Making a Market for Corporate Disclosure

Kevin S. Haeberle[†] & M. Todd Henderson[‡]

It has long been said that market forces alone will result in a problematic under-sharing of information by public companies. Since the 1930s, the main regulatory response to this market failure has come in the form of the massive mandatory-disclosure regime that sits at the foundation of modern securities law. But this regime—especially when viewed along with its speech-chilling antifraud overlay—no doubt leaves society without all the corporate information from which it would benefit. The typical fix offered to the problem has been more of the same: add to the 100-plus-page list of what firms must disclose, often based on the latest Washington fad.

This Article argues that the underproduction of corporate information could be better addressed through constructing an information market. In particular, we theorize that an SEC rule regarding selective disclosure (Regulation Fair Disclosure) and a more general regulatory attitude relating to the same prevent this market from forming today, and that changes to them would allow firm supply and information-consumer demand to interact in a way that would motivate more corporate disclosure, presented in enhanced formats, delivered more frequently. Thus, the Article provides regulators with an innovative and far-reaching tool for use in their long struggle to get socially valuable information out beyond firms.

Introduction	384
I. Information Sharing that Comes Up Short	389
A. The Market Failure	390
B. The Impact of Legal Imperfections on the Market Failure.	393
II. Regulation that Keeps Private Ordering from Ameliorating the S	hortfall in
the Ways We Envision	396
A. Two Red Herrings	
B. The Real Culprits: Regulation Fair Disclosure and Regula	atory
Attitudes on Tiered Information Release	398

[†] Associate Professor of Law, William & Mary Law School.

[‡] Michael J. Marks Professor of Law and Mark Claster Mamolen Research Scholar, University of Chicago Law School. We thank James D. Cox, Richard A. Epstein, Merritt B. Fox, Lawrence D. Glosten, Darian M. Ibrahim, Robert J. Jackson, Donald C. Langevoort, Saul Levmore, Paul G. Mahoney, Robert K. Rasmussen, Roberta Romano, Robert J. Rhee, and Andrew Verstein for their contributions to our thinking in this Article.

III. The Now-Suppressed Supply and Demand for Tiered Access to En	hanced -
Corporate Disclosure	401
A. The Likely Demand	
1. Demand Among Securities-Market Participants	
a. Information Traders	
b. Noise Traders	406
2. Demand Beyond Securities Markets	407
B. The Likely Supply	409
IV. The Market and Products that Would Likely Result from Unleashin	ig the
Supply and Demand	410
A. An Information Market With a Single Early-Release Product	t411
B. An Information Market With Two or More Early-Release Pr	oducts
	414
V. Likely Effect on the Quality of Corporate Disclosure	416
A. Enhancements Along Three Dimensions of Corporate Disclo	
1. Disclosure Amount	417
2. Disclosure Frequency	419
3. Disclosure Formatting	422
B. Illustration–Management Discussion & Analysis	425
1. The MD&A Requirement	426
2. How the Information Market Would Enhance MD&A	
Conclusion.	432

Introduction

Public companies drive the United States economy. Information about them is thus of great value to society. Yet, these firms are prone to excessive secrecy. The main legal response to this problem is the mandatory-disclosure regime that sits at the foundation of modern securities law. Having the government plug disclosure gaps is logical enough. But the government no doubt fails to identify all of the corporate information that would, if produced and shared, generate net benefits for society. Many have argued that voluntary disclosure by firms would lead to more optimal results than the government-

^{1.} American public firms had an aggregate value of 147 % of the nation's GDP in 2016. Market Capitalization of Listed Domestic Companies (% of GDP), WORLD BANK, http://data.worldbank.org/indicator/CM.MKT.LCAP.CD?page=5 [http://perma.cc/3T9W-74ZM]. In fact, just the 500 largest publicly traded companies in the United States alone brought in roughly \$12 trillion in revenues in 2015, which represents about two-thirds of the country's \$18 trillion GDP for that year. See Fortune Editors, Here Are the Top 10 Most Successful American Companies, FORTUNE (June 6, 2016), http://fortune.com/2016/06/06/fortune-500-top-10-companies [http://perma.cc/5Z9R-TTM6].

^{2.} See, e.g., Edmund W. Kitch, The Theory and Practice of Securities Disclosure, 61 BROOK. L. REV. 763, 846 (1995) (discussing the issuer's interest in secrecy). We explain (and support) this point and each of the remaining points in this paragraph in more detail in *infra* Section I.A and Part II

compelled approach to disclosure. However, the impact of these market proponents on this front has been limited. Indeed, the dominant approach to corporate disclosure since at least the 2007-2008 Financial Crisis has been to add new disclosure requirements one by one.

This Article offers an innovative approach to the disclosure-underproduction problem that has long challenged policymakers. It argues that a well-regulated market for corporate disclosures where firms can sell *tiered access* to their information would lead to improved disclosure. More specifically, we argue that if public firms³ could sell early access to information that they must then make available to all, they would produce and share more information, in enhanced formats, more frequently. This would require repealing an SEC rule barring tiered disclosure and liberalizing more general regulatory attitudes regarding the same. It would not require any changes to insider-trading law.

With the law liberalized and information-consumer demand unleashed in a competitive market for information, firms would have a revenue-based motivation to supply information. The end result would be a broad spur for better public-company disclosure that benefits much more than just information consumers. All the while, in contrast to the traditional arguments for voluntary disclosure alone, no reduction in the existing required-disclosure floors need be made. Thus, in this Article, we argue that securities regulators could achieve one of their core goals by reforming the law to construct this market for corporate disclosure.

Problems of sub-optimal information production and sharing pervade the law. But they are especially acute in the corporate and securities area.⁴ There is much history to this present-day reality. After the Great Crash of 1929, there was a view that speculation in securities based on incomplete information caused the sudden market drop and in turn, the argument goes, the Depression.⁵ The main initial regulatory response, found in the Securities Act of 1933, was a system of required disclosure according to a detailed government recipe.⁶ Before firms were able to sell promises to their expected cash flows, they had to publicly file vast amounts of information about themselves. A year later, the Securities

^{3.} We do not address the disclosures that must be made when firms first sell stock to the public in an IPO. Instead, we focus on only ongoing disclosure by public firms as well as disclosures associated with secondary offerings of securities by the same.

^{4.} See Merritt B. Fox, Retaining Mandatory Securities Disclosure: Why Issuer Choice Is Not Investor Empowerment, 85 VA. L. REV. 1335, 1354 n.33 (1999); infra notes 28-43 and accompanying text.

^{5.} See, e.g., Joel Seligman, The Transformation of Wall Street 1-38 (2003). But see Milton Friedman & Anna Jacobson Schwartz, A Monetary History of the United States, 1867-1960, at 305-08 (1971).

^{6.} See Securities Act of 1933, 15 U.S.C. § 77a (2018); see also Gregg A. Jarrell, The Economic Effects of Federal Regulation of the Market for New Security Issues, 24 J.L. & ECON. 613 (1981) (comparing registered and unregistered securities); Carol J. Simon, The Effect of the 1933 Securities Act on Investor Information and the Performance of New Issues, 79 AM. ECON. REV. 295 (1989) (examining the effects of changes in financial disclosure mandated by the Securities Act of 1933 on the distribution of returns earned by investors in new stock issues).

Exchange Act of 1934 continued this same approach beyond the new-issuance context, imposing an ongoing, periodic disclosure regime for public firms.⁷

Over time, a vast complex has been erected on these New Deal-era foundations, such that today these firms spend many tens of billions of dollars each year producing and disseminating information about themselves in compliance with the law. But despite the hundreds of items that must be disclosed in registration statements, 10-Qs, 10-Ks, and similar public filings, firms still no doubt come up short on the information-sharing front.

The problem begins with the creators and guardians of the disclosure regime: the members of Congress and the officials and staff of the SEC. Ultimately, disclosure floors represent little more than these policymakers' best guess as to the information that investors and society should know. ¹² To be sure, there is much back and forth between regulators and industry in this area. For example, when the SEC considers changes to its disclosure regime, the public-comment process plays a significant role in shaping any rulemaking. ¹³ But whether such conversations improve the attempts to identify appropriate disclosure requirements or harm them is open for debate. After all, the government decisions in this area are made by bureaucrats who are not betting

^{7.} See Securities Exchange Act of 1934, 15 U.S.C. § 78a (2018); see also George J. Benston, Required Disclosure and the Stock Market: An Evaluation of the Securities Exchange Act of 1934, 63 AM. ECON. REV. 132 (1973).

^{8.} For a discussion of the evolution of mandatory-disclosure laws in the United States, see Merritt B. Fox, Civil Liability and Mandatory Disclosure, 109 COLUM. L. REV. 237, 241-49 (2009).

^{9.} The SEC has estimated the costs for newly public firms to comply with the ongoing, periodic disclosure regime to be approximately \$1.5 million a year. See Regulation Crowdfunding, Securities Act Release No. 33-9974, Exchange Act Release No. 34-76324, 80 Fed. Reg. 71,388 (Nov. 16, 2015) (codified at 17 C.F.R pt. 227). Those costs vary by firm type and are likely far greater for larger, more established public firms. Getting an idea of the aggregate cost of required disclosure for all public firms is more challenging. But to get a sense of its magnitude, consider a recent addition to the disclosure regime alone. Commentators have estimated the aggregate ongoing cost of the conflict-mineral disclosure item, see infra note 31, to be approximately \$700 million per year for public firms. See Jeff Schwartz & Alexandra Nelson, Cost-Benefit Analysis and the Conflict Minerals Rule, 68 ADMIN. L. REV. 287, 329 (2016).

^{10.} For a sense of the breadth of information that must be disclosed on the firm's own dime, see Regulation S-K Standard Instructions for Filing Forms Under Securities Act of 1933, Securities Exchange Act of 1934 and Energy Policy and Conservation Act of 1975, 17 C.F.R. § 229 (2017). This long-titled regulation takes up well over 100 pages to essentially list what firms must disclose.

^{11.} See, e.g., Paul G. Mahoney, The Exchange as Regulator, 83 VA. L. REV. 1453, 1467 (1997) ("In general, there is substantial evidence that the mandatory disclosure system does not produce information.").

^{12.} See Donald C. Langevoort, Taming the Animal Spirits of the Stock Markets: A Behavioral Approach to Securities Regulation, 97 Nw. U. L. REV. 135, 173 (2002) (observing the lack of empirical support for the SEC's policies).

^{13.} Interestingly, the SEC is currently proposing a reshaping of its corporate-disclosure requirements and guidance. *See* Business and Financial Disclosure Required by Regulation S-K, SEC Release No. 33-10064, 81 Fed. Reg. 23915 (Apr. 13, 2016). We plan on filing this Article as a public comment relating to that proposal.

their own money, often have less experience and expertise than actual consumers of disclosure, and are subject to rent-seeking behavior and regulatory capture.¹⁴

The problem is then exacerbated by the main overlay on the disclosure regime: securities-fraud law.¹⁵ Strict anti-fraud laws enforced through both government and private lawsuits do much to improve the credibility of corporate disclosure. But it is well known that the system captures many false positives too. Class actions targeting corporate statements that turn out to be true and complete can inflict serious pain on companies at the pleading stage alone. The result is a widespread view that disclosure is risky. The net effect is to make firms unwilling to remedy the underlying disclosure-underproduction problem on their own, and instead lead them to keep mum on the margin.

The traditional response to this state of affairs in Washington has been to hone the disclosure regime. This is just what the SEC is trying to do now in its endeavor to clean up Reg S-K. ¹⁶ Others have taken issue with the government's hand in disclosure altogether, and called for voluntary disclosure in an outright market for corporate disclosure. ¹⁷ For them, firms have sufficient incentives to make both their good news and bad news known to the public, and the level of disclosure achieved by leaving disclosure decisions to firms alone is likely to be at least as optimal as that achieved by the government. Most proponents of this view understand that voluntary disclosure will be prone to underproduction. ¹⁸ They do not doubt, for example, that firms will often withhold information to keep it from reaching the competition. But they fear that government-compelled disclosure will result in just as much of the opposite problem: disclosure overproduction. ¹⁹ Whatever the merits of this view today, it has not attracted any kind of majority consensus in the legal academy or among policymakers.

In this and related work,²⁰ we propose an innovative and broad fix by allowing the more nuanced information market teased above. As we show in the

I.B.

^{14.} See Frank H. Easterbrook & Daniel R. Fischel, Mandatory Disclosure and the Protection of Investors, 70 VA. L. REV. 669, 671-72 (1983) (providing a seminal explanation as to why securities-disclosure and securities-fraud law present especially acute problems along these lines, and citing the seminal economics and law and economics articles on the broader problems of rent-seeking and capture).

^{15.} We explain and support the points made in this paragraph in more detail in Section

^{16.} See supra note 13.

^{17.} See, e.g., Mahoney, supra note 11, at 1455 ("[E]xchanges should be the primary writers and enforcers of rules relating to disclosure by listed companies."); accord Roberta Romano, Empowering Investors: A Market Approach to Securities Regulation, 107 YALE L.J. 2359, 2426-27 (1998) (noting "that firms the world over voluntarily release more information than their securities regulators require in order to raise capital").

^{18.} But see Roberta Romano, The Need for Competition in International Securities Regulation, 2 THEORETICAL INQ. L. 387 (2001) ("It is, in fact, implausible that there would be a significant underproduction of firm information in the absence of a single securities regulator.").

^{19.} Easterbrook & Fischel, *supra* note 14, at 708-09 (discussing indirect costs of mandatory-disclosure systems).

^{20.} This Article is one in our series that looks at how the dissemination of market-moving information is regulated. We recently published the first work in this series. See Kevin S. Haeberle & M. Todd Henderson, Information-Dissemination Law: The Regulation of How Market-Moving

pages that follow, changing an SEC rule on selective disclosure (Regulation Fair Disclosure) and regulatory attitudes about the same to permit public firms to sell early access to their valuable information would improve public-company incentives to generate and share more information, in better formats, at more frequent intervals.²¹ For example, if a firm were going to release news to the public at 2:00 p.m., and were allowed to sell private access to the news openly and on a non-discriminatory basis seconds, minutes, or even hours prior, the firm would be more likely to provide more information to satisfy the demand of high-speed traders, investment funds, corporate watchdogs, politicians, and news outlets. Those enhanced informational products, under our requirements, would then have to be made available to the public within a few hours or so of the initial early release at issue.²²

Our goal is thus not just to facilitate voluntary transactions between firms and information consumers that leave both better off. Rather, we have a larger aim: to spur the production of socially valuable information that makes stock prices more accurate—thereby improving the operation of the economy.²³ Specifically, we want to spur the production of fundamental-value information that will be reflected into stock prices, at the latest, upon its public release. Our focus is thus in line with the law and economics literature on securities law and its focus on enhanced price accuracy and, in turn, changes to capital allocation and firm governance that improve economic efficiency. All the while, we also recognize that increased transparency involving the firms that drive our economy can have even broader appeal.²⁴

Stepping back, the true nature of our proposal becomes apparent: the proposal is really just one for an additional mandatory-disclosure item—albeit an open-ended one to which firms subject themselves. Our mandatory-disclosure item is that firms disclose things that information consumers value at a price that is higher than the cost firms must incur to produce them.

To be sure, more corporate information produced in better formats at more frequent intervals might have all of the benefits introduced above, yet not result

Information Is Revealed, 101 CORNELL L. REV. 1373 (2016) [hereinafter Haeberle & Henderson, Information-Dissemination Law]. In that article, we explained why transparency with respect to information-release timing would better protect long-term investors from information asymmetry than today's simultaneous-disclosure efforts, and noted that even allowing public-company information to be sold in a transparent market would leave those investors better off than they are today. We are also now working on an article that considers how securities law as a whole could be centered on a such an information market. See Kevin S. Haeberle & M. Todd Henderson, A New Market-Based Approach to Securities Law, 85 U. CHI. L. REV. (forthcoming 2018).

^{21.} We set forth these points in Parts II-V.

^{22.} This full-release requirement ensures that the selectively released enhanced disclosures would be made available to all within a relatively fast timeframe from their initial release. It also dictates that our market need not erode the existing floors of the disclosure regime whatsoever, and that periods of heightened information asymmetry are time limited in a way that makes them easily avoided by long-term investors. See infra Section V.A.1.

^{23.} See infra notes 36-37 and accompanying text.

^{24.} See infra Section III.A.2 (discussing the likely demand for early access to public-company information traceable to activities beyond securities markets).

in net social benefits due to costs imposed on third parties. For example, this new market could retard information production by outsiders in a way that would actually reduce price accuracy on the whole. Or, it could impose costs relating to mere perceptions of unfairness, even if unfounded, that could not be satisfactorily addressed. And the market may produce things that traders qua traders value at a price that is higher than the firm's cost of production, but that do not actually matter more generally for society as a whole—thereby limiting their appeal.²⁵ Moreover, the information market—without more—would not in any way reduce areas of information overproduction, which may very well be more problematic today than the instances of information underproduction in focus here.²⁶ While we are thinking about these issues in our series of works on how the dissemination of market-moving information is regulated,²⁷ they are beyond the scope of this work and its discrete focus on our present positive claim: that the quality of post-IPO corporate disclosure would be improved if firms were allowed to sell tiered-access rights to their disclosures in a well-regulated information market.

The remainder of this Article tells this story in more detail. Part I provides background on the market failure and imperfections in securities law that combine to result in information sharing that likely comes up short. Next, Part II explains the regulation that keeps the type of market we tout from ameliorating that shortfall. Part III then describes the corporate supply and information-consumer demand for early access to corporate information that is now suppressed by the law. Part IV sketches out the boundaries and features of the market that we would expect to arise should the law be reformed to allow that supply and demand to meet. Finally, Part V presents our positive theory as to how unleashing those market forces could lessen the severity of the information-underproduction problem by improving the amount, frequency, and formatting of corporate disclosure, and illustrates that theory through a look at how the market would improve management discussion and analysis of firm's financial condition and operations.

I. Information Sharing that Comes Up Short

Public companies sit at the center of a market-driven economy like the one present in the United States.²⁸ Unfortunately, these firms lack the incentive to disclose information about their work and their prospects at a socially optimal level.²⁹ Government-compelled disclosure is a straightforward enough way to

^{25.} See David Hirshleifer, Investor Psychology and Asset Pricing, 56 J. Fin. 1533, 1565

^{(2001). 26.} See supra note 14 and accompanying text.

^{27.} See supra note 20.

^{28.} See supra note 1.

^{29.} See, e.g., John C. Coffee, Jr., Market Failure and the Economic Case for a Mandatory Disclosure System, 70 VA. L. REV. 717, 724-33 (1984) (discussing the private incentives for

ameliorate the disclosure underproduction that likely results from this misalignment of private and public incentives.³⁰ But even when giving public comment its due, the government is unlikely to identify and compel all of the information that, if generated and shared, would create social value. Lawmakers are also prone to addressing politically squeaky wheels rather than those presenting the largest functional problems.³¹ Moreover, the well-known shortcomings of anti-fraud enforcement may chill disclosure enhancement on the margin.³² In short, the command-and-control response to the information underproduction problem is unlikely to be successful at generating the socially optimal amount of information disclosure, and may, in fact, make things worse.

In this Part, we provide the basic background for our information-market claim by elaborating on these failures of both markets and existing law.

A. The Market Failure

The consensus story in the securities-law literature is that market forces alone are insufficient to bring about sufficient amounts of public-company disclosure. This market failure is said to be a result of the divergences in the private and public benefits and costs of corporate disclosure. ³³ More specifically, the disclosure benefit-cost ratio for firms is said to be much lower than that for society, leaving firms prone to excessive secrecy. ³⁴ The delta between the two ultimately dictates that firms will lack the incentive to voluntarily disclose all of the information that society values at a level that is higher than the social cost associated with producing that information. ³⁵

information production and how they may deviate from the public benefits of disclosure); Merritt B. Fox, Shelf Registration, Integrated Disclosure, and Underwriter Due Diligence: An Economic Analysis, 70 VA. L. REV. 1005 (1984) (making the case for compelled disclosure based on the misalignment of private and public benefits and costs of disclosure).

- 30. See, e.g., Fox, supra note 8, at 237 ("Mandatory disclosure regimes seek to promote corporate transparency by requiring issuers to disclose information about themselves that they might otherwise not be inclined to release.").
- 31. For notable and controversial recent examples of this approach, see Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 953(b)(1), 124 Stat. 137 (2010) (codified at 15 U.S.C. § 77h-1) (requiring firms to disclose the ratio between the CEO's pay and that of the average worker at the company); id. § 1502 (requiring firms to make a disclosure relating to any conflict minerals in their supply chains).
 - 32. See infra Section I.B.
 - 33. See supra note 29 and accompanying text.
- 34. See Coffee, Jr., supra note 29, at 720-21, 739-747; Fox, supra note 29, at 1017, n. 37. For a prominent example of this excessive secrecy, look no further than one of the most famous public companies, Apple. See Tripp Mickle, Secretive Apple Tries to Open Up on Artificial Intelligence, WALL ST. J. (Sept. 3, 2017), http://www.wsj.com/articles/secretive-apple-tries-to-open-up-on-artificial-intelligence-1504436401 [http://perma.cc/A7ET-LXZS] (noting the technology giant's "famous penchant for secrecy").
- 35. See Kitch, supra note 2, at 772 ("Information is a weapon, and issuers have strong incentives to make disclosures consistent with their success in rivalry with competitors and other adversaries rather than to enhance the accuracy of the prices at which their publicly issued securities are bought and sold."); see also, e.g., Coffee, Jr., supra note 29; Fox, supra note 29; Fox, supra note 8, at 725-28 (noting the public good aspects of securities-investment information and contractual difficulties

On the benefits side, it is clear that there are considerable social benefits associated with firms generating and sharing information about their operations and prospects. The chief ones in focus in the law and economics literature relate to improved capital allocation among firms and resource use by firms. In short, when made available to all, corporate information gets incorporated into stock prices so that those prices reflect firms' fundamental values. Those more "accurate" prices, in turn, help guide capital to the most promising investment opportunities and assist board and shareholder discipline of the managers who hold the reins on so much of society's scarce resources. But information about these firms has an obvious broader value: it matters for a number of stakeholders, including those who care about labor, the environment, tax fairness, and a wide variety of political interests. However, firms do not internalize anywhere close to all of these benefits, and therefore lack the incentive to produce and share the information that generates those benefits.

With respect to the costs of information generation and release, corporate disclosure imposes a greater cost on firms than on society as a whole.³⁹ Of special concern is the sharing of bad news, since it often imposes net costs on the firm and its managers, but not society. For example, when the disclosure of bad news about company prospects sends the firm's stock price down, the firm's cost of capital goes up and one of management's chief forms of compensation (stock-priced-based pay) goes down.⁴⁰ All the while, from the public's point of view, disclosure of the information will be far less costly—if not beneficial altogether. After all, the bad news dictates that this firm should receive less capital, and the higher cost of capital helps ensure that. The bad news also may mean that existing management needs more discipline, and the bad news can be used by the board and/or shareholders to detect that problem more easily.⁴¹

The lack of alignment between both the benefits and costs of disclosure for firms and the public can be seen by thinking about a common dilemma firms face: whether to disclose proprietary data relating to company successes and failures. For example, for Apple, sharing confidential information with the public

in providing value in exchange for it that combine to discourage acquisition of company information by those outside the firm).

^{36.} See, e.g., Fox, supra note 29, at 1013-14; Marcel Kahan, Securities Laws and the Social Cost of "Inaccurate" Stock Prices, 41 DUKE L.J. 977, 1005-16 (1992).

^{. 37.} See, e.g., Fox, supra note 29, at 1013-14 (discussing the main social benefits of enhanced stock-price accuracy); Kahan, supra note 36, at 1028-34.

^{38.} See William H. Beaver, The Nature of Mandated Disclosure, in ECONOMICS OF CORPORATION LAW AND SECURITIES REGULATION 317, 320-21 (Richard A. Posner & Kenneth E. Scott eds., 1980).

^{39.} See, e.g., Fox, supra note 29, at 1013-14.

^{40.} See also S.P. Kothari, Susan Shu & Peter D. Wysocki, Do Managers Withhold Bad News?, 47 J. ACCT. RES. 241, 241 (finding evidence of delayed releases of bad news to investors).

^{41.} See, e.g., Fox, supra note 8, at 254. Firms also often have the incentive to withhold good news. See, e.g., Dan Gallagher, Google Can't Keep Its Success Secret, WALL ST. J. (Apr. 23, 2018), http://www.wsj.com/articles/google-cant-keep-its-success-secret-1524521116 [http://perma.cc/QR6E-VKUK] (noting Google's incentive to keep its successes relating to targeted advertising private given recent policymaker and public outrage over Facebook's use of personal data relating to the same).

on robust iPad sales means exposing it to Samsung and new entrants, each of which might then use the information to ramp up competition in the tablet market. Open and honest information sharing of this specific information rather than more general revenue numbers alone might get Apple a bump in share price, but any such bump would likely be offset in whole or in part by the reduction in cash flows the company earns for its shareholders through the (now-reduced) sale of iPads down the road. Yet for the public, the benefits of that information sharing are higher and the costs lower. From the perspective of society, helping others learn of the demand for these devices saves scarce social resources from being deployed toward figuring out that information from the outside in a duplicative manner, while exposure of the proprietary information likely presents no harm whatsoever. Indeed, any increased competition in the tablet market traceable to Apple's sales projections could very much be in the public's interest. If markets are working properly, better-informed Samsung and new entrants would bring lower prices, new products, and more choices.

Of course, those who benefit from corporate information could pay the firm to produce and share it up to the last point at which the aggregate benefits of disclosure to them still surpasses its costs. But obvious collective-action problems among the vast line of beneficiaries of more corporate disclosure prevent that demand for information from bringing the diverging private and public benefits of disclosure in line with each other. There is no efficient way for all those in society who are better off when scarce capital is better allocated to contribute to firms so that they can get their pro rata share of that broad social benefit. The same problem stops all those who benefit from the slightly lower tablet prices that might result from better-informed Apple competitors from doing the same.

Lastly, even when firms have the incentive to disclose information at the socially optimal level, managers, who make disclosure decisions,⁴⁴ may have different benefit-cost functions.⁴⁵ These agents often do not benefit directly from particular disclosures. In fact, they may privately suffer. For example, disclosure of political contributions by the firm may be just fine for the enterprise and great for society, yet subject executives to scrutiny that carries a heavy personal cost. When factored into their decision-making, the sometimes-selfish perspective of

^{42.} We choose Apple as our example because it and other technology companies are especially prone to such excessive secrecy. See, e.g., Mickle, supra note 34. But the same basic incentives are present in most—if not all—public companies.

^{43.} See, e.g., Fox, supra note 8, at 268 (discussing "the issuer as least cost provider" of corporate information); Rafael La Porta, Florencio Lopez-de-Silanes & Andrei Shleifer, What Works in Securities Laws?, 61 J. Fin. 1, 5 (2006) ("Efficiency considerations suggest that the lowest cost provider of information about a security should collect and present this information, and be held accountable if he omits or misleads.").

^{44.} Most decisions—little and small—at public companies in the United States are made by internal management under the loose direction of the board of directors. See, e.g., DEL. CODE ANN. tit. 8, § 141(a) (2018) (explicitly contemplating such a decisionmaking structure).

^{45.} See, e.g., Robert J. Jackson, Jr., Stock Unloading and Banker Incentives, 112 COLUM. L. REV. 951 (2012) (observing this phenomenon).

those who determine the extent to which firms will disclose information voluntarily can in and of itself result in less disclosure than is socially optimal.

Accordingly, the consensus story in the academic literature on securities law is that the expected benefit-cost ratio of disclosure for firms—let alone their agents—is often going to be considerably lower than the same for society, and that collective action to ameliorate the problem will not happen on its own. To the extent this story is true, the wedge between the private and public optimal level of disclosure leads to inadequate information production and sharing of some of the most important information in society today.

B. The Impact of Legal Imperfections on the Market Failure

The mandatory-disclosure regime of course nets many important items for the public. Disclosure is voluminous. When Facebook went public, it filed a Form S-1 with the SEC that ran to nearly 300 pages, describing in exact detail essentially every aspect of its operations, results, management, and forecasts. Every year, Facebook discloses many times this amount of information. In 2016, for instance, its disclosures ran to about 1,100 normal pages of 12-point font. Yet, fundamental problems with this foundational aspect of modern securities law still leave society with far less information than it would benefit from. 48

To see these points, consider, for example, the disclosure issues presented when Apple CEO Steve Jobs discovered he had cancer. Jobs was diagnosed with cancer in October 2003.⁴⁹ The information was clearly material to investors.⁵⁰ But, there is no legal obligation to disclose this type of news.⁵¹ In fact, Apple disclosed nothing until August 1, 2004, when it announced Jobs was sick, and cured. Over the next few years, Apple made a series of arguably misleading disclosures, announcing for instance that the CEO was suffering from "hormonal imbalances" or a "common bug." Notwithstanding colorable arguments that

^{46.} Form S-1 Registration Statement, U.S. SEC. EXCH. COMM'N (February 1, 2012), http://www.sec.gov/Archives/edgar/data/1326801/000119312512034517/d287954ds1.htm [http://perma.cc/3U4Q-S477].

^{47.} To estimate this, we downloaded each Facebook disclosure on the SEC's EDGAR database, cut and pasted it into Microsoft Word, converted the font to Times 12-point font, and did a page count.

^{48.} See supra note 14 and accompanying text.

^{49.} For background on this example, see Roger Parloff, Why the SEC Is Probing Steve Jobs: Behind the Investigation into the Timing of Disclosure of the Apple's Chief' [sic] Health Problems, FORTUNE (Jan. 22, 2009), http://archive.fortune.com/2009/01/22/technology/stevejobs_disclosure.fortune/index.htm?postversion=2009012217 [http://perma.cc/NW27-WWBR].

^{50.} See infra notes 209-211 (discussing "materiality" in the context of securities law). Several years later, when Apple announced Jobs would not deliver the keynote at Macworld, as he did every year, Apple's stock plunged on mere rumors that he was unwell. Yukari Iwatani Kane & Jacob Goldstein, Apple's Jobs Under Treatment to Gain Weight, WALL ST. J. (Jan. 6, 2009), http://www.wsj.com/articles/SB123116265092753643 [http://perma.cc/3SHH-7UQT].

^{51.} See infra Section V.B.

^{52.} Charles Cooper, Steve Jobs Discloses "Hormone Imbalance," CNET (Jan. 5, 2009), http://www.cnet.com/news/steve-jobs-discloses-hormone-imbalance [http://perma.cc/7WDH-BLZP];

Apple had a duty to disclose the information under anti-fraud provisions,⁵³ it did not and suffered no legal sanction as a result.

Those who defend this decision and the rule against requiring disclosure of such matters generally point to the privacy considerations implicated by disclosure. A lack of privacy can impose costs on individuals. And that matters for firms. Presumably, executives would demand higher salaries to work for firms that would disclose price-relevant information about their personal lives. While the cost of additional disclosure of this variety is obviously a relevant consideration for firms in making disclosure decisions, the fact that the upside of such disclosure for firms is very limited (if there is one at all) means that privacy or other personal considerations for executives is a trump card. That disclosure decisions are made by executives⁵⁴ only strengthens the anti-disclosure stance.

There is also another legal imperfection that matters here. The current mix of securities law emerging out of the 1930s does not just leave the information problem incompletely resolved. Rather, it adds a strict set of anti-fraud laws that actually exacerbates it.⁵⁵ The many federal anti-fraud provisions⁵⁶ that make up this overlay on the securities-disclosure regime no doubt bolster the credibility of disclosures. But their severe penalties for false or misleading statements impose a significant risk to information sharing in a system where the error rate associated with large class actions is high.⁵⁷ In this world, even truthful disclosures can increase litigation risk,⁵⁸ and therefore are deterred on the margin. Moreover, the Exchange Act generally makes any willful violation of any of its provisions or rules (including the broad anti-fraud provisions found in

Jane McEntegart, Steve Jobs Suffers from "Common Bug", TOM'S GUIDE (June 11, 2008), http://www.tomsguide.com/us/Steve-Jobs-Sick,news-1635.html [http://perma.cc/Y683-TBHM].

^{53.} See Exchange Act Rule 10b-5, 17 C.F.R. § 240.10b-5 (2017) (making it illegal "to omit to state a material fact necessary in order to make the statements made, in the light of the circumstances under which they were made, not misleading").

^{54.} See supra note 44 and accompanying text.

^{55.} Kitch, supra note 2, at 772 ("[T]he liability structure of the securities laws reduces the production of information.").

^{56.} The main such provisions are Section 10(b) of the Securities Exchange Act of 1934, 15 U.S.C. § 78j (2018), Rule 10b-5 promulgated under it, 17 C.F.R. § 240.10b-5 (2017), and sections 11, 12, and 17(a) of the Securities Act of 1933, 15 U.S.C. §§ 77k, 77l, & 77o (2018).

^{57.} In the past two decades, there have been over 4,000 securities-fraud suits, with the top ten settlements totaling over \$35 billion. Stanford Securities Class Action Clearinghouse, STAN. L. SCH., http://securities.stanford.edu [http://perma.cc/2SAK-MH2W]. In 2016, courts approved six billion dollars in settlements, with ten cases settling for over one hundred million dollars and two exceeding one billion dollars. Securities Class Action Settlements Continue Upward Trend in 2016 with Record Number of Mega Settlements, CORNERSTONE RES. (Mar. 15, 2017), http://securities.stanford.edu/research-reports/1996-2016/Settlements-Through-12-2016-Review.pdf; Securities Class Action Filings - 2016 Year in Review, CORNERSTONE RES. 11 (2017), http://www.cornerstone.com/Publications/Reports/Securities-Class-Action-Filings-2016-YIR [http://perma.cc/2X6Y-XE3C].

^{58.} See Amanda M. Rose, The Multienforcer Approach to Securities Fraud Deterrence: A Critical Analysis, 158 U. PA. L. REV. 2173, 2192 (2010); Lynn A. Stout, Type I Error, Type II Error, and the Private Securities Litigation Reform Act, 38 ARIZ. L. REV. 711, 711 (1996).

Section 10(b) and Rule 10b-5 promulgated thereunder) a federal crime.⁵⁹ For these reasons, early settlement is often preferable to vindication after summary judgment—let alone trial.⁶⁰ Securities-fraud law thus creates very real disincentives for additional disclosure. Noting these issues, one leading commentator recently went as far as referring to the Securities Act as a "secrecy statute."⁶¹ Along the same vein, securities-disclosure lawyers often counsel their clients to divulge as little as possible given that anything said can and will be used against them in a court of law.⁶² In the end, the floors of the mandatory-disclosure regime are said to become ceilings.

* * *

Despite their leading role in the economy, public companies in the United States are thought to provide insufficient amounts of disclosure when left to their own devices. And the main legal response to this concern for under-disclosure fails to identify and compel all that society should know, while the securities-fraud overlay on the same chills information production and sharing on the margin. Accordingly, an underlying market failure along with the fundamental flaws of the mandatory-disclosure regime and its securities-fraud overlay keep society from receiving all of the corporate information of value today.

In this brief background Part, we have focused broadly on corporate "disclosure"—namely, the amount of it. But in addition to the shortfall with respect to the amount of corporate disclosure, public-company information sharing comes up short in two other ways (frequency and formatting) for the same basic reasons. In order to move more quickly through the necessary background, we have not focused on these other dimensions of the problem thus far. But each is important for our larger thesis. For these reasons, when we discuss our ultimate conclusion toward the end of the Article (that our information market would broadly improve the quality of corporate disclosure), we break down the theory in terms of not just disclosure amount, but also in terms of disclosure frequency and formatting.

^{59.} Securities Exchange Act of 1934 § 32, 15 U.S.C. § 78ff (2018).

^{60.} Concerns along these lines led to the passage of the Private Securities Reform Act of 1995. See H.R. CONF. REP. No. 104-369, at 37 (1995) ("The cost of discovery often forces innocent parties to settle frivolous securities class actions." (internal quotation marks and alteration omitted)); Janet Cooper Alexander, Do the Merits Matter? A Study of Settlements in Securities Class Actions, 43 STAN. L. REV. 497, 525-26 (1991).

^{61.} PAUL MAHONEY, WASTING A CRISIS: WHY SECURITIES REGULATION FAILS 38 (2015) ("[A]lthough described as a 'full disclosure' statute, the Securities Act as initially enacted was at least as much a secrecy statute."); accord Mahoney, supra note 11.

^{62.} See, e.g., Practical Guidance for Living with Regulation FD, WILMERHALE (Sept. 1, 2000), http://www.wilmerhale.com/pages/publicationsandnewsdetail.aspx?NewsPubId=87474 [http://perma.cc/7YKN-DMBQ] ("Follow a 'no comment' policy which prohibits the company from responding to inquiries or commenting upon rumors concerning prospective developments or transactions, such as acquisitions. Adherence to this policy requires that the company respond with a statement to the effect that it is the company's policy not to comment upon or respond to such inquiry or rumor. A statement that the company does not know of any basis for such a rumor, or is not aware of any pending transaction, is not consistent with this policy and, if inaccurate, could subject the company to liability.").

With the streamlined background provided in this Part along with this more precise roadmap to our thinking, we can now present additional background that is necessary for understanding our ultimate claim. This additional background relates to the long-overlooked aspects of the law that, we argue, prevent market forces from bringing about significant improvements with respect to the quality of corporate disclosure.

II. Regulation that Keeps Private Ordering from Ameliorating the Shortfall in the Ways We Envision

The above market and legal shortcomings are well established. So too is the premise that private ordering with pure voluntary disclosure might help produce more optimal corporate disclosure than that generated by the mandatory-disclosure regime.⁶³ But we have more to add to this story of suboptimally low corporate disclosure and how market forces could address it. We argue that two aspects of securities regulation today prevent private ordering from mitigating the disclosure-underproduction problem in the distinct ways we envision.⁶⁴ As explained in this Part, those aspects are not the ones that even those familiar with securities law would likely suspect (namely, mandatorydisclosure law and insider-trading law). Instead, they are two related, yet distinct aspects of securities law. The first aspect is a narrow SEC overlay on the mandatory-disclosure regime (Regulation Fair Disclosure). The second one is a more general attitude among regulators about tiered information release. We thus explain here why this rule and the related mindset combine to prevent a disclosure-enhancing market like the one we envision and tout in the remainder of this Article.

A. Two Red Herrings

There is no legal market for tiered access to material corporate information today. At first glance, one might think that the law stopping this market (and any positive externalities to which it would lead) from arising is mandatory-disclosure law combined with insider-trading law. But these are red herrings here.

Nothing about auctioning off content beyond that required to be produced and shared would be inconsistent with the floors of the mandatory-disclosure regime. Required public disclosure, by definition, precludes the outright sale of the relevant information to some consumers and not others. But it does not stop firms from selling enhanced disclosure products above and beyond what is required by the law. To continue the earlier example on Apple, 65 the company

^{63.} See supra note 17 and accompanying text.

^{64.} We previewed that vision in the Introduction, and lay it out in much detail in Parts

III-V.

^{65.} See supra Section I:B.

could have sold hedge funds the information about Steve Jobs's health problems without running into any mandatory-disclosure requirement. Likewise, nothing in mandatory-disclosure law itself stops firms from releasing information to those who pay for it before releasing it to the general public—even when the information at issue is subject to a specific disclosure requirement. All mandatory disclosure itself requires is that certain information be made available to the public within set timeframes—timeframes that many consider to be quite generous. The regime alone does not in any way bar firms from providing that information to select information consumers at some earlier time.

Nor is it insider-trading law that stands in the way of a tiered market for corporate disclosure and its social promise. Insider trading is mainly restricted by the joint prohibition on securities fraud found in Section 10(b) and Rule 10b-5.⁶⁷ Ultimately, those laws stop trading when it involves deceit.⁶⁸ There is nothing deceptive about a firm's *transparent* sale of its information to select audiences before making it available to the full public.

Under the classical theory of insider trading, corporate executives breach a fiduciary duty owed to their counterparties in a deceptive way when they trade based on material, non-public information without first disclosing that information. ⁶⁹ Plainly, that prohibition cannot apply to the situation in which a company openly sells its own information to others who will trade on it. Even if one thought this conduct involved a breach of a duty owed to market participants, those market participants cannot be said to be deceived in that scenario. Even if federal judges somehow took the position that this practice did involve some sort of deceit, the firm and the managers who directed the company to provide the information to those outside the firm for trading purposes would have to be

^{66.} See infra Section V.A.2 (discussing the required pace of disclosure today, and how our market could improve on it).

^{67.} See 15 U.S.C. § 77j (2018); 17 C.F.R. § 240.10b-5 (2017). Much of the insider trading that is illegal under these provisions is also proscribed by Section 17(a) of the Securities Act of 1933,15 U.S.C. § 771 (2018), as well as the federal prohibitions on mail and wire fraud, 18 U.S.C. § 1341 & 1343 (2018). Due to the prominence and breadth of Section 10(b) and Rule 10b-5, and for ease of exposition, we discuss only these latter two provisions in the text. This approach is common in both scholarly commentary and judicial opinions.

^{68.} See Securities Exchange Act of 1934 § 10(b), 15 U.S.C. § 77j (2018) (making it illegal "[f]o use or employ, in connection with the purchase or sale of any security ... any ... deceptive device or contrivance in contravention of such rules and regulations as the [SEC] may prescribe as necessary or appropriate in the public interest or for the protection of investors." (emphasis added)); Securities Exchange Act of 1934 Rule 10b-5, 17 C.F.R. § 240.10b-5 (2017) ("It shall be unlawful for any person ... [t]o engage in any act, practice, or course of business which operates or would operate as a fraud or deceit upon any person, in connection with the purchase or sale of any security." (emphasis added)); see also Santa Fe Indus. v. Green, 430 U.S. 462, 473-74 (1977) ("The language of § 10(b) gives no indication that Congress meant to prohibit any conduct not involving manipulation or deception. Nor have we been cited to any evidence in the legislative history that would support a departure from the language of the statute. When a statute speaks so specifically in terms of manipulation and deception, ... and when its history reflects no more expansive intent, we are quite unwilling to extend the scope of the statute. Thus the claim of fraud and fiduciary breach in this complaint states a cause of action under any part of Rule 10b-5 only if the conduct alleged can be fairly viewed as 'manipulative or deceptive' within the meaning of the statute." (internal quotation marks and ellipsis omitted)).

^{69.} See Chiarella v. United States, 445 U.S. 222 (1980).

targeted as tippers, and not traders. If they were providing such "tips" in a transparent information market in return for revenue for the firm alone, they would not be providing it in return for a personal benefit, as that term of art is understood in insider-trading law. While compliance training would likely be warranted to prevent illegal use of the information, the central aspect of the violation is thus absent.

Moreover, such a permitted practice, by definition, would not involve any sort of deceptive procurement or use of information under the misappropriation theory of insider trading.⁷¹ The source of the information (the firm itself) would be willingly supplying the information to traders, so there would be no misappropriation of information by the traders⁷²—let alone the requisite *deceptive* one.⁷³

B. The Real Culprits: Regulation Fair Disclosure and Regulatory Attitudes on Tiered Information Release

Mandatory-disclosure law and insider-trading law may not be directly on point. But there is still a legal rule that is closely related to each, and it gets in the way of a market for corporate disclosure. Likewise, despite the lack of relevancy of the principled policy rationales underpinning the prohibition on insider trading, there is a closely related regulatory attitude about tiered information release that matters.

The legal rule that precludes transactions for enhanced corporate disclosure comes in the form of a relatively small overlay on the mandatory-disclosure regime⁷⁴: Regulation Fair Disclosure. Reg FD, as it is commonly known, requires public companies to make any piece of material information available to all potential investors at the same exact time when first sharing it with market participants.⁷⁵

^{70.} See Dirks v. SEC, 463 U.S. 646 (1983). For the most recent Supreme Court guidance on the scope of the personal-benefit test, see Salman v. United States, 137 S. Ct. 420 (2017).

See United States v. O'Hagan, 521 U.S. 642 (1997).

^{72.} *Id.* at 689 (Thomas, J., dissenting) (noting that, under the majority's opinion, "were the source expressly to authorize its agents to trade on the confidential information—as a perk or bonus, perhaps—there would...be no § 10(b) violation").

^{73.} Justice Ginsburg's majority opinion in O'Hagan makes clear that a mere misappropriation of material, non-public information is not actionable under Section 10(b) and Rule 10b-5 when that misappropriation is not accompanied by deception. See id. at 655 ("[Section] 10(b) is not an all-purpose breach of fiduciary duty ban, but trains on conduct that is manipulative or deceptive." (citing Santa Fe Indus., Inc. v. Green, 430 U.S. 462, 473-76 (1977)).

^{74.} The regulation is promulgated pursuant to the SEC's rulemaking authority relating to public-company disclosure. See Securities Exchange Act of 1934 § 14(h), 15 U.S.C. § 78n (2018).

^{75. 17} C.F.R. § 243.100 (2017) ("Whenever ... [a public firm] discloses any material nonpublic information regarding ... [itself] or its securities ... [, it] shall make public disclosure of that information ... [s]imultaneously."); Selective Disclosure and Insider Trading (Adopting Release), Exchange Act Release Nos. 33-7881 & 34-43154 ("Reg FD Adopting Release"), 65 Fed. Reg. 51716, 51719 ("As a whole, the regulation requires that when an issuer makes an intentional disclosure of material nonpublic information ..., it must do so in a manner that provides general public disclosure, rather than through a selective disclosure.").

Reg FD is also bolstered by a general policymaker disdain for unequal access to market-moving information going back decades. Such views are not hard to find among lawmakers. For instance, responding to a report that certain investors were getting an early peek at some corporate filings in 2014, Representative Carolyn Maloney said: "It is extremely distressing that insiders have been getting an early look at public filings for so long." Indeed, Supreme Court Justices, in dissent, have gone as far as arguing that unequal informational footing in securities markets alone is sufficient for there to be an insider-trading violation of Section 10(b). And the SEC has made aggressive arguments to that same general effect. Crucially, all of these views have been rejected by the Supreme Court in majority opinions. They have also been broadly rejected by commentators in the legal academy who study insider-trading law and policy for a living. The views are out of line with the realities of securities markets to boot.

Reg FD's simultaneous-dissemination mandate and these regulatory attitudes that accompany it mean that few would provide enhanced disclosure products or pay for the same. For one thing, Reg FD requires that such product would have to be made available to all (including the competition) on equal terms from the get-go. By Morgan Asset Management, for example, would be unlikely to pay for an enhanced disclosure product if it had to be delivered to Credit Suisse Asset Management and all other competitors and market participants at the same exact time. For another, few firms would want to test the resolve of even misguided prosecutors armed with insider-trading law. This last point is especially true given that violations of Section 10(b) are often subject to criminal law and all that it brings along in terms of sanction. By

On the point on regulatory attitudes alone, the recent behavior of information providers in response to mere investigations by the New York State Attorney General's Office (NYSAGO) are instructive. The NYSAGO used statelevel fraud law to target seconds-early releases of market-moving information

^{76.} In our work published in 2016, we showed this disdain to often be based on misunderstandings of contemporary securities markets. See Haeberle & Henderson, Information-Dissemination Law, supra note 20.

^{77.} Press Release, Office of Carolyn B. Maloney, Maloney Calls on SEC to End Outrageous Policy that Allows Inside Investors Early Access to Public Filings (Oct. 28, 2014), http://maloney.house.gov/media-center/press-releases/maloney-calls-on-sec-to-end-outrageous-policy-that-allows-inside [http://perma.cc/U8NB-PN6A].

^{78.} Chiarella v. United States, 445 U.S. 222, 251 (1980) (Blackmun, J., dissenting) (arguing that "persons having access to confidential material information that is not legally available to others generally are prohibited . . . from engaging in schemes to exploit their structural informational advantage through trading in affected securities").

^{79.} See id. at n.20 (noting that Justice Blackmun's view "must be rejected").

^{80.} See, e.g., Merritt B. Fox, Lawrence R. Glosten & Gabriel V. Rauterberg, Informed Trading and Its Regulation, 43 J. CORP. L. (forthcoming 2018).

^{81.} See Haeberle & Henderson, Information-Dissemination Law, supra note 20.

^{82.} See supra note 75 and accompanying text.

^{83.} See supra note 53.

by non-corporate information producers, such as research universities and trade associations.⁸⁴ The NYSAGO has termed these types of tiered information releases "Insider Trading 2.0," and effectively stopped them nationwide via consent decree alone.⁸⁵ No firm appears to have been interested in challenging the merits of Attorney General's claims, despite strong arguments against them.⁸⁶

Interestingly, Reg FD was adopted in 2000, and there was a market for early access to public-company information prior to its passage. However, this market was still of course subject to the general regulatory disdain for tiered information release. It should come as little surprise that the market was thus limited to the shadows of the financial industry, with firms giving certain investors early access to material information in return for quid pro quos (such as favorable analyst reports, reductions in investment-banking fees, or access to distinct investment opportunities) rather than openly selling tiered-access rights to anyone willing to pay their market price.⁸⁷

We do not claim these practices were a good thing. In fact, we are confident that they were not. These in-kind and often sub-rosa payments were likely inefficient and imposed costs on third parties, not the least of which because they created a perception that the markets were rigged in favor of a select few. But while the SEC was correct to put an end to these practices, from a quality-of-disclosure perspective, it was a mistake in the first place to drive this market underground with overbroad attitudes relating to insider-trading law. From that same perspective, it was also a mistake to then kill it altogether with Reg FD. As made clear from the remainder of this Article, we theorize that it would have been better to consider bringing the market out of the shadows—to regulate it, thus reducing any negative externalities while availing society of positive benefits associated with improved public-company disclosure.

* * *

This second Part has argued that the law stops market forces from ameliorating the disclosure shortfalls discussed in Part I. However, it did not focus on the typical argument that the mandatory disclosure and insider trading regimes preclude a purely voluntary one that would be more optimal. Instead, it

^{84.} We discuss this investigation in detail in our 2016 work. See Haeberle & Henderson, Information-Dissemination Law, supra note 20, at 1389-92.

^{85.} See id. at 1375-76, 1391-92; see also A.G. Schneiderman Announces Marketwired Agreement to End Sales of News Feeds to High-Frequency Traders, N.Y. STATE OFF. ATT'Y GEN. (Mar. 19, 2014), http://www.ag.ny.gov/press-release/ag-schneiderman-announcesmarketwired-agreement-end-sales-news-feeds-high-frequency [http://perma.cc/3784-NZEF] (discussing A.G. Schneiderman's "efforts to end Insider Trading 2.0").

^{86.} See Haeberle & Henderson, Information-Dissemination Law, supra note 20, at 1430 (explaining why the underlying conduct that the NYSAGO stopped had much appeal from a public policy perspective).

^{87.} See Selective Disclosure and Insider Trading, Exchange Act Release No. 33-7787, 64 Fed. Reg. 72590, 72591-92 (Dec. 28, 1999).

explained how the law stops a market for tiered access to corporate disclosure from forming. Crucially, as we have shown here, a lesser-known SEC regulation and a more general regulatory disdain for selective information revelation are the legal sources for the suppression of these market forces. In the next two Parts, we examine the market for early access to corporate disclosure that would exist if Reg FD and these regulatory attitudes were liberalized. In the final two Parts that follow them, we hone in on just how this market would improve corporate disclosure.

III. The Now-Suppressed Supply and Demand for Tiered Access to Enhanced Corporate Disclosure

If not for the regulation described above, there would likely be much more supply and demand for early access to *enhanced* corporate disclosure. It is this now-suppressed supply and demand that holds the key to the public information-sharing improvements we foresee. For that reason, this Part thinks about the composition of this likely early-access demand and supply.

A. The Likely Demand

Demand for enhanced early-access products from a variety of disclosure consumers (including potential ones) is suppressed by regulation today. This demand includes both that relating to participation in securities markets as well as that arising out of potential uses far beyond those markets.

1. Demand Among Securities-Market Participants

There are two main types of traders with likely demand for early access to enhanced corporate disclosure relating to their use of corporate information in securities markets: information traders and noise traders.

a. Information Traders

As the nomenclature suggests, information traders buy and sell securities on the basis of *information* that indicates an opportunity to profit in securities markets.⁸⁸ The information on which they trade generally relates to firms'

^{88.} See LARRY HARRIS, TRADING & EXCHANGES: MARKET MICROSTRUCTURE FOR PRACTITIONERS 6 (2003) (discussing "informed traders"); Fox et al., supra note 80, at 3 ("Informed traders buy or sell a stock due to private information providing them with a superior estimate of a stock's value than that implied by the stock's current price."). We focus on "information traders," and not the "informed traders" that are present in the economics literature (specifically, that relating to market-microstructure economics) and other legal commentary that relies on it. Although there is much overlap between the two categories, our aim is to focus on all those who trade based on information in a savvy manner, and not simply those who are actually better-informed.

fundamental values. ⁸⁹ In most cases, the information indicates some discrepancy between new information on firm prospects and existing market prices that do not yet reflect that information. ⁹⁰ But the picture is not always this romantic. The information may have very little to do with fundamental values, and instead simply relate to the direction of near-term price movements based on, for example, the flow of orders to buy and sell that are likely to be submitted to the market after such announcements. Whether trading on new fundamental-value information or new intelligence on impending trades, accessing information before it becomes apparent to the market is thus the essence of the information-trading enterprise. It follows that information traders surely have (now-suppressed) demand for early access to enhanced corporate disclosure products.

More specifically, there are two main types of information trading that entail such demand: announcement trading and so-called fundamental-value trading. The former is now traceable to high-speed traders. These traders buy and sell stocks solely based on the ability to procure, process, and trade on new computer-readable information. For these traders, the time period from receipt of the information to completed trade makes an eye blink look long. In fact, the trading value of many publicly disclosed announcements no doubt disappears in well under a second today because these traders act on it in such great quantity so quickly.

A well-publicized instance of announcement trading supports these observations about these market participants and their demand for enhanced early-access products. Until the NYSAGO put an end to it in mid-2014, about a dozen high-speed trading firms procured seconds-early releases of a wide variety of corporate-disclosure-like informational products, including the University of Michigan Index of Consumer Sentiment. Seconomists studied the trading that took place just after that index was released to a dozen or so announcement traders. The release to those traders occurred just two seconds prior to the time

^{89.} See, e.g., HARRIS, supra note 88, at 6 ("[Informed] [t]raders ... estimate fundamental values [and] cause prices to reflect their value estimates."); Fox et al., supra note 80, at 3 ("Fundamental value information arises from observing varied pieces of information that are publicly available or involve observable features of the world and analyzing that information in a sophisticated way that enables a superior assessment of a stock's value than that implied by the current market price.").

^{90.} See, e.g., Fox et al., supra note 80; Zohar Goshen & Gideon Parchomovsky, The Essential Role of Securities Regulation, 55 DUKE L.J. 711, 721 (2006) ("Pricing information requires analyzing the information to determine its value, and then trading based on discrepancies between price and value.").

^{91.} Fox et al., *supra* note 80, at 4 ("Announcement traders profit by appreciating with lighting speed the import of an announcement and then trading based on it with high speed technology.").

^{92.} See Merritt B. Fox, Lawrence R. Glosten & Gabriel V. Rauterberg, The New Stock Market: Sense and Nonsense, 65 DUKE L. J. 191, 199 (2015).

^{93.} See Vince Heaney, The War Against 'Insider Trading 2.0', FIN. TIMES (Oct. 19, 2013), http://www.ft.com/content/bdb99a02-359a-11e3-b539-00144feab7de [http://perma.cc/Q8NU-29EE].

^{94.} See Grace Xing Hu, Jun Pan & Jian Wang, Early Peek Advantage, 126 J. FIN. ECON. 399 (2017).

at which the information was fully released to the public.⁹⁵ The study showed that the index results routinely became incorporated into securities prices in literally less than the time required for a blink of an eye—well before the full public release even took place two seconds after the early one.⁹⁶

As one might imagine, these traders' analysis of new information for the most part takes place before they receive it. They use carefully thought-out algorithms to buy and sell based on one of many expected new data outcomes, waiting only for the information to be inputted into their algorithms.⁹⁷ For example, if among the group of initial recipients of a firm's earnings report (composed of a single number of income per share), these traders can set up an algorithm that receives that information and makes a trading decision in an instant.⁹⁸

Announcement traders would thus surely be keen on obtaining early access to corporate disclosures—if firms could provide them with it. With access to corporate information before others, these high-speed traders would gain a money-making advantage. The flip side of this is that these traders cannot engage in their work in a world in which some traders (but not them) are able to access information before the full public, as the high-speed-trading competition within the early-access window would swallow up any profits available to them before they could even deploy their algorithm. ⁹⁹ So, the fact that one trader might have it would incentivize all such traders to demand it.

In fact, even today when early-access products are outlawed for at least public companies, high-speed traders still pay to ensure that they are the first to be able to digest and trade on new corporate information. These traders continue to subscribe to services that specialize in passing along freshly released computer-readable versions of corporate disclosures and similar products with material information. For example, industry insiders have informed us that well-known information-dissemination firms such as Thomson Reuters and

^{95.} See id. at 400 ("Thomson Reuters adapted a two-tiered process, sending the readings of [Index of Consumer Sentiment] to a small group of fee-paying clients at 9:54:58, two seconds earlier than the broader release at 9:55:00.").

^{96.} See id.

^{97.} Yesha Yadav, How Algorithmic Trading Undermines Efficiency in Capital Markets, 68 VAND. L. REV. 1607, 1608 (2015).

^{98.} The point is also (somewhat amusingly) illustrated by the 2013 market drop that occurred within milliseconds after the Associated Press's hacked Twitter feed tweeted the words "White House," "President Barack Obama," and "[e]xplosions" in the same sentence—even though the network news correspondents on the White House lawn had nothing unusual to report. See Jamila Trindle, Hacked Tweet Prods Revamp, WALL St. J. (Apr. 30, 2013), http://www.wsj.com/articles/SB10001424127887324482504578455114002114382 [http://perma.cc/RS2Q-CMQC]. Market prices rebounded as quickly as they sank, as real human beings went on a buying spree that corrected the failure of artificial intelligence to detect the hoax.

^{99.} This conclusion is made clear by the experience with the early release of the revisions to the Michigan consumer-sentiment survey. See supra notes 94-94 and accompanying text; see also Brody Mullins, University of Michigan Inks Deal to End Early Release of Survey, WALL ST. J. (Oct. 7, 2014), http://www.wsj.com/articles/university-of-michigan-inks-deal-to-end-early-release-of-survey-1412690643 [http://perma.cc/4VET-MC2R].

Bloomberg LP offer specialized services that process and format hot-off-the-presses announcements for use by high-speed traders. The latter company—which now holds the rights to distribute the Michigan index—continues to provide a computer-readable feed of that index at the time at which the information is first released to the public. And at least one company (RavenPack International S.L.) provides this same type of service for corporate disclosures themselves.

The second type of information trading relevant here is that associated with more traditional fundamental-value trading based on analysis by human beings that takes place after new information is learned. Many refer to these traders simply as fundamental-value traders, 103 even though the distinct practice of announcement trading too is often based on information with fundamental-value implications. Whatever one calls them, these information traders too have good reason to demand head starts with respect to corporate information. Although they also turn to computerized analysis and use complex trade-execution programs, they operate in a quite distinct manner from that in which announcement traders operate, instead relying much more on the actual human processing of news. These traders mainly come from the ranks of thousands upon thousands of investment funds (including private equity funds, activist hedge funds, and actively managed mutual funds). 104

Just as with announcement traders, the conclusion that these information traders have demand for early-access products is supported by an understanding of their business. Accurately predicting the direction of market prices is not in and of itself enough to make them successful. Instead, they must not only accomplish this core task, but also do it in a timely fashion. Otherwise, they will be unable to capture profits based on their informed predictions before the underlying information and its implications are incorporated into market prices. As such, when new information is released to the public, time is of the essence for even these more traditional, slower-acting market participants.

^{100.} See also Aaron Timms, The Race to Topple Bloomberg, INSTITUTIONAL INV. (Dec. 28, 2017, 8:37 PM), http://www.institutionalinvestor.com/article/b14zbkqlxvjr52/the-race-to-topple-bloomberg [http://perma.cc/99A9-M7AX] (documenting attempts of rival services to replace the Bloomberg terminal).

^{101.} See, e.g., Press Release, Attorney General Eric T. Schneiderman, A.G. Schneiderman Applauds Deal Between University Of Michigan and Bloomberg Ending Early Release of Market-Moving to High-Frequency Traders (Dec. 28, 2017), http://ag.ny.gov/press-release/ag-schneiderman-applauds-deal-between-university-michigan-and-bloomberg-ending-early [http://perma.cc/533C-BA8R].

^{102.} See Who We Are, RAVENPACK (Dec. 28, 2017), http://www.ravenpack.com/about [http://perma.cc/VS5M-DCWT].

^{103.} See, e.g., Fox et al., supra note 80, at 3-4.

^{104.} See, e.g., id. ("Examples of fundamental value information traders are actively managed mutual funds, hedge funds, pension funds, and the professionally managed portfolios of wealthy individuals and non-profits.").

^{105.} See, e.g., HARRIS, supra note 88, at 69, 515. For a popular account of the need for speed in this context, see MICHAEL LEWIS, FLASH BOYS: A WALL STREET REVOLT (2014).

^{106.} See id. at 69.

On this note, it is clear that demand for enhanced early-access products from these information traders is quite distinct from that of their announcement-trading step-brothers. A mere two-second advantage would do little for the former. For this reason, their typical demand is likely very different. They probably would be interested in something more on the order of, at a minimum, hours-early access. For example, a sustained period for digesting the import of a narrative description of a firm's decision to settle a lawsuit would likely be valuable to a hedge fund that specializes in litigation-based trading.¹⁰⁷

Still, this point on the amount of early access to enhanced disclosures that would be valuable to these traders should not be overstated. It is entirely plausible that these traders would pay for early access on the order of but a few minutes. Those minutes might be enough for them to engage in deeper analysis while also completing their trading before their time-based advantage is gone. Or, this small-time advantage alone may be of great value to the extent that it can be used for a head start on trading that will bleed into the period after the information is more widely released.

Just as with announcement traders, the conclusion that there is suppressed demand for early access to corporate disclosures among those who fall into the fundamental-value trading group of the information-trading family is supported by existing industry practices. Currently, these traders purchase early access to material information produced by third parties, such as market surveys. For instance, hedge funds and actively managed mutual funds pay substantial amounts—on the order of \$500 million per year in the aggregate—to get information through expert networks about issuers even though those issuers will eventually make the information at issue public. And it is well known that they (legally) spend considerable resources trying to gain early access to lots of small pieces of immaterial corporate information that they can put together into a material mosaic to better understand firms' fundamental values before that information is similarly disclosed by firms. Indeed, the penchant for illegal insider trading based on *material* information in the United States and abroad evidences this same demand.

^{107.} A number of hedge funds focus their trading based on new information relevant to the likely outcome of large litigations. For example, as law firm associate, one of us was sent to monitor litigations, stepping outside of the courtroom to provide important updates in real time. This type of activity is especially prominent in bankruptcy proceedings, where company life-and-death decisions are not uncommon. Emails from the courthouse can reach traders before Bloomberg terminals receive and transmit the news. And, they can reach the same minutes or even hours before the Wall Street Journal publishes the article about warning signs of a liquidation.

^{108.} BORIS G. ROYSBERG ET AL., GERSON LEHRMAN GROUP: MANAGING RISKS 1 (2012) (estimating revenues).

^{109.} See, e.g., Gretchen Morgenson, Surveys Gives Big Investors an Early View From Analysts, N.Y. TIMES (July 15, 2012), http://www.nytimes.com/2012/07/16/business/in-surveys-hedge-funds-see-early-views-of-stock-analysts.html [http://perma.cc/2UYH-7SKJ].

^{110.} Trading based on information in soon-to-be-released corporate disclosures is thought by many to be rampant in the United States. For a recent empirical study supporting this conclusion, see Alma Cohen et al., *The 8-K Trading Gap* (Columbia Law & Econ. Working Paper No.

Of course, it is theoretically possible that announcement traders and information traders would act as a group to refrain from one-upping each other by paying firms for the right to access their disclosures early. If they did so, each might save from having to pay for early-access rights while leaving the current equilibrium among them in place. However, this collective action is unlikely. The incentive to depart from the group practice would simply be too strong—especially given that the parties that would have to coordinate include many competitors. The fact that many of these same traders (including more traditional hedge funds and actively managed mutual funds) have already engaged in an intense arms race with respect to speed-based trading technology bolsters these points. So too do the ones mentioned earlier in this section relating to announcement traders' purchase of early-access feeds of non-corporate information and of specialized ones for equally timed corporate disclosure.

b. Noise Traders

The intra-market demand for early access also includes a second category of trader: the noise trader. Like the two sub-types of information traders considered above, noise traders aim to use new information in order to purchase underpriced stocks or sell overpriced ones. However, they trade based on information that does not actually indicate such a mispricing. Instead, they trade based on "noise." Typically, the problem is that they are trading based on fads or the like that have little to do with firms' more accurate values. Or, the information on which they are buying or selling has already been incorporated into market prices by the time they have finished watching Power Lunch on CNBC. Thus, these market participants operate on the false premise that they possess a profitable informational advantage. More often than not, their trading earns them losses. Whatever the precise nature of this value-losing trading, economic and legal literature considers them unworthy of even standing in the same category as others that trade on information. 113

Whether rational or not, noise traders generally want to be on at least equal time footing with savvy information-trading pros. If the law allowed it, they would therefore likely be well represented among the universe of consumers in this market—even if joining in on the fun is not in their best financial interests.

^{524, 2015),} http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2657877 [http://perma.cc/8AME-RVUQ] (showing abnormal trading by insiders during the four-day window allowed by the law for disclosing certain significant firm events); see also M. Todd Henderson et al., Offensive Disclosure: How Voluntary Disclosure Can Increase Returns from Insider Trading, 103 GEO. L.J. 1275 (2015) (documenting abnormal returns earned by insiders using Rule 10b5-1 trading plans).

^{111.} See, e.g., Merritt B. Fox, Lawrence R. Glosten & Gabriel V. Rauterberg, Stock Market Manipulation and Its Regulation, 35 YALE J. ON REG. 67, 88 (2018).

^{112.} See supra note 88.

^{113.} See, e.g., Fox et al., supra note 92, 86-88 (treating information traders and noise traders as distinct types of traders); Goshen & Parchomovsky, supra note 90, 714-15 (same with respect to "informed traders" and noise traders).

It is interesting to flag one final aspect of these traders' demand for enhanced early-access products. Many of these market participants are individuals, and therefore by definition conduct their trading through retail-level brokerage accounts as opposed to institutional-level ones. 114 As a consequence, brokerage houses that target individual, everyday investors would also have a strong incentive to pay for early-access products—so long as redistribution of the information from them to their customers would be permitted within early-release windows. We can thus count Charles Schwab, Fidelity, E*TRADE, and the like as parties that likely have demand for early access to corporate disclosures that is now suppressed by the law. Indeed, we can count brokerage houses focused on institutional investors too, as many investment funds no doubt engage in little more than noise trading at times, whether or not they know or admit it. 116

2. Demand Beyond Securities Markets

The value of corporate information (and therefore demand for enhanced versions of it) should not be viewed too narrowly. The demand for early-access products that is now curtailed by the law no doubt goes even further to cover many who would use their early-access rights for purposes that have little to do with the trading of financial instruments. Not even the most close-minded observer of corporate law and securities regulation can deny the extra-market importance of information about public companies. It is these firms that drive so much of the production of goods and services in the U.S. economy, and in so doing so much of the economic activity of the nation. To better or worse, corporations also intermediate much of our culture and have a big effect on politics. As such, their activities have enormous implications for the distribution of wealth in society as well as overall levels of economic welfare.

Who exactly are these individuals and entities with extra-securities-market demand for advantageous access to enhanced disclosures? Only an information market can answer this question fully. But it is worth noting that news outlets,

^{114.} See, e.g., Kristina Zucchi, Comparing Institutional and Retail Traders, INVESTOPEDIA (Jan. 2, 2018, 11:42 AM), http://www.investopedia.com/articles/active-trading/030515/what-difference-between-institutional-traders-and-retail-traders.asp [http://perma.cc/PYC4-8BXM].

^{115.} In Section IV.A., we discuss whether one should expect firms to permit such redistribution.

of those who are first to receive new corporate disclosures. They are the record holders of the public-company stock that their customers own beneficially, so they are the ones to whom the disclosures are provided. Collective action among these brokerage houses to avoid paying for this first access that they (and all) now get for free is unlikely. As with collective action among information traders discussed at the close of the previous subsection, the incentive for one competitor to depart and gain a competitive advantage over all others is simply too strong. Indeed, these dominant firms could lose much business to one or more smaller brokerage houses (including new-entrant upstarts) if the latter purchased early-access rights to corporate disclosures while the former attempted to collectively hold the industry line.

^{117.} See supra note 1 and accompanying text.

corporate watchdogs, and any individual or group of concerned citizens may want to be in the know about corporate information as early as possible. For the news, even if barred by private contract or law from publishing information until the firm makes it fully public, extra time would allow more thorough analysis and story-telling development before going live with the new information. In fact, the federal government itself already provides this type of early access to its information to the news media—albeit for free, much to the chagrin of the well-informed taxpayer. The Department of Labor allows reporters to enter a sealed room ahead of certain important data releases, thereby allowing them to get a head start on their articles so that they can publish them as soon as the data is released. For watchdogs and other concerned individuals or groups, early access would allow for analogous valuable pre-public-release work. For example, it may help get these parties to organize and be prepared to act in time to strike the hammer while the iron is hot as the information begins spreading worldwide.

On a similar note, even traders themselves surely have extra-securities-market uses for early-access products—and therefore demand for them that is held down by current law. For example, some information traders who purchased the information in an hours-early market could use their early peek to distill the information into useable form for institutional shareholders and client-development purposes. Being among the first to digest important new information is a powerful tool to the investment-fund rainmaker seeking to bring in or please clients who are willing to pay for good analysis by someone with her finger on the pulse of a company or industry.

Thus, the true social value of corporate disclosure emanates far beyond securities markets. Indeed, the chief justification for the securities-disclosure regime is based on the good work it does in helping get information about the condition and prospects of firms reflected in securities prices that all can see. ¹¹⁹ In the end, corporate information impacts those far beyond the market, and not just those who attempt to trade on it for profit. It follows that there is much reason to believe that early access to this information would be of interest to more than just traders—if the law allowed firms to grant it.

^{118.} U.S. Department of Labor Press Lock-ups Policy Statement and News Organization Agreement, U.S. DEP'T LAB. (Oct. 1, 2016), http://www.dol.gov/sites/default/files/documents/newsroom/lockup-organization-agreement.pdf [http://perma.cc/KQR8-D779]; see also Bernard Baumohl, The Lock-Up, in The Secrets of Economic Indicators: Hidden Clues to Future Economic Trends and Investment Opportunities 1 (Bernard Baumohl ed., 1st ed. 2004), http://www.informit.com/articles/article.aspx?p=357686 [http://perma.cc/83TF-U59Z].

^{119.} See supra note 36. See generally Friedrich A. Hayek, The Use of Knowledge in Society, 35 AM. ECON. REV. 519 (1945) (providing one of the seminal works on the role of securities markets in incorporating far-ranging pieces of information about the economy's future into market prices).

B. The Likely Supply

There is also reason to believe that firms would like to meet this demand if not for the current mix of securities laws that stops them from doing so. Currently, firms give away a large amount of information for free. They have to, as Reg FD and regulatory attitudes on tiered information dissemination effectively preclude any other result.¹²⁰

Crucially, the marginal cost associated with the production of at least basic tiered disclosure products would likely be quite low. Companies already produce disclosures on an ongoing, periodic basis as well as upon a number of special events. 121 At a minimum, they have to do so in order to comply with mandatory-disclosure law. 122 Although not consistent with the general views of securities-lawyer counsel in the area, 123 some firms even go beyond the minimum, providing more information to the public than that required by law. 124 Consequently, firms have systems in place designed to both collect information and disseminate it to the public. Deploying those systems to provide those same disclosures to high-speed traders on a seconds-early basis, and fundamental-value traders, news outlets, and corporate watchdogs on something more like a minutes- or hours-early one, may require relatively small additional outlays.

Still, our precise goal is not for information consumers to have access to corporate information early. Rather, the goal is to get them early access to *enhanced* disclosures—and to have those disclosures be then made available to all. Would the same thinking apply to such enhanced versions of those disclosures? There is much reason to think the answer is yes.

Mandatory-disclosure law is firmly rooted in the belief that companies are the lowest-cost producers of corporate information. ¹²⁵ If anyone were able to sell enhanced informational products at an attractive price to those who value corporate disclosure, it would thus be firms. And once those enhanced products were generated, the existing means for disclosure could likely be used to complete the disclosure product and its delivery. The latter point is especially true if third parties that specialize in the information-dissemination businesses (including those already in existence today)¹²⁶ are efficient at creating tiered disclosure products, and operate in a competitive market.

^{120.} See supra Section II.B.

^{121.} See supra Introduction; Section I.B.

^{122.} See id.

^{123.} See id

^{124.} E.g., D. Eric. Hirst, Lisa Koonce & Shankar Venkataraman, Management Earnings Forecasts: A Review and Framework, 22 ACCT. HORIZONS 315 (2008) ("Management earnings forecasts are voluntary disclosures that provide information about expected earnings for a particular firm. Such forecasts represent one of the key voluntary disclosure mechanisms by which managers establish or alter market earnings expectations, preempt litigation concerns, and influence their reputation for transparent and accurate reporting.").

^{125.} La Porta et al., supra note 43, at 5.

^{126.} See, e.g., supra note 95.

Picking up on this last note, just as with our conclusions with respect to demand for enhanced disclosure products delivered in a tiered fashion, the conclusion that there is likely supply of the same that is now held down by the law is bolstered by the presence of similar products today. A market for the speedy provision of enhanced post-release versions of corporate disclosures and similar informational products now exists. Information-dissemination services such as those provided by RavenPack, Thomson Reuters, and Bloomberg¹²⁷ can—and do—garner revenue from repackaging these products and sending them out at lightning-fast speeds. If the law did not force this intermediation, firms themselves could net much or all of the profits associated with the products. With the legal reforms we propose to make way for an early-access market, firms would presumably either recreate this line of business and keep its profits for themselves, or charge the existing intermediaries in return for the right to do so. And when they did so, they would surely consider the revenue that could be generated through enhancing the quality of the disclosures at issue.

Whether this new line of business is built or bought by the firms that choose to supply early-release products, a variety of forces might nevertheless lead many—or even most—firms to nevertheless be hesitant to offer disclosures in a commoditized form. Considering the precise scope of this likely supply is beyond the scope of this Article. 128 For present purposes, it is only necessary to see that revenue incentives, low marginal costs, and existing practices give rise to the inference that many firms would be interested in selling early-access rights to new and improved versions of their disclosures if not for existing regulation.

* * *

This third Part has shown why there is strong reason to believe that the law is suppressing both demand for early access to corporate information as well as the supply that demand would otherwise trigger. With tiered access to disclosures permitted, both investors and those operating well beyond securities markets could put that information to good use. Firms would therefore have an incentive to provide them with early-access rights to not just the information they already generate, but to something more. In the final Part, we think specifically about just what that something more would entail. But before we do that, Part IV addresses the contours of the market and products that would likely arise if tiered information dissemination were allowed.

IV. The Market and Products that Would Likely Result from Unleashing

^{127.} See id.

^{. 128.} We discuss the relation between the scope of corporate supply, on the one hand, and the likely effect on the quality of corporate disclosure we envision, on the other, in more detail in Part V. We do the same with respect to likely demand for early-access products in that section.

the Supply and Demand

Given the likely supply and demand for early access to enhanced corporate disclosures, the legal reforms we envision would result in a market with multiple types of early-release products. We cannot provide a precise description of this future market for corporate disclosure any more than those setting up the proto-New York Stock Exchange under a buttonwood tree in lower Manhattan in 1792 could have explained the algorithmic buying and selling that dominates trading today. The exact shape of the market will evolve over time as buyers and sellers interact again and again, with government regulators and law professors looking on from afar—intervening and commenting, respectively, when necessary. But it is possible to make well-reasoned predictions as to the general contours and features of that market. This penultimate Part aims to do just that, largely by making inferences that flow from what we covered above. In particular, this Part sketches out a basic market with one or more early-release products that we think would likely come into being should tiered-access supply and demand no longer be suppressed by the law.

A. An Information Market With a Single Early-Release Product

The most basic market that would follow a liberalization of the law in the area would be one in which firms sold only a single early-release product, marketing it to any individual or entity interested in having a head start in using corporate information. For example, a company may agree to supply two-hourearly access to its disclosures.

Although many options exist for this type of product, we expect a subscription model to be among the easiest and most common. Under subscription contracts in this setting, a fixed price would likely be paid by information traders, noise traders, and more general information consumers. In return, they would be entitled to early access to whatever disclosures the firms made over some sustained time period. For example, in December, a firm might represent that if it has new information to disclose at the pertinent time, it will be releasing it at 2:00 p.m. on the 15th and 30th or 31st of each month throughout the following year—and that it would be charging \$5,000 per month for a subscription to 12:00 p.m. releases of that information on those days. 130

^{129.} For a discussion of this history, see William A. Birdthistle & M. Todd Henderson, Becoming a Fifth Branch, 99 CORNELL L. REV. 1 (2013) (describing the origins of stock exchanges as they relate to self-regulation of brokers).

^{130.} The subscription might also include this same type of hours-early access to other disclosures that the firm must make between those dates to comply with current law. For example, if certain significant firm events happen on January 8, the law requires a disclosure on Form 8-K within four days. So, the firm might promise to share the content of an 8-K to subscribers at noon on the day on which the firm would be releasing the 8-K to the public at 2:00 p.m.

The price for early access to the University of Michigan Index of Consumer Sentiment discussed above¹³¹ used a model like this, attracting significant interest from investors.¹³² However, we must be clear that the price and timing in our example here is very speculative. In the Michigan example, the forces of supply and demand that led to that market price reflected a product composed of a mere index, that index was in fact revised only twice a month, and the early-release period lasted just two seconds.¹³³ At the same time, that index had import for not only one company (and perhaps a relatively small number of competitors and the like), but for the market as a whole. Michigan was able to charge thousands of dollars per month to a wide range of investors.¹³⁴ Ultimately, the value of a subscription for the average public company will be revealed by the market—whether it be a very small amount or hundreds of thousands per month.

Still, there are plausible attractive alternatives to this subscription. For instance, firms could host one-off auctions each time they expected to make a new disclosure in the near future. But that scenario must be much less likely than the envisioned subscription-based one. With 3,500 or so public companies in the United States, there could be tens of thousands of disclosures made in the aggregate each year to repeat customers. If that is the case, one-off auctions would present significant transaction costs to both firms and purchasers. Thus, a preference on both the supply and demand sides for a sustained subscription-based approach should be expected. Admittedly, though, if the market turned out to be less active than we predict, and firms only sold early access to a handful of their disclosures each year (e.g., the annual 10-K and quarterly 10-Qs alone), an auction alternative could dominate.

Whether offered via sustained subscription or one-off auction, a prominent issue with regard to re-sales of this single early-release product is foreseeable. Even assuming that regulators would not step in to place a ban on re-sales, issuers might place terms in their contracts that partly or fully forbid redistribution. Courts can be expected to permit these types of limits on re-sales. Despite long-standing hostility to restrictions on the alienation of property, the trend for some time now is toward enforcing limited licenses when it comes to the distribution of information.¹³⁵

^{131.} See supra Section III.A.1.a.

^{132.} See Brody Mullins et al., Traders Pay for an Early Peek at Key Data, WALL ST. J. (June 12, 2013), http://www.wsj.com/articles/SB10001424127887324682204578515963191421602 [http://perma.cc/GU77-YVAM].

^{133.} See supra Section III.A.1.a.

^{134.} See Mullins, supra note 132 (stating that the subscription fee charged by the information-dissemination intermediary that directly provided the early-release product to clients was \$5,000 a month plus a \$1,025 monthly "connection charge" in return for seconds-early access to the index). Similar early-release products sold by the Institute for Supply Management relating to revised manufacturing indices went for about \$3,000 per month. See id. Likewise, the Chicago Business Barometer's early-access version of its measure of local business activity sold for approximately \$2,600 a year. See id.

^{135.} See ProCD, Inc. v. Zeidenberg, 86 F.3d 1447 (7th Cir. 1996).

Although it is difficult to even predict the outcome of this re-dissemination issue, it is clear that that outcome will have a marked impact on the contours of the information market. The value of at least anything beyond seconds-early access to corporate disclosures would be greatly altered should purchasers of early access have the right to re-disseminate the product (namely, its information) within the early-release window. For example, such a permissive approach to re-sales would increase the value of the early-release product for a party like Charles Schwab. With a green light to profit by passing on the information within the early-release window, the retail brokerage house could purchase early access, offer it to its clients alone, and then earn revenue in a variety of ways. For others, this permissive approach might do the opposite by reducing the informational advantage provided to them during the early-release window. For example, hedge funds may find the early look at the disclosure far less valuable should non-subscribing mutual funds be able to obtain the single early-release product by simply signing up for a Charles Schwab brokerage account.

Of course, firms would almost surely place some sort of outside restriction on the sharing of their early-release products before they are made fully public. Without that type of restraint, MSNBC and Thomson Reuters could purchase early access to a disclosure, and then release it to the entire public—thereby greatly reducing the value of early access to all but itself and perhaps a handful of high-speed traders. So, at a minimum, any single-product market can be expected to be characterized by contractual clauses tailored to avoid this type of large-scale re-dissemination within the early-release window. 136

Whatever the re-dissemination outcome, this simple one-product market likely fails to reflect the different needs of the investors and other parties that value early-release products as well as the different types of such products firms would be interested in generating for them for a price. As such, our description of this simple market with a single early-release product perhaps provides little more than background for what we think is more likely to arise: an early-access market characterized by more complexity than that sketched out so far, like the one we describe next.

^{136.} Even if the outside limit on resales involves early access that is circumscribed to a select group explicitly identified in the subscription contract ("all retail brokerage clients of Charles Schwab"), issuers should nevertheless be expected to tolerate resales by buyers of the information whose sole purposes in buying the information is to function as a repackaging/re-dissemination intermediary between the firm and information consumers. In that case, there would likely be a single buyer of the information (e.g., Thomson Reuters), and that buyer would be acting merely as a conduit for that information. As such, the issuer would price the initial sale to this informational intermediary to incorporate the expected gains from the intermediary's resale. Notably, thinking about such an organization of the early-release market shines light on something that already exists today where tiered dissemination of corporate disclosures is barred: The initial price of corporate disclosure is zero (by law), and firms like RavenPack and Bloomberg capture all of the producer surplus associated with at least disclosure-formatting enhancements.

B. An Information Market With Two or More Early-Release Products

Given the high likelihood of unsatisfied demand associated with a single-product market, firms would have the incentive to provide different types of early-access products to consumers in what would therefore be a multi-part market. It is easy to envision this multi-faceted market. In such a market, firms and one set of subscribers might agree to sell and buy, respectively, products that allowed for some types of corporate information to be digested over hours. All the while, those same firms and a distinct set of subscribers might contract for a staggered start lasting a mere second or two that would take place *prior* to those other early starts. ¹³⁷

These two distinct sets of subscribers and products could be described under the heading of Tier 1 and Tier 2. So, if a firm is once again releasing its disclosures to the public at 2:00 p.m., Tier 1 subscribers might gain access to the information at 11:59:58 a.m. sharp in a computer-readable format. They would therefore have a two-hour-and-two-second head start. Tier 2 subscribers would then gain access at noon, two seconds after the Tier 1 subscribers, yet still two hours before the general public.

In this scenario, the consumers signing up for Tier 1 access would likely come from the announcement-trader ranks alone. In contrast to that superspecialized audience for Tier 1 seconds-early access, those subscribing to Tier 2 hours-early access would come from a broader group of information traders, noise traders, and a more general audience.

Whatever the exact composition of the Tier 1 and Tier 2 subscriber base in this type of market, those who signed up for early-access products (and at least a limited set of their clients, assuming some form of redistribution is allowed within early-release windows)¹³⁸ would be the only market participants with the information between just prior to noon and 2:00 p.m. Only Tier 1 announcement-trading subscribers would be able to compete effectively to capture the value of the new information during the two seconds prior to noon.¹³⁹ During the two hours leading up to 2:00 p.m., they, along with the Tier 2 fundamental-value-trading subscribers, noise traders, and the broader audience of information consumers contemplated earlier would have exclusive rights to use the new information to inform their work.¹⁴⁰ During that time period, Tier 2 subscribers would thus have joined the Tier 1 subscribers with exclusive access to an early-release version of the ultimate public disclosure product.

^{137.} The experience with the Michigan consumer-sentiment survey is a model here. Also interesting here is that stock-market trading data is disseminated loosely in this fashion. High-speed traders pay trading platforms for private feeds of quote and transaction data, thereby receiving this valuable trading information ever so briefly before others. See, e.g., Global Data Products – U.S. and Global Data Feed Products, NASDAQ, http://www.nasdaqtrader.com/Trader.aspx?id=dpspecs [http://perma.cc/8KJY-P3AD] (listing the "low-latency" direct-access data products offer by NASDAQ).

^{138.} See supra Section IV.A.

^{139.} See supra Section III.A.1.a.

^{140.} See supra Section III.A.1.a & b.

Still, this discussion of these two main possible submarkets within the proposed early-access market in no way forecloses another possibility: that of even more submarkets. There is nothing magical about a couple of seconds or hours of early access. Those are merely broad contours of the market we expect—and ones that we find useful for ease of exposition. Law professors cannot know all the uses various investors might have for the information. So, in the complex real world, firms might offer any number of discrete products within a particular time period, slicing and dicing as the market demands. For instance, in the hours before a public announcement of corporate information, a firm could offer a two-hour-and-two-second Tier 1 feed (11:59:58 a.m.), a two-hour Tier 2 one just after it (12:00 p.m.), a one-hour Tier 3 one after that (1:00 p.m.), and a 1-minute Tier 4 one even later (1:59 p.m.). The value (and even existence) of each of these early-access products would reflect the expected benefits of receiving it.

The description of this multi-faceted market raises a set of important issues relating to subsequent releases of disclosure products. Would subsequent early releases have to include everything included in the earlier-released versions? For example, would Tier 3 one-hour-early access include access to the computer-readable product and other products already released to Tier 1 and 2 subscribers an hour earlier? Although there is reason to doubt that Tier 3 subscribers would even value at least the Tier 1 code-based disclosure, one can imagine earlier-release products that would in fact be useful to Tier 3 subscribers. Whether this aspect of the proposed market would increase or decrease the aggregate value of early-release products to corporations is tough to predict. Earlier subscribers would likely pay more for larger advantages. Later subscribers would therefore likely pay less. In the end, firms could be expected to figure out what mix of products delivered the most profit.

Lastly, it is important to emphasize that we require a full public release of all early-release products within a relatively small time period. As we soon explain, that full release is essential for the functioning of the disclosure spur we anticipate. In many instances, current mandatory-disclosure law would require such full disclosure, as the information released early would be subject to an existing compulsory disclosure item. But the full-release requirement is still necessary to achieve our goal, since in other cases, existing law would in no way require such full disclosure. To be sure, if the information was valuable enough to traders that they paid for early-access rights to it, then that information would generally be material. And the mandatory-disclosure regime targets the production and release of a long list of *material* information. Hut it in no way

^{141.} See supra Introduction; supra note 22 and accompanying text.

^{142.} See infra Section V.A.1.

^{143.} See infra notes 209-211 and accompanying text (discussing "materiality" in the securities context).

^{144.} See id.; infra Section V.B.

requires all material information to be released.¹⁴⁵ Moreover, under current law, even required releases need only be made within a very large timeframe, generally more easily measured in financial quarters than in hours or days.¹⁴⁶

For many, the same full-release feature of our proposal also has larger appeal. This is because it dictates that the anticipated production of disclosure above and beyond that in existence today will not result in any selective disclosure of information beyond the relatively small limited-release periods we contemplate. For that reason, information asymmetry in the market would be limited to these periods. Moreover, due to the transparency we require, these periods would be visible to all before they took place. This allows ordinary investors and the investment funds trading on their behalf to better protect themselves from the dangers of information release than they can today, when information can be disseminated at any time without any warning.¹⁴⁷

* * *

This Part has aimed to stake a bare understanding of the market and products that would arise absent the current prohibition on the tiered dissemination of corporate disclosures—albeit while still providing enough description so that the expected general contours and key features of the same are clear. Absent the regulation that bars them, one or more of the markets with early-access products along the lines described above would likely arise. As indicated above, our inkling is that a market with two parts and much redissemination of information prior to its full release would be most likely—with one part aimed at announcement traders and the other at more traditional information traders, noise traders, and more general users of corporate information. But we cannot paint the exact contours of the anticipated market on this canvass. Ultimately, only a loosening of the law that allows early-access supply and demand to interact could provide the full picture. Nevertheless, the basic vision of the market and products laid out in this Part allows us to do what we do in the next and final Part: set forth in detail our thesis about the likely effect the information market would have on the quality of corporate disclosure.

V. Likely Effect on the Quality of Corporate Disclosure

Making reforms to permit tiered information releases along the lines drawn thus far would help in the law's long struggle to bring about improved disclosure from firms. In particular, as we explain below, the envisioned market would

^{145.} See infra Part V.B.

^{146.} See infra Section V.A.2 (describing the required pace of corporate disclosure under current law).

^{147.} See Haeberle & Henderson, Information-Dissemination Law, supra note 20, at 1431 ("Today, no law restricts public companies and similar information producers from releasing their information when they please, without any advanced notice to the public whatsoever. For this reason, even savvy ordinary investors no doubt find themselves harmed by post-release information asymmetries with some frequency.").

facilitate the production of better disclosure along three dimensions: amount, frequency, and formatting. We also illustrate this theory with the example of one of the most socially valuable aspects of corporate disclosure today (management discussion and analysis of the firm's financial condition and operations). Accordingly, in this final Part, we set forth in detail the ultimate claim of the Article.

A. Enhancements Along Three Dimensions of Corporate Disclosure

The early-access market described above would likely bring about the production and sharing of more corporate disclosure, at more frequent intervals, in better formats.

1. Disclosure Amount

problem).

Allowing marketplace bargaining between the firms that produce disclosures and the consumers who actually use them would present a straightforward fix to shortfalls in the amount of what is disclosed today. With the ability to sell early access to information, firms would have new revenue-based incentives to generate and share valuable content above and beyond that which is required by the law today. The material information included in those selective releases, under our proposal, would then have to be made available to the entire public—even when it is not subject to an existing disclosure mandate. Accordingly, when market demand incentivizes the production of an early-release product with more information than that produced and released today, that information would be shared with the general public soon enough—leaving both those who paid for early access to the information and the public more generally with more information than they receive today.

Our conclusion here becomes even clearer by thinking about the superior feedback that the market would generate for the firms that produce disclosures. The feedback would mainly come in the form of competition and demand. In advance, General Mills cannot know the exact content investors demand any more than it can decipher the most attractive ingredients for its breakfast cereals. But the firm can respond to the signals sent by the purchasing decisions of many consumers in the marketplace who prefer the content in one disclosure product more than another, just as it can increase the amount of fiber in Rice Chex to match that of Wheat Chex based on sales patterns among those products and others. Whatever the corporate-information equivalent of fiber in cereal is, over time firms that meet the demand of consumers for additional information, like

^{148.} See supra Part I (providing background on the disclosure-underproduction

^{149.} See supra Introduction; supra note 22 and accompanying text.

those that meet consumer demand more generally, will be rewarded with higher revenues in return for information, while those that don't will not.

Despite our confidence in the information market, like any attempt to identify the exact demand for early-access products for use beyond securities markets, ¹⁵⁰ or to sketch out the precise contours of the market, ¹⁵¹ speculating on the exact additional information that would be produced threatens to obscure what should be emerging as our main refrain by now: this information market has the potential to enhance disclosure in ways that the mind cannot foresee. Still, some detailed concrete examples are in order. For that reason, the next section provides an illustration of just how the market would increase the amount of a key aspect of disclosure today—that relating to management discussion and analysis that is provided in 10-Ks, 10-Qs, and registration statements. For now, however, the story is short and sweet: with this new revenue incentive, firms would be more likely to supply more financial data and the like for, at a minimum, announcement and fundamental-value traders¹⁵²—and more labor information and domestic-hiring data for news providers and their general public audiences too.¹⁵³

Still, a final point on disclosure amount is important to emphasize. We think it highly unlikely that the number of firms willing to offer additional content in this market will be zero. This conclusion flows from our description of the likely demand and supply discussed in Part III. But even if the market yielded no additional quantity of disclosure whatsoever across all 3,500 or so public firms, there is little downside for the quality of disclosure should the law experiment with it. A signal from the market indicating that information on the margin is not wanted would not in and of itself reduce the amount disclosed today. In different words, the information market need not change the floors set by mandatory-disclosure law—meaning that it, in and of itself, would not leave the amount of disclosure produced worse off by even an iota. ¹⁵⁴

Stepping back, our observation at the outset of this Article should become clearer: our proposal is merely one for an additional mandatory-disclosure item—albeit an open-ended one. The new disclosure requirement is thus one that compels the disclosure of all information that firms have selectively disclosed in the early-access market. Firms must disclose every additional piece of information that select information consumers value at a price high enough to incentivize the firms to generate and share it. Or, simply stated, our new

^{150.} See supra Section III.A.1.

^{151.} See supra Part IV.

^{152.} See supra Section III.A.1.a.

^{153.} See supra Section III.A.2.

^{154.} The informational signal embodied in such a lack of demand may nevertheless be valuable to regulators in determining the content and scope of existing disclosure requirements—namely, by helping identify areas where those requirements result in information overproduction. See infra Conclusion.

disclosure requirement is one that would likely result in firms disclosing things that information consumers want and could get, but do not receive today.

2. Disclosure Frequency

The second main dimension along which corporate disclosure comes up short today relates to the frequency with which firms share information.

The United States is a "periodic disclosure" jurisdiction (as opposed to a "continuous" one), meaning firms are only required to disclose key information on an ongoing, periodic basis, and not immediately as they learn of it.¹⁵⁵ For instance, if the CEO developed cancer or the firm discovered the cure for cancer, there is not necessarily any obligation to disclose the news anytime soon.¹⁵⁶

There is an active and longstanding debate about the extent to which this pace of disclosure is sufficient.¹⁵⁷ Many other similarly sophisticated securities-law jurisdictions have gone with a continuous-disclosure one for public firms.¹⁵⁸ Would a move toward a more continuous regime be more optimal? Many critics would answer in the affirmative, taking the reasonable view that public companies in America may make their general disclosures less often than investors and society would want.¹⁵⁹

Taking a small step in the direction of continuous disclosure, the SEC has recently promulgated rules increasing disclosure frequency for some key corporate events. ¹⁶⁰ This has not satisfied all critics, some of whom have called

Reform: The Impact of Regulation FD and Current Disclosure Initiatives, 7 STAN. J.L. BUS. & FIN. 225, 231-240 (2002). Firms do have to make a variety of other more specific disclosures as the underlying events that trigger them occur. For example, every time an executive trades in the company stock, the firm must file a Form 4 within two days. See Securities Exchange Act of 1934 § 16, 15 U.S.C. § 78p (2018). Likewise, whenever significant events take place, firms must "8-K" them within four days. While we focus on concerns for the amount of information in, and formatting of, these more specific disclosures, we leave aside issues with their frequency, as these disclosures must occur within relatively tight timeframes as often as the underlying events that trigger them occur.

^{156.} The earlier discussion of Apple's approach to disclosing Steve Jobs's illness makes this point. See supra Section I.B.

^{157.} Dale Arthur Oesterle, *The Inexorable March Toward A Continuous Disclosure Requirement for Publicly Traded Corporations: Are We There Yet?*, 20 CARDOZO L. REV. 135, 194-211 (1998) (arguing in favor of continuous disclosure).

^{158.} For example, in Canada, where securities law at the provincial level requires continuous issuer disclosure. See, e.g., Securities Act, O. Reg. 446/16 §§ 3 & 4 (Can.) (citing National Instrument 51-102, Continuous Disclosure Obligations, http://www.osc.gov.on.ca/en/SecuritiesLaw_51-102.htm [http://perma.cc/3SG9-WHZP]).

^{159.} See Oesterle, supra note 158 at, 218-225.

^{160.} See SEC Final Rule, Additional Form 8-K. Disclosure Requirements and Acceleration of Filing Date, Securities Act Release No. 33-8400A, Exchange Act Release No. 34-49424A, 69 Fed. Reg. 48,370 (Aug. 23, 2014) (codified at 17 C.F.R pt. 239, 249 (2017)). The disclosure is required by Section 409 of the Sarbanes-Oxley Act of 2002, 15 U.S.C. 78m(I) (2018) (expanding what must be disclosed in current reports within days of their occurrence on Form 8-K, as opposed to mere quarterly and annual ones on Form 10-Q and 10-K).

on the agency to leap toward a regime that requires companies to update and release their general disclosures with much greater frequency. 161

A central problem with the SEC approach to disclosure frequency is that the rules apply to all 3,500 or so public firms. But, there is little reason to believe that the optimal frequency of ongoing, periodic disclosure would be the same from \$900-billion Apple Inc. to \$700-million 1-800Flowers.com Inc. There is also reason to believe that changes in technology and social media could lead to more frequent updates for many companies, given the move in other areas to the sharing of information piecemeal via brief status updates and tweets.

Like their ability to provide additional content in their disclosures, companies are freely allowed to go above and beyond the government-dictated minimums. ¹⁶² No law directly stops them from updating their disclosures and providing additional ones as often as they desire. ¹⁶³ Yet, few engage in disclosure updating resembling anything of this sort.

The likely disconnect between the frequency with which information consumers living in today's Snapchat, Facebook, and Twitter world get corporate-disclosure updates and the one with which they get most other information they value is unsurprising. Once again, as with underproduction concerns relating to the amount and form of disclosure, providing updates on the firm's wellbeing at a faster pace than that required by the law is often unlikely, since Reg FD and related regulatory attitudes stop firms from selling more frequent disclosure and the cost of disclosing, including the familiar ones associated with anti-fraud actions, ¹⁶⁴ is not zero. As a consequence, firms have reduced incentives on the margin to release information with high frequency.

Ultimately, as with disclosure amounts, ¹⁶⁵ there is much reason to believe that SEC timing minimums are not frequent enough. For one thing, even a well-informed government agency can only guess at the intervals at which disclosure would have value for society. ¹⁶⁶ And there is much reason to be dubious of the Commission's current uniform approach to disclosure frequency across all public firms. Law professors should not purport to know the optimal frequency of disclosures either. But they and all who study the area should suspect that it varies widely by firm, industry, market conditions, and other factors—and that it might be supplied much more frequently than it is today at a cost that comes in under the social value it produces.

Enter our market. Putting a market price on corporate information, which the firm can value, would also be a way of incentivizing information release

^{161.} See, e.g., Oesterle supra note 157, at 218-225 (outlining the mechanics of a continuous disclosure rule).

^{162.} See supra Part II.A.

^{163.} See id.

^{164.} See supra Part I.B.

^{165.} See supra note 29 (describing the likely underproduction of disclosure content).

^{166.} See, e.g., Alan R. Palmiter, Towards Disclosure Choice in Securities Offerings, 1999 COLUM. BUS. L. REV. 1, 95 (observing that the SEC disclosure forms "guess the needs of investors").

farther ahead of the next planned quarterly disclosure or the like—and at more frequent intervals in general. Indeed, with stock-market prices in constant flux and much money to be made from capturing even small mispricings, ¹⁶⁷ one could imagine firms providing something that looks more like continuous disclosure to the market. While at first that might seem far-fetched, thinking again about how so much information is shared today via social media beyond the highly regulated public-company context shows reality. One might thus expect the same in the public-company setting. Perhaps firms just need a revenue incentive to encourage them to do so. Indeed, perhaps they do not even need the revenue, but just the removal of the regulation that chills more frequent disclosure. ¹⁶⁸

Of course, firms might find it more profitable to withhold information for as long as possible, and then sell one or more early-release products right before their required quarterly filings. But this result is likely the disclosure-frequency equivalent of the proposed market generating no marginal disclosure-amount enhancement. After all, holding onto private information for as long as they can is the approach firms and their manager agents can—and generally do—pursue today. 169

It is possible that many firms today nevertheless disclose information significantly sooner than they must under the law. And it is likewise possible that our information market would somehow encourage them to delay that disclosure up until the last moment legally allowable—and then provide the full public release hours later. But even if that is the case, the social costs of such limited disclosure delay attributable to our market-based approach to disclosure would have to be weighed against the social benefits of additional disclosure content and enhanced formatting associated with the same. A delay of mere hours is generally of little import when it comes to the main benefits of corporate disclosure relating to capital allocation and corporate governance. ¹⁷⁰ But even that assumes that the information would be reflected in stock-market prices only upon its *full* release, which is likely not the case. ¹⁷¹ Moreover, even if some firms delayed disclosure in this way, there is no reason to believe that those delays would dominate the opposite behavior by other firms.

^{167.} That six to seven billion shares are traded each day, on average, in the United States stock market evidences this profit potential. See U.S. Equities Market Volume Summary, BATS GLOBAL MKT., http://www.bats.com/us/equities/market_share [http://perma.cc/4PWJ-99UJ] (providing the daily trading volume across the market).

^{168.} The information market would also likely help increase disclosure frequency for a related, yet analytically distinct reason: by giving firms the incentive to better police insider trading, and thus insiders to release information to the market rather than keeping it private for personal gain.

^{169.} See, e.g., supra note 34 and accompanying text.

^{170.} See supra notes 36-37 and accompanying text (discussing these benefits); see also Easterbrook & Fischel, supra note 14, at 682 ("Trading on news that is bound to come out anyway does not change the future or lead to better investment in new securities. The price will ultimately change to reflect the true earnings.").

^{171.} The experience with the early release of the Michigan consumer-sentiment survey, where new information was incorporated into market prices well within the two-second early-release period, is instructive on this point. See supra Section III.A.1.a.

Accordingly, although there are interesting counterarguments, there is much reason to believe that, on the whole, if information consumers want disclosure on a more continuous basis rather than the ongoing, periodic pace that dominates today, our information market would help move firms in that direction.

3. Disclosure Formatting

Finally, the early-access market would likely lead to disclosure presented in better ways. The theory with respect to these enhancements is much the same as that relating to disclosure amounts and frequency. Just like with those two dimensions of disclosure quality, there are problems with disclosure formatting today.

Under the law as it stands, the government instructs firms not just on what must be shared and when, but often also on how it must be presented—in what sections, fonts, tables, and so forth. One can see this by looking at disclosures across firms: whether they are registration statements on Form S-1, annual reports on Form 10-K, quarterly reports on Form 10-Q, or proxy statements on Schedule 14A, they look as identical as keyboards. The general length, font, pagination, structure, and tabular structure of each is practically universal.

It may be that firms and those who consume their disclosures have a better solution as to how to present information. But even when there is some room for innovation in this way, they will not choose to deviate from the SEC's clear instructions on how, for example, exec-comp tables and numbers must be set forth. In addition to creating compliance concerns, deviation can raise fears of sticking out in a way that can garner unwanted regulatory attention. As with the lack of interest in providing disclosure in amounts and frequencies above and beyond that required by legal minimums, here too floors become ceilings. In the end, there is likely too little innovation in disclosure formatting.

These problems with what essentially become government-dictated formats is illustrated by the fact that forms today look much as they did years ago. Over the past decade or two, very little about the way in which corporate disclosures are presented has changed. Yet over this same stretch, the formats in which

^{172.} Forms List, U.S. Sec. & Exchange Commission, http://www.sec.gov/forms [http://perma.cc/RF97-3QWV].

^{173.~17} C.F.R. \S 229.402 (2017) (providing detailed instructions and charts for executive compensation).

^{174.} See, e.g., Brian Knight, BankThink Innovation Will Stall Without a Regulatory Fintech 'Sandbox', AM. BANKER, (Nov. 15, 2016, 11:00 AM), http://www.americanbanker.com/opinion/innovation-will-stall-without-a-regulatory-fintech-sandbox [http://perma.cc/R3P4-MJCU] ("The fear of facing the regulator's wrath chills innovation, deprives consumers and encourages firms—especially small innovators—to stay under the radar.").

^{175.} See supra Part I; Section IV.A.1 & 2.

^{176.} See, e.g., Charles R. Korsmo, The Audience for Corporate Disclosure, 102 IOWA L. REV. 1581, 1598-99 (2017) (providing an overview of historical changes to SEC disclosure requirements and noting Reg FD, in 2000, as the last major change).

much information is disseminated throughout society has shifted into more succinct and frequent status updates, such as those on Facebook and Twitter mentioned earlier.

One might think that consumers of corporate information want more than Tweets, but there are reasons to believe that the radical changes in the more general information-dissemination trend in society are paralleled in the corporate information world. Consumers of corporate information today are increasingly sophisticated and even computerized, and business moves at the speed of society. These consumers might want corporate information presented in a different length, in a more graphical form, or just set out in a series of zeros and ones. 178

The most prominent theme in the realm of disclosure formatting today provides a nice example of inefficiencies traceable to the lack of innovation in this area. The theme is that disclosures be written in "plain English" so that they can be accessible to everyday investors. ¹⁷⁹ This requirement that disclosures be articulated in "a clear, concise and understandable manner," using "short, explanatory sentences," and avoiding "legal and highly technical business terminology" ¹⁸⁰ might be good for wordsmith lawyers who understand corporate finance and can charge by the hour to translate corporate statements into smooth narratives. However, this push for colloquial disclosure prose is almost certainly not the format preferred by either firms that produce disclosures or the traders who use them in value-enhancing ways. Anyone who has spent time with the auditors who prepare financial statements for 10-Ks on behalf of firms or the quantitative gurus who build algorithms to understand their import for current market prices knows that "plain English" is not the preferred mode of communication. Terms of art are their friends in helping them digest the import of newly disclosed information for firm prospects. In fact, for a growing number of disclosure "readers" in the latter group today, the preferred form is more likely to be plain code than plain English. 181

Third parties have recognized this and created services that repackage corporate disclosures into more useful formats for hedge funds and high-speed traders immediately upon their release. The niche firm RavenPack is one

^{177.} See, e.g., Jerry W. Markham & Daniel J. Harty, For Whom the Bell Tolls: The Demise of Exchange Trading Floors and the Growth of ECNs, 33 J. CORP. L. 865 (2005) (chronicling the growth of electronic trading and automation); supra note 93 and accompanying text.

^{178.} See Korsmo, supra note 176, at 1586 (explaining that "developments in financial and information technology have" changed the type of disclosure that would "maximize market efficiency").

^{179.} See Plain English Disclosure, Securities Act Release No. 33-7497, Exchange Act Release No. 34-39593, 63 Fed. Reg. 6370 (Feb. 6, 1998); Plain English Disclosure, Securities Act Release No. 33-7380, Exchange Act Release No. 34-38164, 62 Fed. Reg. 3152 (proposed Jan. 21, 1997).

^{180.} Id

^{181.} See Henry T.C. Hu, Too Complex to Depict? Innovation, "Pure Information," and the SEC Disclosure Paradigm, 90 TEX. L. REV. 1601 (2012) (observing that financial and legal innovations have resulted in complexity not easily expressed by plain English).

example of this type of information re-packager.¹⁸² The far larger and more widely known company Bloomberg L.P. does the same for a variety of informational products that it distributes to market participants.¹⁸³ The service provided by Thompson Reuters in delivering key economic data to high-speed traders is another example—although outside the corporate-disclosure context.¹⁸⁴

The kicker with respect to the plain-English requirement is that the investors who would value disclosures in that format are everyday individuals. When trading directly, these individuals are typically engaged in either trading to assemble, balance, or liquidate pieces of diversified portfolios or trading based on noise. If the former (portfolio trading), they should count their lucky stars. They have no financial use for corporate disclosures whatsoever, and can therefore spend their free time reading something more interesting than General Mills's 10-Qs. If the latter (noise trading), their ability to get through disclosures written in "plain English" actually harms them to the extent that it results in their being able to follow what is going on at the firm and engaging in trading based on that likely already obsolete understanding. After all, more savvy and sophisticated investors almost surely caused the full import of the new information to be reflected in market prices milliseconds, if not minutes or even hours, earlier.

This discussion of the plain-English requirement demonstrates that, at least for some corporate information, the formats for disclosure today are not the most efficient in terms of serving the needs of key information consumers. At least some substantial portion of the universe of those who engage in speculative trading are not receiving the information in the formats that they would prefer—even though they would be willing to pay for enhanced formatting. And ordinary investors are getting it for free in a format that either wastes their time or perversely encourages them to engage in losing trading strategies.

Like with disclosure amount and frequency, any better-formatted disclosure product generated by our market would not in any way reduce what (if anything) is gained by the SEC's plain-English requirement. That requirement would be untouched by the information market. To the extent disclosure in enhanced formats fails to meet the SEC's writing standards, the company would have to continue to generate and release its more traditional disclosure product. Both products would thus be shared with the public by the time of the full public release we require. ¹⁸⁶ Whether the informational signal embodied in this type of result would lead to revisions of the law is a different issue.

^{182.} See supra note 102 and accompanying text.

^{183.} See supra Section III.A.1.a.

^{184.} See supra note 100 and accompanying text.

^{185.} See supra Section III.A.1.b.

^{186.} See supra note 147 and accompanying text; infra Conclusion.

Admittedly, formulaic disclosure according to a government recipe has benefits. Standardization reduces the costs of producing and consuming information.¹⁸⁷ For instance, if one wants to compare the accounting performance or executive compensation of several firms, it is much easier to do so when all of the firms are using the same form of financial statement. Or, it might help provide important information in a way that is more accessible or understandable to particular consumers who the law is more interested in aiding than others—such as the press that reports on the public companies, outside auditors and watchdogs who look to detect fraud in those same entities, or the traders that help make their stock market prices more accurate by purchasing in response to good news and selling after bad news. 188 But even with these acknowledgements, for the reasons discussed above, it is likely that the more or less static formatting of corporate disclosure today leaves society without benefits that would otherwise be achieved through formatting improvements. Indeed, mere tailoring alone by different types of public firms in this area might represent leaps forward for disclosure consumers.

We touch on related, and more concrete, improvements to disclosure formatting in our illustration next. Thus far, it is just important to see that as with the amount and frequency of what firms will disclose, permitting the sale of disclosures will encourage innovative formats that high-speed traders, portfolio managers at fundamental-value traders, and news reporters and other more general consumers of corporate information find to be new, useful, and perhaps even exciting, thereby bringing about improvements along this third axis of disclosure quality as well. 189

B. Illustration-Management Discussion & Analysis

These theories as to why the market would enhance corporate disclosure in meaningful ways along each of these three dimensions is illustrated by thinking about one of the most valuable aspects of disclosure today: the focus on firms' financial prospects typically found in management discussion and analysis of

^{187.} See Easterbrook & Fischel, supra note 14, at 701 (discussing the benefits of standardization, and noting that whether it is best provided by government or private forces is an open, empirical question).

^{188.} For the view that securities law primarily aims to help the latter because it is they who best generate accurate securities pricing, see Goshen & Parchomovsky, supra note 90.

^{189.} It is worth noting that an interesting issue arises as to whether enhanced formatting of disclosure would be most efficiently determined and provided by the corporations that are disclosing the information themselves, or by third parties hired to make that determination and provision. There is no obvious resolution. Nor is the resolution likely to be the same for all firms, for all disclosures, or at all times. It may be that firms, which have and understand the information, can satisfy consumer demand most efficiently themselves. But it could be that specialized third-party services (like the repackaging ones provided today by RavenPack, Thomson Reuters, and Bloomberg today, see *supra* notes 93 and 102) are able to provide these products keyed to actual use of them at lower cost. However those issues were resolved, whether firms build or buy these capabilities does not change our core argument as to why the early-access approach should be considered.

financial conditions and operations. While perhaps one of several tedious aspects of a disclosure lawyer's practice, a careful focus on management's view of the firm's financial prospects alone—and thus its value—is crucial for both information traders and, in turn, all those who rely on more accurate stock pricing in our market-centered economy.

1. The MD&A Requirement

Securities law requires that corporate management articulate and share in narrative form its take on a number of financial issues in ongoing, periodic disclosures (namely, in the firm's annual 10-K report and its quarterly 10-Q reports) and in new-issuance ones (namely, in registration statements). ¹⁹⁰ This management discussion and analysis, commonly referred to as "MD&A," provides a window into management's thinking on the firm's financial prospects and more.

Management's views embody a wealth of information about the future cash flows that the company is likely to produce. In many ways, the job description of corporate management is to have a handle not just on large individual pieces of material information that affect the company's operations and sales, but also to know lots of bits of information that can be pieced together to present an accurate picture of the same.

It should thus come as little surprise that information traders commonly use the information in the MD&A section of 10-Ks, 10-Qs, and registration statements to make informed buy and sell decisions. ¹⁹¹ In fact, empirical work following the implementation of the MD&A disclosure requirement found an increase in stock price accuracy associated with the new compelled practice. ¹⁹² It is also thought that analysts go to this material first when firms make their disclosures available to the public. ¹⁹³ Thus, it is safe to conclude that MD&A often conveys valuable information to the market.

What exact information that is so meaningful does it compel? Most prominently, the MD&A requirement calls for a description of "any unusual or infrequent events or transactions, or any significant economic changes that materially affected [a firm's] . . . reported income" in the applicable reporting period. This core MD&A requirement embodies an SEC conclusion that

^{190.} See Regulation S-K Item 303, 17 C.F.R. § 229.303 (2017).

^{191.} Bernd Hufner, The SEC's MD&A: Does it Meet the Informational Demands of Investors? – A Conceptual Evaluation, 59 SCHMALENBACH BUS. REV. 55, 58-59 (2007).

^{192.} See Artyom Durnev et al., Law, Share Price Accuracy, and Economic Performance: The New Evidence, 102 MICH. L. REV. 331 (2003).

^{193.} See, e.g., Elizabeth MacBride, How To Read a 10-K Like Warren Buffett, CNBC (Jan. 27, 2017), http://www.cnbc.com/2014/01/27/how-to-read-a-10-k-like-warren-buffet.html [http://perma.cc/6F2Y-PKVW] ("You start to put together how the company works [by looking at MD&A]." (quoting Fidelity Investments' head of global equity research)).

^{194.} Regulation S-K Item 303, 17 C.F.R. § 229.303 (2017).

market participants use corporate earnings from the last reporting period as a starting point for figuring out what earnings will be over the next one.

The SEC's approach here is perfectly sensible from an economic point of view. Trends may very well change, but the starting point for figuring out what will happen next year in terms of profits is generally, well, what happened last year on that front. And anything that insiders know that would suggest last year's earnings are not a good predictor of next year's earnings is likely good for the market to know. Indeed, in the SEC concept release on MD&A, the agency noted that it had "long recognized the need for a narrative explanation of the financial statements, because a numerical presentation and brief accompanying footnotes alone may be insufficient for an investor to judge the quality of earnings and the likelihood that past performance is indicative of future performance." Thus, the SEC's MD&A provision requires management to share anything out of the ordinary that is in the works that would make past financial performance not a very good predictor of upcoming financial performance—thereby allowing information traders to better value public firms and their stock.

Crucially for our discussion below, the MD&A requirement also calls for the production and release of a management description of "any known trends or uncertainties that . . . the <code>[issuer]</code> reasonably expects will have a material unfavorable or favorable impact on net sales or revenues or income from continuing operations." Likewise, it requires management to articulate its take on whether "material events and uncertainties known to management . . . would cause reported financial information not to be necessarily indicative of future operating results or future financial condition." ¹⁹⁷

Just as important for the discussion below, the MD&A provision also encourages management to make forward-looking statements about the firm's prospects. The SEC noted that this "optional forward-looking disclosure involves anticipating a future trend or event or anticipating a less predictable impact of a known event, trend, or uncertainty." Notably, however, it does not require those types of projections and the like to be made.

2. How the Information Market Would Enhance MD&A

Unleashing supply and demand for early-access products would likely spur the production of more robust MD&A in at least two important ways.

^{195.} Concept Release on Mgmt.'s Discussion & Analysis of Fin. Condition & Operations, Exchange Act Release No. 6711, 1987 WL 847497, at *3 (Apr. 17, 1987).

^{196.} Regulation S-K Item 303, 17 C.F.R. § 229.303 (2017).

^{197.} Instruction 3 of Regulation S-K Item 303(a), 17 C.F.R. § 229.303 (2017).

^{198.} See Instruction 7 of Regulation S-K Item 303(a), 17 C.F.R. § 229.303 (2017).

^{199.} Management's Discussion and Analysis of Financial Condition and Results of Operations; Certain Investment Company Disclosures, Securities Act Release No. 6835, Exchange Act Release No. 26831, 54 Fed. Reg. 22427, 22429 (May 24, 1989) (emphasis added).

First, the interaction of those market forces would likely lead to the production of more material information being discussed and analyzed by management in 10-Ks and 10-Qs. A common misconception is that public companies must disclose all material information in their public filings. The law does not require that breadth of corporate disclosure. Instead, it compels the disclosure of a long list of specific types of information (namely, the list found in well over 100 pages in Reg S-K).²⁰⁰

Still, much of what must be disclosed is of course limited by materiality. For example, Reg S-K calls for the disclosure of *material* pending litigation in annual and quarterly filings—not *all* pending litigation.²⁰¹ So McDonald's must disclose the class action by its workers across the nation, but not the slip-and-fall case relating to the spilled (now-retired) orange drink at an individual franchise. There are hundreds of similar requirements in Reg S-K's mind-numbing, 100-plus-page list of what must be disclosed by public companies. Other laws that require the production and release of corporate information take the same approach. Most prominently, there is the disclosure that is triggered by other disclosure under the several securities laws. Under those laws, statements of *material* fact must be made in order to prevent other statements from being misleading.²⁰²

The MD&A provision itself also focuses on the production and release of "material" information. As the SEC noted in its concept release on MD&A, the following "wide range of corporate events may warrant MD&A disclosure," including:

Material changes in product mix or in the relative profitability of lines of business; Material changes in advertising, research, development, product introduction or other discretionary costs; The acquisition or disposition of a material asset other than in the ordinary course of business; Material and unusual charges or gains, including credits or charges associated with discontinuation of operations; Material changes in assumptions underlying deferred costs and the plan for amortization of such costs; Material changes in assumed investment return and in actuarial assumptions used to calculate contributions to pension funds; [and the] closing of a material facility or material interruption of business or completion of a material contract.²⁰³

Yet, despite this list of material information and other similar lists associated with the MD&A requirement, firms need not provide what is perhaps

^{200.} See supra note 10.

^{201.} Regulation S-K, Item 103, 17 C.F.R. § 229.103 (2017) ("Describe any material pending legal proceedings...." (emphasis added)).

^{202.} Several securities laws compel disclosure in this way—namely, Sections 8 and 11 of the Securities Act of 1933 as well as Section 10(b) and Rule 10b-5 of Securities Exchange Act of 1934. See, e.g., supra note 68 and accompanying text (reciting the language of Rule 10b-5 giving rise to this requirement).

^{203.} Concept Release on Mgmt.'s Discussion & Analysis of Fin. Condition & Operations, Exchange Act Release No. 6711, 1987 WL 847497 (Apr. 17, 1987) (emphasis added).

the most valuable type of MD&A to information traders: financial projections.²⁰⁴ Instead, including discussion and analysis of those projections is merely encouraged by the SEC and the law more generally.²⁰⁵ And the reality is that many firms are afraid to provide them, despite the law's invitation for them to do so.²⁰⁶ The main culprit is the fear of legal proceedings initiated by private plaintiffs—even if those proceedings are likely to be dismissed at the pleading stage under the protections afforded by the Private Securities Litigation Reform Act.²⁰⁷

How would the early-access market help here? With the ability to profit from the release of these projections that are so valued by the market, firms would be much more likely than they are today to produce and release them. Indeed, it is likely that firms already produce these projections for internal purposes—even when they do not expect to share them outside the firm in return for payment. How else could they engage in capital budgeting and planning? So, getting firms to share the projections with the public might require only a small nudge, like the one that would be provided by the financial incentives at play in the early-access market we promote.

But there is also a second main way in which the early-access market has the potential to spur the production of more robust MD&A: the market would provide firms with the incentive to provide a larger set of valuable information than just that called for in even explicit MD&A lists.

A key part of the content that management must analyze and discuss in narrative form relates to "material" trends, demands, and commitments.²⁰⁸ But the materiality standard for when this type of MD&A must be shared beyond the firm is distinct from the one that applies elsewhere throughout the rest of the mandatory-disclosure regime.

In securities law, there is a firmly established definition of the word "material": information is material if there is a substantial likelihood that it would have been considered significant by a reasonable investor making a buy,

^{204.} See Suzanne J. Romajas, The Duty to Disclose Forward-Looking Information: A Look at the Future of MD&A, 61 FORDHAM L. REV. S245 (1993); see also Tom A. Alberg, SEC Disclosure Requirements for Corporations, 26 BUS. LAW. 1223, 1229 (1971) (explaining the challenges relating to financial projections in disclosures to the SEC).

^{205.} One way in which the law "encourages" these projections is by providing them with protection from private securities litigation. See, e.g., Securities Exchange Act of 1934, § 21(e), 15 U.S.C. §78u-5 (2018); Securities Act of 1933, § 27(a), 15 U.S.C. § 77z-2 (2018).

^{206.} See, e.g., JOHN C. COFFEE, M. TODD HENDERSON & HILLARY A. SALE, SECURITIES REGULATION: CASES AND MATERIALS 201 (13th ed. 2014) (describing the phenomenon).

^{207.} The main area in which issuers continue to be reluctant to provide financial projections is found in the new-issuance context. See id. ("Issuers remain hesitant about including projections in prospectuses, largely out of anxiety about the high, negligence-based liability created by sect. 11 of the 1933 Act.").

^{208.} See supra note 203 and accompanying text.

sell, or hold decision. That definition applies in the insider trading context, 209 the broader securities-fraud context, 210 and even the proxy context 211 .

However, in the MD&A context, the SEC defines material in a distinct manner: "reasonably likely to occur." For this reason, the MD&A requirement only compels future uncertainties to be disclosed if they are, well, reasonably likely to occur. Thus, even if one of many looming problems known to management would impact the company in a way that would be considered significant by a reasonable investor, there will often still be no need to, in industry parlance, "MD&A it."

It follows that there will often be daylight between what the MD&A requirement compels and what information traders want. This can be most easily seen through an extreme hypothetical. Suppose a company relies on consumers who live in the Southeast along the Atlantic coast for a large amount of its revenue. Further suppose that the company not only has information as to a likely bad hurricane season coming up, but also that any flooding associated with it will materially affect vital sales in this region. Thus, we have a situation in which management thinks the likelihood of something happening is not reasonably likely, but if that something did in fact happen, the result would be very bad for the company.

Does management have to discuss the negative impact of possible flooding that might result from a hurricane under an MD&A heading in its next 10-Q, annual 10-K report, or even in a registration statement upon the sale of new securities?

Information traders are among the most reasonable of investors. And they will very likely consider such a discussion to be quite significant, and thus very valuable. It might help them determine whether the stock of this company (and other companies) is overpriced or underpriced in the market. Yet the information does not have to be supplied in the MD&A section of a firm's major disclosures, let alone provided sooner via some other communication. Under the MD&A requirements, the firm would not have any obligation to make that disclosure because the flooding here is not "reasonably likely to occur." 213

Moreover, management would have a strong incentive to keep this business vulnerability private. The company executives would, all else equal, prefer not to disclose this negative information because it would likely lead to a drop in the

^{209.} See SEC v. Tex. Gulf Sulphur, 401 F.2d 833 (2d Cir. 1968) (en banc).

^{210.} See Basic, Inc. v. Levinson, 485 U.S. 224 (1988); TSC Indus., Inc. v. Northway, Inc., 426 U.S. 438 (1976).

^{211.} See Mills v. Elec. Auto-Lite Co., 396 U.S. 375, 383 (1970).

^{212.} Management's Discussion and Analysis of Financial Condition and Results of Operations; Certain Investment Company Disclosure, Exchange Act Release No. 26,831, 6 Fed. Sec. L. Rep. (CCH) ¶¶ 72,436 and 73,193, at 62,843 (May 18, 1989); see also id. at 62,843 n.14 ("MD&A mandates disclosure of specified forward-looking information, and specifies its own standard for disclosure—i.e., reasonably likely to have a material effect.").

^{213.} See id.

stock price.²¹⁴ These facts are especially disconcerting given that for securities lawyers, drafting MD&A on behalf of management is often challenging, as what to include and not include requires subtle judgments that are difficult to make. That leaves much room for maneuvering within the framework provided by the law—including by erring on the side of under-disclosing important information to please the client (namely, the CEO and chief legal officer at the relevant public-company). Accordingly, there is information that is "material" as that term of art is commonly understood and defined in securities law that nevertheless need not be discussed in a very important part of a company's public filings. For these reasons, information on which traders place a very high value goes undisclosed—and prices on which an even broader swath of society should place a high value remain uncorrected.²¹⁵

How would the early-access market help here? Despite all the ink spilled and technicalities explored in this section and all those that preceded it, the premise is quite straightforward and easy to convey at this point. The story is the same as that of the projections that are not required to be provided by public companies in the MD&A section of their registration statements and ongoing, periodic disclosures discussed above: the financial incentives provided by allowing firms to satisfy market-participant demand for this valuable additional information will make all the difference for at least some public companies. Just how many is something that only the information market can tell us.

* * *

This final Part has completed the presentation of our theory that a well-regulated information market would address longstanding concerns for the inadequate production of corporate disclosure. More specifically, it explained why reforming the law to allow firms to earn revenue in return for providing enhanced disclosure products valued by actual consumers of corporate information would have the potential to do something significant for securities regulation: unleash market forces that could mitigate any current shortfall with respect to the amount, frequency, and form of corporate disclosure. Thus, we have provided regulators with a novel way in which to address the information-sharing problem that has long plagued securities law.

To illustrate our thesis, we thought about what the early-access market would do for one of the most valuable aspects of disclosure today. In particular, we focused on a technical—yet very important—aspect of disclosure: management discussion and analysis relating to the firm's financial condition and operations. Should they be able to profit from doing so, firms would have

^{214.} See supra note 45 (discussing management incentives with respect to disclosure).

^{215.} Other specific disclosure requirements set out in Reg S-K or commanded by Rule 10b-5 in light of other statements made by the issuer may nevertheless require disclosure of this information. See, e.g., supra note 201 and accompanying text. But that will not always be the case where MD&A falls short of providing the information that the market and society value.

much reason to supply more of this type of corporate disclosure—and perhaps do so at more frequent intervals in enhanced formats. This discussion of MD&A thus provides a powerful illustration to back up the ultimate positive claim we have made and supported in this Article: that reforming the law to allow firms to sell tiered-access rights to their disclosures would improve the quality of corporate disclosure.

Both our focus on the three types of disclosure enhancements we envision and our illustration recognized that the termination of the current equal-timing mandate and imposition of our more liberal information-dissemination regime could lead to disclosure enhancements that are very small or quite large. Ultimately, the scope of each of these improvements to the quality of corporate disclosure would turn on the scope of supply and demand. We explained in Part III why there is much reason to foresee significant amounts of each. At the same time, through the last two Parts, we have also acknowledged that no one can know for sure how the market will play out. And there are of course other market problems that could impede it from working in the ways we envision, including those that are apparent when thinking about the firms as monopoly suppliers of disclosure, or when contemplating the chances of monopoly buyers of the same opposite them. But, as we have pointed out in these Parts, there is little down side for corporate disclosure if the market is permitted to tell us the precise amount and nature of early-access supply and demand. The worse-case scenario is that the disclosure produced today (including that required by the law) continues to be produced. Thinking more about the precise scope of early-access supply and demand thus remains beyond the scope of this project and its goal of establishing the positive claim we have detailed just above: that the nowprohibited information market would improve the quality of corporate disclosure—thereby giving regulators a new tool to fix an age-old problem.

Conclusion

Securities law has long labored to improve the extent to which the public companies at the center of our economy generate and share information beyond the firm. The main tool it has deployed toward this end is the mandatory-disclosure regime that forms the foundation of modern securities regulation. But all the heavy lifting associated with compiling a list of what firms must disclose, when they have to disclose it, and how it must be presented has still left society with insufficient information about public companies, released too infrequently, shared in far from perfect formats. All the while, any list and related regulation of disclosure items of this variety compiled by the government will be subject to obvious political economy and rent seeking concerns. Yet, until now, the approach in Washington since at least the 2007-2008 Financial Crisis has been to add disclosure items one by one pursuant to the 1930s formula. In this Article, we offered an alternative approach to this foundational securities law problem: permit a well-regulated market for corporate disclosure.

In this proposed information market, anyone can buy access to information from firms in advance of its public release so long as they are willing and able to pay the market price for it. The resulting interactions between information-consumer demand for enhanced disclosure products and firm supply of the same, we asserted, will spur the production and release of more of that information, more often, in better formats. That information, under the well-regulated market we touted, must be made available to the pubic within a relatively small period (perhaps a few hours or so)—meaning that all disclosure enhancements are disseminated well beyond the select audiences that pay for first access to them. Accordingly, at least as a matter of theory, the Article has provided federal regulators with an additional tool for their use in their almost century-long battle to ameliorate the problem of inadequate information production and sharing by public companies.

More broadly, it is important to see that this market would permit firms to charge for the production of valuable information that they now must give away for free to the public. This changes the status quo, under which firms have very little incentive to improve disclosure because they are impeded from capturing any significant benefits from improved disclosure due to Reg FD and the related regulatory mood surrounding tiered information release. This is the case even where the substantive requirements of the mandatory-disclosure regime would allow firms to improve disclosure amount, frequency, and formatting, and even when the SEC would not have any obvious reason to stop them. Our market changes that calculus by permitting tiered information release, with specific blessing for firms to charge for early access to their disclosures. And that change would provide an incentive for firms to discover whether information consumers value more disclosure delivered at a faster pace in different formats.

All this is not to say that the information market should in fact be pursued. That conclusion is far beyond the scope of this work. To reach that conclusion, one would have to think about the overall effect this market would have on much more than just the quality of corporate disclosure. For starters, gains in disclosure quality might come at the expense of outside information production. Further, evaluation of the market would have to consider additional costs of such a market. For one thing, this market raises fairness issues—even if we do not think they are appropriate. For another, there are of course costs to change. But even assuming that implications are in fact negative on these fronts, they would have to be weighed against not just the benefits of the more robust disclosure in focus in this paper, but that of the information market more generally. In fact, ultimately, whether the information market is worth pursuing likely turns on the extent to which it would bring about desirable changes not just to disclosure, but to other areas of securities law as well. We will leave a fuller exploration of any such positive changes to future work, including our next installment in this series of articles on how information revelation is regulated.²¹⁶ But it is worth noting

four considerable larger securities law implications of allowing firms to sell their information in this type of well-regulated market here—including one that touches on the disclosure regime itself.

First, the characteristics of the information market itself will shed much light on the extent to which the law requires the supply of disclosure items despite a lack of information-consumer interest in them. The information market could thus correct not just information-underproduction problems, but also those relating to information overproduction. To many, the latter is a bigger problem than the former, as powerful groups (namely, securities lawyers and large accounting firms) have much reason to prefer over-disclosure. That the SEC officials who command the disclosure boat generally move on to a private sector where the ability to navigate more burdensome disclosure law carries with it great value²¹⁸ only heightens these concerns.

Second, by more clearly identifying the information that investors value, the market could shine much light on materiality determination in securities litigations. When it comes to securities-fraud and insider-trading actions, judges make the relevant materiality determination at the pleading and summary-judgment stages. This central matter to these litigations is generally handed to juries for a finding of fact after trial. For either, knowing whether or not investors paid for access to the information would be telling. In the end, both litigation uncertainty and errors could be reduced by better listening to what the information market has to say on this issue.

Third, allowing the sale of early-access rights would result in firms having better incentives to police trading by their insiders. We noted this earlier when discussing how the information market would affect the frequency with which firms disclose information.²¹⁹ But it is important to also note that the end result would be improvements not just to the frequency with which information is released beyond the firm,²²⁰ but also to the larger aims of insider-trading law.

Fourth, for related reasons, another aspect of securities litigation would stand to gain, as the longstanding problem of identifying those who are actually harmed by false and misleading corporate statements would likewise be reduced. The problem of overbroad class actions might therefore be reduced too, should federal judges use that information to curb the excesses of controversial fraud-on-the-market suits in value enhancing ways. The judiciary invented the fraud-on-the-market presumption that allows class actions with anyone who bought a stock in an efficient market able to claim reliance on the fraud that affected the stock's price at time of purchase.²²¹ Given the amount of index-based portfolio

^{217.} See supra note 14 and accompanying text.

^{218.} See id.

^{219.} See supra notes 167-171 and accompanying text.

^{220.} See id

^{221.} The Supreme Court endorsed the presumption in *Basic v. Levinson*, which held that plaintiffs in these suits did not have to show individual reliance on alleged misrepresentations in order

trading in a market in which about half of all Americans and countless foreign investors participate,²²² this approach has opened the door to enormous class actions. Yet, it is clear that the great majority of the purchasers encompassed by fraud-on-the-market actions do not rely on the alleged statements, and, before buying or selling stock, are just as likely to be better off from fraudulently inflated prices in the market as worse off from them.²²³ Permitting a market for early access to corporate information, however, would make it much easier to identify the investors who were actually defrauded by companies. The logical presumption would be that those who paid for early access to the disclosure and then traded during an inflationary period relied on the disclosure, and that they therefore could team up to maintain a class action with common issues of law and fact. The courts could thus use what we might call a "participated in the information market" presumption to better identify the actual victims of securities fraud. Perhaps far more importantly, they could use its flexibility to shape class actions to achieve a better deterrence-benefit-to-cost ratio than either the current overbroad approach or an alternative insufficient one that tosses out the private cause of action altogether.

To those who have studied securities law, these larger potential benefits of our information market should be both intriguing and, in some respects, controversial. But that should not let us lose sight of the important narrower work done in the instant Article in showing how this type of market-based approach to securities law would improve the quality of corporate disclosure. Likewise. these larger potential benefits of the information market should not eclipse other broader implications of this work not mentioned above. After all, our thinking on how an information market could improve the quality of corporate disclosure also has implications for the production and revelation of valuable information far beyond the public-company context. And, the analysis here, although intentionally limited in scope, opens the door to thinking about how information markets might make larger contributions to something held sacred by even members of society uninterested in securities law: the production and sharing of government, NGO, university, and non-profit information. Indeed, taxpayers, the funders of all of the aforementioned organizations, and all those who value more information, released more frequently and presented in better formats, may be

to proceed under the anti-fraud laws, but instead were entitled to this presumption that they had satisfied the requisite reliance. 485 U.S. 224 (1988).

^{222.} Justin McCarthy, Little Change in Percentage of Americans Who Own Stocks, GALLUP (Apr. 22, 2015), http://www.gallup.com/pol/182816/littlechange-percentage-americans-invested-market.aspx [http://perma.cc/QT5GAUPH].

^{223.} See, e.g., Richard A. Booth, The End of the Securities Fraud Class Action, 4
BERKELEY BUS. L. J. 1 (2007) (describing securities fraud class action as "nothing more than an expensive rearrangement of wealth from one pocket to another); Anjan V. Thakor, The Economic Reality of Securities Class Action Litigation, (Navigant Consulting, Oct. 26, 2005), http://www.instituteforlegalreform.com/uploads/sites/1/EconomicRealityNavigant_1.pdf [http://perma.cc/4S65-5UP8] (demonstrating that diversified investors generally break even from their investments in common stocks impacted by fraud allegations).

left wondering why the disclosure-underproduction problem and our solution to it would be limited to the public-company context.