MAKING DISCLOSURE WORK FOR START-UP EMPLOYEES

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Equity-based compensation of startup employees is attracting growing and skeptical attention in academia and the media. Legal and finance scholars have raised concerns that employees are misinformed regarding the value of their equity grants in a manner that could distort their employment and investment decisions. This Article addresses these emerging concerns by articulating a theoretical and practical framework for the regulation of start-up employees’ human capital investments. This framework balances the confidentiality interests of employers with employees’ need for ongoing and realistic valuation of the return on their labor.

Start-ups commonly rely on Rule 701 of the Securities Act to grant equity-based compensation to their employees without registering these securities with the Securities and Exchange Commission. This Article describes the flaws of the current regulation and proposes concrete amendments including (1) replacing the requirement to disclose the issuer’s financial statements with a requirement to disclose fair market valuation and exit waterfall analysis; (2) changing the threshold that triggers the enhanced disclosure requirement from when the company issues equity-based compensation

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exceeding $10 million within a twelve month period, to when the company issues securities to at least 100 employees, and these securities aggregately convey over 10% ownership in any class of shares; and (3) advancing the timing of the disclosure from its current post-employment stage to the offer letter stage.

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I. INTRODUCTION

Equity-based compensation is prevalent among US corporations, whether privately held or publicly traded. Indeed, it is the norm among privately-held venture-backed start-ups and an inherent part of the business culture of

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1 This Article uses the terms equity-based compensation, equity compensation, and equity incentives interchangeably. It thereby refers to stock options, restricted stock units, and other securities commonly issued as employee compensation.


3 The term “start-up” has different meanings in different contexts. For the purposes of this Article the following definition by the U.S. Small Business Administration is useful:
these companies.\textsuperscript{4} Equity-based compensation at privately held firms is, however, problematic from a securities law perspective.\textsuperscript{5} Employee recipients of equity compensation are generally not financially sophisticated, and, typically, they do not qualify as accredited investors who would be permitted to participate in a private placement of their employers’ securities.\textsuperscript{6}

To solve this problem, the Securities and Exchange Commission (SEC) adopted Rule 701,\textsuperscript{7} which, permits the issuance of equity-based compensation to employees and

In the world of business, the word “startup” goes beyond a company just getting off the ground. The term startup is also associated with a business that is typically technology oriented and has high growth potential. Startups have some unique struggles, especially in regard to financing. That’s because investors are looking for the highest potential return on investment, while balancing the associated risks.


\textsuperscript{6} See \textit{infra} Section II.B.

\textsuperscript{7} Exemption For Offers and Sales of Securities Pursuant to Certain Compensatory Benefit Plans and Contracts Relating to Compensation, 17 C.F.R. § 230.701 (2018). See \textit{infra} Section II.C.
service providers,\(^8\) in limited amounts,\(^9\) without having to register the offering with the SEC. Once a company issues equity-based compensation exceeding $10 million within a twelve month period, the statutory exemption requires the disclosure of, inter alia, the issuer’s financial statements and a list of risk factors associated with the investment.\(^{10}\)

Rule 701 is, however, profoundly flawed. The SEC adopted the Rule in 1988 to accommodate the growing need of start-up companies to rely on equity incentives as a means to attract and retain a highly-skilled workforce.\(^{11}\) However, the SEC has paid little attention to the other side of the employment equation—employees’ need for information regarding the value of their equity compensation.\(^{12}\)

The Rule fails to inform employees because it does not require that prospective employees receive information before accepting an employment offer that contains an equity compensation component.\(^{13}\) Furthermore, Rule 701 does not call for the disclosure of the most salient form of start-up

\(^8\) Service providers are “consultants and advisors” who are “natural persons” that “provide bona fide services” to the company. 17 C.F.R. § 230.701(c)(1).

\(^9\) The aggregate sales price or amount of securities that could be sold under Rule 701 is the greatest of the following: $1 million; 15% of the total assets of the issuer, measured as of the date of the issuer’s most recent balance sheet; or 15% of the outstanding amount of the class of securities being offered and sold in reliance on Rule 701, measured as of the date of the issuer’s most recent balance sheet. See 17 C.F.R. § 230.701(d)(2). These limitations are calculated for the aggregate sales price or amount of securities sold in reliance on Rule 701 in a consecutive twelve month period. Id.

\(^10\) Issuers that sell more than $10 million worth of securities under the exemption in a twelve month period, are required to provide to the persons that received the securities in that period enhanced disclosure, including: a summary of the material terms of the compensatory plan or compensatory contract; a list of risk factors associated with investing in the issuer’s securities; and financial statements of the issuer prepared in accordance with U.S. generally accepted accounting principles (GAAP) dated not more than 180 days before the sale. See 17 C.F.R. § 230.701(e)

\(^11\) See infra Section II.C.

\(^12\) See infra Section III.A.

\(^13\) See infra Section V.C.
valuation information—data describing the firm’s capitalization table and aggregate liquidation preferences.\footnote{See infra Section V.B.} Instead, once the $10 million threshold is crossed, the Rule mandates the disclosure of financial statements, which are likely to contain sensitive information of the start-up\footnote{See infra Section V.A.} and are only remotely related to the valuation challenges facing employees.\footnote{See infra Section III.C.} The Rule thus creates an inconsistent and, at times, absurd disclosure regime that puts certain issuers at unnecessary risk by exposing financial information that could be valuable to competitors but is of only marginal value to employees.

When the SEC adopted Rule 701, private issuers had a limited ability to rely on this exemption due to securities laws restrictions on the volume of the securities that could be offered and sold and the number of employees that could participate in such offerings.\footnote{See infra Section II.C.} However, over the years, the legal limitations on start-ups’ ability to issue securities for compensation purposes were gradually curtailed, thereby turning this small exemption into a significant channel of securities offerings to household investors.\footnote{Id.} At the same time, the widespread and growing practice of providing equity-based compensation has transformed the relationship between high-skilled employees and their employers from a pure employment relationship into one that involves a significant investment component.\footnote{See Andrea L. Eisfeldt et. al., Human Capitalists 2 (Apr. 29, 2019) (unpublished working paper), http://web.stanford.edu/class/econ310/EisfeldtApril29 [https://perma.cc/N7KR-JUXB] (defining “human capitalists” as “corporate employees who receive significant equity-based compensation, for example in the form of equity grants or stock options,” demonstrating that human capitalists have become an increasingly important class of corporate income earners, and finding that “[e]quity-based compensation represents almost 45% of compensation to human capitalists”).} While household investors are moving their investment activities towards
institutional investors that offer diversified portfolios of securities. equity-based compensation still ties a significant portion of the employee’s wealth to the stock of a single company. In light of the rule’s multiple shortcomings, the Commission’s regulation thus fails to provide start-up employees with material information concerning one of the most important investment decisions they make.

The SEC is aware that Rule 701 may need an update. On July 18, 2018, it issued a concept release soliciting public comment about ways to modernize it. This Article responds to that call by offering practical recommendations for significant amendment of the disclosure regime.

Furthermore, this Article offers a much-needed underlying theoretical framework to guide the regulation of start-up equity compensation—a foundation that is currently missing from the literature. Start-up employees often fail to fit the mold of the nonaccredited capital investor because, until exercising their stock options, they do not bear out-of-pocket costs (they invest labor rather than cash). Deregulation advocates were, therefore, able to promote the perception that equity compensation is merely a benefit to employees. As a result, under the current disclosure regime, employee equity-holders are effectively treated as investors who are less


21 Larcker et al., supra note 2 (“[Employees of pre-IPO companies] are also exposed to a concentrated investment portfolio with a significant portion of their net worth invested in a single company and no readily accessible public market mechanism through which to diversify.”).


23 See infra Part VI.

24 See Cable, supra note 5 at 639, 641 (arguing that “one can view Rule 701 as a triumph of incremental regulation” and that “[t]he SEC played a hunch” in promulgating the Rule, and concluding that “our priority should be a research agenda that takes seriously startup employees’ status as investors”).
worthy of protection compared to nonaccredited capital investors.\(^\text{25}\)

This Article offers an alternative organizing principle to the regulation of equity compensation: pre-negotiated equity-based compensation is and ought to be treated by regulators as an arrangement that allows workers to invest human capital in return for an equity stake in their employer.\(^\text{26}\) Based on the simple premise that human capital is a scarce resource whose allocation responds to equity incentives, this Article argues that a better disclosure regime is needed to facilitate the efficient allocation of talent.\(^\text{27}\) This Article further argues that similar to capital investments, human capital investments are subject to information asymmetry and agency problems that can disrupt market efficiency.\(^\text{28}\) Mandatory disclosure is therefore an appropriate response to market failures that impede competitive forces in the labor market.

The theoretical and doctrinal inquiry on which this Article is based is supplemented by practical insights gathered through a series of semistructured interviews with Silicon Valley employees, founders, venture capital investors, and attorneys\(^\text{29}\) along with survey data collected using an internet panel survey of 1,114 college-educated tech workers.\(^\text{30}\) These

\(^{25}\) See infra Section III.A.

\(^{26}\) See infra Sections II.A., IV.A.

\(^{27}\) See infra Section IV.A.

\(^{28}\) See infra Part IV.

\(^{29}\) Interviews with lawyers, venture capitalists, founders, and employees (June 2017 to Apr. 2019) [hereinafter Interviews]. This account is based on thirty semi-structured interviews conducted by the author between June 2017 and April 2019, mostly in person, and occasionally via phone or Skype calls. When interviewees consented, the interview was recorded and transcribed. When they did not, notes were taken during the interview. All interviews were anonymized. Lawyers are quoted in this Article as (“L”), Venture Capitalist are quoted as (“VC”), Founders are quoted as (“F”), and employees are quoted as (“E”).

\(^{30}\) Yifat Aran, Equity Compensation Study (2019) (unpublished survey data) (on file with author) (The survey was conducted online between March and October 2019 through the polling platform Lucid among workers in the
empirical insights describe the real-world operations of Rule 701 and shed light on contemporary challenges in the employee equity compensation domain.

Based on both theoretical and practical considerations, the Article calls for a new securities regulation approach to equity compensation that differs from the current regime in at least three major aspects.

First, the regulatory regime should acknowledge that employees who negotiate equity compensation as part of their total compensation packages, transfer value to their employers primarily through their human capital (as opposed to cash). As such, they incur an opportunity cost for their investment regardless of whether they incur additional, out-of-pocket, costs down the road. These employees make an investment decision when accepting a job offer that includes an equity compensation component, not only upon exercising their stock options and paying the exercise price. It follows that capital and labor market efficiency will be enhanced if those employees gain access to relevant material information before making this employment-investment decision.31

Second, the regulatory regime should acknowledge that the valuation of a venture capital-backed start-up is often remote from traditional financial metrics reflected on the balance sheet, income statement, and cash flow statement of the start-up.32 The company’s most recent fair market valuation and the description of its capital structure convey far more useful information.33 A simple method for providing this more relevant information is through disclosing an exit waterfall analysis that describes the employee’s personalized expected payout in various exit scenarios (accompanied by appropriate caveats about the investment’s associated

31 See infra Section VI.B.
32 See infra Sections III.B., V.C.
33 See infra Section III.C.
Armed with this information, employees would not need the traditional forms of disclosures now mandated by Rule 701, and issuers could be relieved of the risk that the information contained in financial statements would fall into the wrong hands.

Finally, the threshold triggering the disclosure requirements of this financial information should be amended. Currently, the disclosure requirements are triggered when the total sales of securities under the exemption exceed $10 million within any period of twelve months (either on a rolling or an annual basis). This trigger is problematic for both practical and material reasons: it applies retroactively to sales that occurred during the twelve months even before the disclosure threshold has been exceeded, and it releases the vast majority of the start-up equity compensation market from any meaningful regulatory oversight. This Article calls for adaptation of the disclosure trigger from the total sales of securities to the number of equity-compensated employees and their aggregate ownership stake—and proposes the following threshold: 100 employees who collectively hold over 10% of any class of the company’s shares.

Thus, the Article responds to Rule 701’s suboptimal structure by suggesting several concrete changes that should be welcomed by issuers and employees alike.

The Article proceeds as follows. Part II places Rule 701 in the broader context of other exemptions available to private issuers in compensating employees. It establishes that this exemption is designed to address securities offerings to employees who are presumed to need the securities laws’ investor protection provisions (i.e., they are neither accredited nor otherwise sophisticated) as part of a transaction that

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34 “Waterfall analysis” is a term commonly used to describe the breakdown of cash flow distribution arrangements. See, e.g., Inna J. Efimchik, Waterfall Analysis (How VCs See the World), AVVO (May 2, 2012), https://www.avvo.com/legal-guides/ugc/waterfall-analysis-how-vcs-see-the-world [https://perma.cc/K5G3-72XG].

35 See infra Section II.C.

36 See infra notes 300–03 and accompanying text.
involves value transfer from the employee to the issuer in exchange for the securities. This overview establishes that Rule 701 issuances are a form of investment by employees rather than merely a benefit bestowed upon them—an argument promoted by advocates of deregulation.

Part III briefly reviews some of the explanations that the SEC has provided over the years for deregulating equity compensation, and casts doubt on these arguments. It goes on to offer an alternative framework for the regulation of equity compensation, which recognizes employees’ unique needs and vulnerabilities, given their lack of sophistication as investors and the immense complexity of start-ups’ capital structures.

Part IV discusses the theoretical justifications for mandatory disclosure to equity-compensated employees by describing the inefficiencies caused by information asymmetry in the start-up equity compensation market.

Part V describes the practical problems currently created by Rule 701. Specifically, this part describes three categories of problems with the disclosure requirements: too much, too little, too late. That is to say, the regulation mandates the disclosure of too much irrelevant and potentially harmful information, too little material information, in a timeframe that does not permit efficient decisionmaking by employees.

Part VI offers concrete amendments to Rule 701 that will help close the information gap and contribute to better decisionmaking by employees without imposing undue costs on the issuer.

II. EMPLOYEE-EQUITY HOLDERS AND THE SECURITIES DISCLOSURE REGIME

Although cast as a contemporary issue of the upper-middle class, the regulation of equity-based compensation has its roots in long-standing case law regarding blue-collar workers. The case law does not provide a single straightforward answer to the question of what the required disclosures in an offering of unregistered securities to the issuer’s employees are. It instead offers a continuum of disclosure levels that starts with full disclosure in the form of a registration statement and ends with no need to disclose any information at all. Two Supreme
Court decisions mark the edges of this continuum: *International Brotherhood of Teamsters v. Daniel*\(^\text{37}\) and *SEC v. Ralston Purina Co.*\(^\text{38}\) The decisions in both *Daniel* and *Ralston Purina* were given in another era and involved a different class of workers, but their holdings do bear directly on the compensation of start-up employees today.

The intermediate cases, positioned between those two extremes of no disclosure (*Daniel*) and full disclosure (*Ralston Purina*), are governed by a series of rules and regulations that the SEC adopted over the years, primarily Rule 701. The economic realities underpinning Rule 701 offerings and the policy goals of their regulation can only be evaluated when such offerings are distinguished from a host of cases that are governed by other provisions. First and foremost, a distinction must be drawn from situations that do not involve any offer or sale of securities.

A. Daniel and the “No-Sale” Doctrine

From a legal standpoint, the use of equity-based incentives is subject to the requirements of the federal securities laws. Section 5 of the Securities Act of 1933 (“Securities Act”) mandates that all securities offered and sold in the United States be registered with the SEC or qualify for an exemption from the registration requirement.\(^\text{39}\) However, what constitutes an offer to sell securities? Oddly enough, this question was brought before the Supreme Court by a retired trucker.

In 1973, a 63-year old truck driver named Daniel (court decisions do not mention his full name) retired after more

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\(^{39}\) Sections 5(a) of the Securities Act of 1933 prohibits the sale or delivery after sale of unregistered securities. 15 U.S.C. § 77e(a) (2012). Section 5(c) of the Securities Act of 1933 prohibits the offer of securities by federal jurisdictional means without first filing a registration statement for them with the SEC. 15 U.S.C. § 77e(c). *See also* Securities Act of 1933, ch. 38, 48 Stat. 74 (codified as amended at 15 U.S.C. § 77b(a)(3) (2012)) (defining “offer” as including “every attempt or offer to dispose of, or solicitation of an offer to buy, a security or interest in a security, for value”).
than twenty-two years of service. To be precise, it was twenty-two and a half years, minus a four-month involuntary break in his service that had occurred thirteen years earlier. Unfortunately for him, those four missing months were soon proven crucial to his future. After Daniel was hired, the union he was affiliated with negotiated a collective bargaining agreement with some trucking companies, including Daniel’s employer, to establish a pension plan for the union’s members. As part of this agreement, the trucking companies were required to fund the employee pension plan without employees making monetary contributions from their wages (namely, a noncontributory compulsory pension plan). To be eligible for a pension, Daniel was required to provide twenty years of continuous service; as such, due to the four months of involuntary break in his service, his local union had refused to pay him any pension benefits whatsoever, and his retirement account had thus been forfeited.

Daniel sued the union and the trustee of the pension fund claiming, among other things, that they had misrepresented and omitted material facts concerning his interest in the pension plan, thereby committing securities fraud. He also argued that even though he did not make monetary contributions to the pension fund, he had bought securities by means of his labor. The District Court for the Northern District of Illinois, Eastern Division, and later the Seventh Circuit Court of Appeals accepted this line of reasoning and

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40 Daniel, 439 U.S. at 555.
41 See id.
42 See id at 553–54.
43 Id. at 553–55.
44 Id. at 555.
45 Id. at 559 (“By allowing his employer to pay money into the [Pension] Fund, and by contributing his labor to his employer in return for these payments, respondent asserts he has made the kind of investment which the Securities Acts were intended to regulate.”).
denied the defendants’ motion to dismiss the securities’ counts of the plaintiff’s complaints.46

However, the Supreme Court reversed, holding that to become an investor, a person must “choose to give up a specific consideration in return for a separable financial interest with the characteristics of a security.”47 The Supreme Court did not reject the idea that a security could be bought in exchange for employee labor—“[t]his is not to say that a person’s ‘investment,’ in order to meet the definition of an investment contract, must take the form of cash only, rather than of goods and services.”48 However, in the context of an employment relationship that involves many compensation components and benefits, the Court found that the significance of the security component (future pension) is “attenuated.”49 Finding that “[o]nly in the most abstract sense may it be said that an employee ‘exchanges’ some portion of his labor in return for these possible benefits,”50 the Court concluded, “[l]ooking at the economic realities, it seems clear that an employee is selling his labor primarily to obtain a livelihood, not [to make] an investment.”51 Therefore, the Court dismissed all counts against defendants involving securities fraud.52

The decision in Daniel suggests that an equity-based compensation arrangement does not constitute an offer to sell where the equity component cannot be differentiated from the other components of the compensation package. However, in the years following this decision, economic realities have changed, and a growing number of employees have started

46 See Daniel v. Int’l Bhd. of Teamsters, 410 F. Supp. 541 (N.D. Ill. 1976), aff’d, 561 F.2d 1223 (7th Cir. 1977). The Court of Appeals explained that “[r]ealistically speaking, employers are putting money into a fund for an employee’s future use which he would otherwise be getting in his paycheck.” Daniel v. Int’l Bhd. of Teamsters, 561 F.2d 1223, 1232 (7th Cir. 1977).
47 Daniel, 439 U.S. at 559.
48 Id. at 560 n.12.
49 Id. at 560.
50 Id.
51 Id.
52 Id. at 570.
accepting compensation agreements in which equity grants represent a significant proportion of their pay. The SEC responded to these market dynamics by further developing the Court’s specific consideration test under the “no-sale” doctrine.

In a 1980 release, the SEC distinguished between noncontributory plans that do not involve an investment decision on the employee’s part and voluntary, contributory plans “where there is both an investment decision and the furnishing of value by participating employees.” In the latter case, a “purchase or sale” within the meaning of Section 2(a)(3) of the Securities Act takes place. Conversely, the grant of securities to an employee under an employee benefit plan, such as a stock bonus plan, does not constitute a “purchase or sale” where the employees “do not individually bargain to contribute cash or other tangible or definable consideration to such plans.”

The courts followed a similar trajectory applying the “no-sale” doctrine in cases where employees did not make an intentional investment decision and specifically bargain for the equity grant. On the other hand, when employers offered

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53 See Aran, supra note 4, at 1263.
58 See In re Cendant Corp. Sec. Litig., 76 F. Supp. 2d 539, 545 (D.N.J. 1999) (holding that the “plaintiff did not receive her options as part of a bargained-for exchange that required her to make an affirmative investment decision”); see also In re Enron Corp. Sec., Derivative & “ERISA” Litig., 238 F. Supp. 3d 799, 877, 882, 902 (S.D. Tex. 2017) (finding that there was no sale because the corporate client’s stock option plans were noncontributory and compulsory for its employees).
equity grants to prospective employees as inducements to accept employment (as opposed to inducements to continue employment), the courts included the plaintiff-employee under the scope of the Securities Act’s protection. In this determination, courts examined the existence of an affirmative decision by the prospective employee to accept a compensation scheme that included an equity component in return for his or her labor. When such bargained-for consideration for the securities was recognized, courts concluded that a “purchase” of securities had taken place.

See In re Cendant Corp. Sec. Litig., 81 F. Supp. 2d 550, 556 (D.N.J. 2000) (differentiating the case from those “where the employee changed his employment status in return for individually bargained-for compensation including stock options” which does constitute a “purchase or sale”); see also Yoder v. Orthomolecular Nutrition Inst., Inc., 751 F.2d 555, 560 (2d Cir. 1985) (the plaintiff agreed to work for the defendant in return for an annual salary of $40,000 plus options to purchase up to 30,000 shares of the defendant’s stock). In addressing a motion to dismiss the plaintiffs’ securities fraud claim, the Judge Friendly, writing for the court, found that the existence of a contract for the sale of up to 30,000 shares of stock meets the definition of a “sale” or “sell” within the meaning of the Securities Act:

> [W]e perceive no reason why ... Congress should have wished the courts to exclude from the benefits of facially applicable language a person who parts with his or her established way of life in return for a contract to issue stock. As the Supreme Court has noted in a similar context, “[t]he economic considerations and realities present ... are similar in important respect[s] to the risk an investor undertakes when purchasing shares. Both are relying on the value of the securities themselves, and both must be able to depend on the representations made by the transfer of the securities ....

Id. at 560.


The “no-sale” doctrine, therefore, helps differentiate between two groups of employee-equity holders: the first group includes employees who receive securities as a mere benefit, without specifically negotiating for these securities and thereby transferring value to the issuer. The second group includes employees who expressly contracted in a compensation agreement for an equity component in their compensation structure. These employees are presumed to accept their job offer partly based on the allure of equity incentives and, as such, they choose to invest their human capital in their employers’ securities.

The decision in Daniel and the subsequent development of the “no-sale” doctrine bear on the compensation of start-up employees today. Given that the common practice in venture capital-backed start-ups is to offer equity compensation as part of a prenegotiated compensation agreement (i.e., equity grants are offered to prospective employees as inducements to accept employment), it is safe to say that the vast majority of start-up employees fall under the category of employee-investors who are covered by the Securities Act. These employees

(S.D.N.Y. 1988) (denying a motion to dismiss on the grounds that there was no “sale” given that “plaintiff’s Complaint alleges that a sale of securities occurred when plaintiff accepted Hutton’s offer of employment”).

62 Cf. Simon M. Lorne, Accommodating the Securities Laws to Employee Benefit Plans, 1979 DUKL.J. 421, 427 (“Such a view rested to some extent on a legal fiction, since monetary payments pursuant to an organized plan between an employer and employees certainly lack most characteristics of a gift.”).

63 According to a 2012 survey by National Center for Employee Ownership, the most common way to be awarded an equity grant as an employee at a privately held company is upon hire. See NAT’L CTR. FOR EMP. OWNERSHIP, PRIVATE COMPANY EQUITY COMPENSATION SURVEY REPORT 6 (2012), http://www.sos-team.com/pdfs/nceoresults.pdf [https://perma.cc/KP8E-C36A]; see also, Joseph Bankman, The Structure of Silicon Valley Start-Ups, 41 UCLA L. REV. 1737, 1750 (1994) (explaining that because start-ups provide “contingent compensation” in the form of equity, “employees sacrifice the higher cash salary” they might obtain at “more established companies”); Richard A. Booth, Give Me Equity or Give Me Death—The Role of Competition and Compensation in Silicon Valley, 1 ENTREPRENEURIAL BUS. L.J. 265, 274 (2006) (noting that start-ups can “compete for talent without offering more cash” by offering equity instead).
employees transfer value in the form of human capital to the firm and are presumed to be in need of the Securities Act’s protection. However, to determine the appropriate level of protection, another question should be considered, besides the receipt of consideration for the securities by the issuer. The second question relates to the position of the employee, and the type of information that he or she possesses about the issuer’s business—as discussed in the following Section.

B Private Offering Exemptions and the “Fend-for-Themselves” Test

After finding that the equity grant in question is exchanged for value, the second question to consider when determining the level of required disclosure in an offering of unregistered securities to the issuer’s employees is the investment proficiency of the employee—namely, whether the employee can “fend for himself.” The Supreme Court introduced this test to distinguish between public and private offerings in 1953 in a case involving agricultural workers.\(^{64}\) In response, the SEC, as part of Regulation D, later developed and clarified the boundaries of the private offering exemption.\(^{65}\)

In 1953, the SEC brought an action against Ralston Purina, a manufacturer and distributor of various feed and cereal, for selling unregistered common stock to hundreds of employees.\(^{66}\) These employees purchased the shares in private placements at market-rate prices.\(^{67}\) The company argued in its defense that the sales were exclusive to “key employees” and therefore were exempted from registration according to Section 4(1) (today Section 4(a)(2)) of the Securities Act, which


\(^{65}\) See Definitions and Terms Used in Regulation D, 17 C.F.R. § 230.501(a) (2018).

\(^{66}\) See Ralston Purina, 346 U.S. at 120–21 (noting that among these were “employees with the duties of artist, bakeshop foreman, chow loading foreman, clerical assistant, copywriter, electrician, stock clerk, mill office clerk, order credit trainee, production trainee, stenographer, and veterinarian”).

\(^{67}\) See id. at 121.
exempts transactions “not involving any public offering” (also known as the private offering exemption). The company broadly defined the term “key employees” to include rank-and-file employees who demonstrated some special contribution to the company or potential for promotion. The Court rejected the company’s line of argument and stated that the Securities Act is designed “to protect investors by promoting full disclosure of information thought necessary to inform investment decisions.” Consequently, the Court reasoned, the natural interpretation of the private offering exemption requires examining whether the particular class of offerees needs the Act’s protection. If the offerees “are shown to be able to fend for themselves,” then the transaction can be viewed as exempt under the private offering exemption.

The Court stressed that, as a rule, “employees are just as much members of the investing ‘public’ as any of their neighbors in the community.” Therefore, by and large, employees are subject to the full protection of the Securities Act. Nonetheless, the Court accepted that under special circumstances, certain employees could participate in a private offering (exempted under Section 4(a)(2) of the Securities Act). As an example, the Court specifically mentioned an offering “made to executive personnel who because of their position have access to the same kind of information that the Act would make available in the form of a registration statement.”

68 Id. at 121–22.
69 See id.
70 Id. at 124.
71 Id. at 125.
72 Id. The exemption would be available only if the offerees also had access to, or were given, the kind of information that would be available in a registration statement. See Doran v. Petroleum Mgmt. Corp., 545 F.2d 893, 902–03 (5th Cir. 1977).
73 Ralston Purina, 346 U.S. at 126.
74 Id. at 125–26.
In 1982, as part of Regulation D, the SEC promulgated Rule 506,75 which expresses the SEC’s interpretation of the private offering exemption. The exemption under Rule 506 limits the sale either to “accredited investors”76 or otherwise sophisticated persons, meaning that they have sufficient knowledge and experience in financial and business matters to make them capable of evaluating the prospective investment’s merits and risks.77 The term “accredited investor” is defined in Rule 501 and encompasses institutional investors78 and officers79 along with high-net-worth80 and high-income individuals.81

Rule 506 offerings are particularly useful for start-up companies because the rule does not place a limit on the aggregate number of securities a company can issue. Moreover, as long as the offering is exclusive to accredited investors, the rule does not mandate providing disclosures to offerees.82 Rule 506 transactions are, however, still subject to

76 17 C.F.R. § 230.506(c)(1)(ii). The definition of “accredited investor” is also set forth in Regulation D. See Definitions and Terms Used in Regulation D, 17 C.F.R. § 230.501(a) (2018).
77 17 C.F.R. § 230.506(b)(2)(ii) (“Each purchaser who is not an accredited investor either alone or with his purchaser representative(s) has such knowledge and experience in financial and business matters that he is capable of evaluating the merits and risks of the prospective investment.”).
78 17 C.F.R. § 230.501(a)(1)–(3).
80 17 C.F.R. § 230.501(a)(5) (including natural persons “whose individual net worth, or joint net worth with that person’s spouse, exceeds $1,000,000,” excluding the value of the person’s primary residence).
81 17 C.F.R. § 230.501(a)(6) (including those “who had an individual income in excess of $200,000 in each of the two most recent years or joint income with that person’s spouse in excess of $300,000 in each of those years and have a reasonable expectation of reaching the same income level in the current year”).
the antifraud provisions of the federal securities laws.\textsuperscript{83} Rule 506 is also useful for certain compensatory equity awards, particularly those aimed at the company’s directors, executive officers and other employees and service providers who meet the accredited investor criteria due to their income or net worth.\textsuperscript{84}

The private offering exemptions (Section 4(a)(2) of the Securities Act and Rule 506) therefore further divide the population of equity-compensated employees in the following way: among the employees who negotiated their equity compensation and are therefore considered investors, some employees qualify as “accredited investors” due to their role in the organization (directors and executive team), their income, or their high net worth.\textsuperscript{85} These employees can participate in a private offering that is not subject to the requirement to disclose detailed information. The other employees, those who have negotiated their equity compensation but do not qualify as accredited investors, constitute a distinct group of investors whose needs the SEC did not address until 1988.

\textsuperscript{83} See Fast Answers: Rule 506 of Regulation D, U.S. SEC. & EXCHANGE COMMISSION (last modified Nov. 27, 2017), https://www.sec.gov/fast-answers/answers-rule506htm.html [https://perma.cc/4Q67-LQGZ] (“Companies must decide what information to give to accredited investors, so long as it does not violate the antifraud prohibitions of the federal securities laws.”).

\textsuperscript{84} See Securities Act Rules, U.S. SEC. & EXCHANGE COMMISSION (last updated Nov. 6, 2017), https://www.sec.gov/divisions/corpfin/guidance/securitiesactrules-interps.htm [https://perma.cc/JZ9E-352B] (“An issuer may rely on an available alternative exemption such as . . . a private placement exemption under Rule 506 of Regulation D or Section 4(2) for the sales in excess of the Rule 701(d) limits and rely on Rule 701 for sales that do not exceed the Rule 701(d) limits.” (quoting the answer to Question 271.07)); see also Joseph M. Wallin et al., Start-up Equity Awards: Securities Law Considerations, THOMSON REUTERS PRAC. L., July 2015, at 1, 5, http://joewallin.com/wp-content/uploads/2015/07/Start-up-Equity-Awards-Securities-Law-Considerations-3-610-2005-3.pdf [https://perma.cc/B67C-QAEY] (“In practice, Rule 506(b) is only available when an award recipient is an AI [Accredited Investor].”).

\textsuperscript{85} Wallin et al., supra note 84, at 5.
C. Rule 701 Exemption for Compensatory Arrangements

To reiterate, Section II.A establishes that under Daniel and the “no-sale” doctrine, equity grants that employees receive as a mere benefit, without pre-employment negotiation and corresponding value transfer, do not require any disclosure of information. Section II.B further establishes that under Ralston Purina and Rule 506, employees who can fend for themselves, in the sense of either being sophisticated or who otherwise qualify as accredited investors, can participate in a private offering that does not involve substantial disclosure requirements. These exemptions, however, do not address start-ups’ need to offer equity compensation in negotiations with prospective employees who are not particularly sophisticated or of high net worth. This void is the reason for the adoption of Rule 701.

Before addressing the terms of Rule 701 offerings, it is worth mentioning the background of the rule’s promulgation and its evolution over the years. The typical model for a start-up company, which took form in Silicon Valley during the 1970s and the 1980s with the rise of information technology, includes a unique feature: employees at virtually all ranks hold an ownership stake in the company.86 This form of compensation emerged during Silicon Valley’s inception as an alternative model to the more centralized and hierarchical organizational culture of East Coast corporate America, which held that companies should reserve equity grants only to management.87 Simultaneously, in the early 1980s, personal computers became household items, and numerous related hardware and software companies began proliferating in

86 See Aran, supra note 4, at 1263 (describing the origin of broad-based equity compensation in Silicon Valley); see also Joseph R. Blasi et al., supra note 4, at 8; Christophe Lécuyer, Making Silicon Valley: Innovation and the Growth of High Tech, 1930–1970, 265 (Wiebe E. Bijker et al. eds., 2006).

87 See Aran, supra note 4, at 1262.
Silicon Valley and elsewhere. As part of this process, the new high-tech industry experienced a pressing need to adopt employee equity compensation plans as a means to attract and, even more so, retain skilled workers. Since the mid-1980s, scholars, industry representatives, and attorneys have called on the SEC to create a special exemption that would allow start-ups to offer equity compensation to prospective employees, thereby enabling these emerging businesses to compete for talent against better-established public firms.

At the forefront of promoting these initiatives was the SEC Government-Business Forum on Small Business Capital Formation (hereinafter Forum on Small Business) that the SEC established in 1982 pursuant to the Small Business Investment Incentive Act of 1980. Starting in 1985, this forum called for easing the investor protection guarantees of the Securities Act in cases where the nature of a securities transaction is essentially compensatory.

88 See, e.g., ANNALEE SAXENIAN, REGIONAL ADVANTAGE: CULTURE AND COMPETITION IN SILICON VALLEY AND ROUTE 128, 108–09 (1994) (discussing the proliferation of electronics firms in Silicon Valley and Route 128 in the 1980s); Matt Weinberger, 36 PHOTOS SHOWING HOW SILICON VALLEY WENT FROM PRUNE ORCHARDS TO THE CENTER OF THE TECH WORLD, BUS. INSIDER (Nov. 10, 2015). https://www.businessinsider.my/history-of-silicon-valley-in-photos-2015-11/ [https://perma.cc/3Y7R-JG43] (“By the mid-eighties, Silicon Valley was established as the center of the computer industry, which was only on the rise . . . . The eighties would give way to the nineties, bringing a new kind of company to Silicon Valley, thanks to the PC starting to hit the mainstream . . .”).


90 Id. at 1332; see also Cable, supra note 5, at 625–26 (describing the source of deregulation initiatives in the equity compensation domain).


The SEC responded in 1988 by creating Rule 701, which allowed non-reporting companies to offer and sell securities as part of compensatory arrangements without the need to register the securities. The SEC explained that it would be an unreasonable burden to require these non-reporting companies, many of which are small businesses, to incur the expenses and disclosure obligations of public companies in cases in which their sales of securities were confined to employees and sophisticated investors. To distinguish Rule 701 offerings from the kind of offerings the Court deemed in Ralston Purina as public, the rule explicitly states that the exemption from registration is not available for plans or schemes intended to raise capital. Likewise, in accordance with the small offering exemption of the Securities Act, the original version of the rule placed annual volume limits of up to $5 million.

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95 Preliminary Note 5 to Rule 701 addresses the scope of the exemption. See Exemption for Offers and Sales of Securities Pursuant to Certain Compensatory Benefit Plans and Contracts Relating to Compensation, 17 C.F.R. § 230.701 (2019) (“This section also is not available to exempt any transaction that is in technical compliance with this section but is part of a plan or scheme to evade the registration provisions of the [Securities] Act. In any of these cases, registration under the [Securities] Act is required unless another exemption is available.”). The distinction is somewhat artificial because the purpose of the offer to employees at Ralston Purina was to encourage employee ownership and not to raise capital. See SEC v. Ralston Purina Co., 200 F.2d 85, 91, 93 (8th Cir. 1952) (“[T]he sole purpose [was] enabling them to secure a proprietary interest in the company or to increase the interest already held by them.”).

96 See Compensatory Benefit Plans and Contracts, 53 Fed. Reg. at 12,919 (referencing pt. I (A)(2)). In its original form, Rule 701 permitted the
At the time when the SEC adopted Rule 701, private issuers’ ability to rely on this exemption was limited not only in the volume of securities offered and sold but also in the number of equity-compensated employees allowed. That is because after crossing a threshold of 500 equity holders (“held-of-record”), private issuers assumed the reporting obligations of public companies. In such situations, most companies preferred going public over assuming the costs of public reporting obligations without the benefits of having access to public capital markets. Thus, the “500-held-of-record” threshold effectively deterred companies from granting equity incentives to hundreds of employees for fear of not being able to control the timing of their initial public offering (IPO) (which will be dictated by the pace of option exercise by employees).

However, due to constant industry pressure applied over the years, the limitations on private issuers’ ability to issue securities for compensation purposes were gradually curtailed, thereby turning this small exemption into a

amounts of securities offered and sold annually to be the greatest of $500,000; 15% of total assets of the issuer; or, 15% of the outstanding securities of the class, subject to an absolute limit of $5,000,000 derived from Section 3(b) of the Securities Act. 17 C.F.R. § 230.701(d)(2).

Rule 701 has never specified a ceiling to the number of offerees who could participate in a Rule 701 offering. However, when the Rule was adopted, the number of such offerees was nevertheless limited. The limitation did not stem from Rule 701 itself but rather from Section 12(g) of the Securities Exchange Act of 1934, which sets a cap on the number of shareholders (referred to in the Act as “held of record”) a private company may have before it becomes subject to the Act’s reporting requirements. See 15 U.S.C. § 78l(g) (2012). At the time of Rule 701 adoption, Section 12(g) set a maximum shareholder threshold of 500, including both investors who received shares in return for capital investments and employees who received equity as compensation. See Aran, supra note 4, at 1284–85.

In 1996, Congress enacted the National Securities Markets Improvement Act of 1996 (the “NSMIA”), which gave the SEC the authority to provide exemptive relief under Section 3(b) of the Securities Act, of more than $5 million for transactions such as offers to employees. National Securities Markets Improvement Act of 1996, Pub. L. No. 104-290, 110 Stat. 3416. Subsequently in 1999, the SEC amended Rule 701, lifting the $5
significant channel of securities offerings to household investors. In their most recent deregulation initiative, the SEC commissioners unanimously voted on July 18, 2018 to lift the threshold at which companies are required to disclose financial information to Rule 701 offerees from $5 million to $10 million, with automatic subsequent increases every five years to account for inflation. The amendment was made following the Economic Growth, Regulatory Relief, and

million volume ceiling and replacing it with an enhanced disclosure requirement. See Exempt Offerings Pursuant to Compensatory Arrangements, Securities Act Release No. 7645, 64 Fed. Reg. 11,095 (Mar. 8, 1999) (to be codified at 17 C.F.R. pt. 230). Furthermore, the Jumpstart Our Business Startups (JOBS) Act of 2012 raised the threshold at which companies become subject to public company reporting obligations from 500 shareholders to either 2,000 shareholders or 500 shareholders who are not accredited investors. Jumpstart Our Business Startups (JOBS) Act of 2012, Pub. L. No. 112-106, 126 Stat. 306 (codified as amended in scattered sections of 15 U.S.C. (2012)). In addition, and more importantly, the JOBS Act of 2012 further allowed companies to exclude securities held by Rule 701 offerees when counting their shareholders. It thereby removed the limitation of Section 12(g) of the Securities Exchange Act on the number of employees and service providers that start-ups could compensate with equity while staying private. See Aran, supra note 4, at 1288; see also Cable, supra note 5, at 626.

99 Rule 701 offerings are not registered, and therefore any estimate as to the total value of securities awarded to employees in Rule 701 offerings is inaccurate. The standard employee option pool in VC-backed companies has changed throughout the years between 10–15%. See Henry Ward, Investors vs. Employees, CARTA (Feb. 23, 2017), https://carta.com/blog/investors-vs-employees-2/; see also Adley Bowden, How Big Should an Employee Option Pool Be?, PITCHBOOK (Oct. 31, 2016), https://pitchbook.com/news/articles/how-big-should-an-employee-option-pool-be [https://perma.cc/PFD3-ARVR]. To the best of the author’s knowledge, there are no available data on the aggregate market cap of VC-backed private companies in the U.S. The estimate as to the aggregate valuation of U.S. unicorn companies (valued at $1 billion or more) in 2018 was $718 billion. See Aggregate US Unicorn Valuation Surpasses $700B, PITCHBOOK (Mar. 8, 2018), https://pitchbook.com/newsletter/aggregate-us-unicorn-valuation-surpasses-700b [https://perma.cc/S4EX-WU26].

Consumer Protection Act signed by President Trump on May 24, 2018, and, inter alia, directs the SEC to adopt an amendment to Rule 701.\textsuperscript{101}

Under the current version of Rule 701, the issuer must deliver a copy of the compensatory benefit plan or contract to the equity recipients.\textsuperscript{102} No other disclosures, however, are necessary besides what the circumstances might require under the general antifraud provisions of the federal securities laws, as long as the volume of securities offered does not exceed the $10 million threshold.\textsuperscript{103} In contrast, if the aggregate sale price of securities sold during the twelve month period exceeds the $10 million threshold, the issuer must deliver to investors within a reasonable period before the date of sale the following: (1) a copy of the summary plan description required by ERISA or a summary of the plan’s material terms if it is not subject to ERISA,\textsuperscript{104} (2) information about the risks associated with an investment in the securities sold under the plan or contract,\textsuperscript{105} and (3) financial statements required to be furnished by Part F/S of Form 1-A under Regulation A (essentially a simplified registration form, similar to a prospectus, but less detailed and allowing for unaudited but GAAP-prepared financial statements).\textsuperscript{106} These financial statements must be as of a date no more than 180 days before the sale of securities relying on Rule 701.\textsuperscript{107}

Thus, Rule 701 differentiates between employees who are not entitled to receive financial information and employees who must receive access to the company’s financial statements, based on the annual volume of the company’s Rule 701 offerings.

\textsuperscript{102} 17 C.F.R. § 230.701(e).
\textsuperscript{103} 17 C.F.R. § 230.701 (“These transactions are not exempt from the antifraud, civil liability, or other provisions of the federal securities laws.” (quoting Preliminary Note 1)).
\textsuperscript{104} See 17 C.F.R. § 230.701(e)(1)–(2).
\textsuperscript{105} See 17 C.F.R. § 230.701(e)(3).
\textsuperscript{106} Offering Statement, 17 C.F.R. § 230.252(a) (2018).
\textsuperscript{107} See 17 C.F.R. § 230.701(e)(4).
To summarize this Part of the Article, as described in Figure 1, the level of disclosure in an offering to employees is determined by three key questions:

1. Are the securities bargained-for by the employee? (In other words, did the employee transfer value to the company in exchange for the securities?) If the answer is negative, then according to the principles set forth in Daniel and the “no-sale” doctrine, the Securities Act does not cover the transaction. Conversely, if the answer is positive, a sale of securities took place and the employee is presumed to need the Securities Act’s protection.

2. Can the employee fend for himself? If the employee is accredited or an otherwise sophisticated investor, then only the anti-fraud provisions of the Securities Act are applicable. Conversely, if the employee is neither an accredited investor nor otherwise sophisticated, the issuer will need to rely on Rule 701 to exempt its issuance of securities from the registration requirements of the Securities Act.

3. Does the volume of the sales in reliance on the Rule 701 exemption exceed $10 million in a relevant 12-month period?
If not, then according to Rule 701(e), only a copy of the compensatory benefit plan or contract must be delivered. However, if the answer is positive, the issuer is required to provide enhanced disclosures to Rule 701 investors, including a summary of risk factors and its financial statements.

Figure 1. The scope of disclosure in exempted offerings to employees as a function of the consideration provided by the recipient, the recipient’s investment proficiency, and the volume of the offering.

III. POLICY RATIONALES AND OBJECTIVES FOR DISCLOSURE TO START-UP EMPLOYEES

Part II establishes that employees who negotiate equity compensation agreements are making an investment decision. It also establishes that, in general, rank-and-file employees are presumed to be in need of the Securities Act protection. Given that, what are the explanations for the exemption of compensatory issuances from the registration requirement of
the Securities Act? In other words, what were the rationales set forth for the SEC’s policy regarding equity compensation?

The following Part discusses the rationales offered by the SEC for the deregulation of equity-based compensation, addresses the weakness in the SEC’s stand, and proposes an alternative theoretical framework to serve as a foundation for the regulation of disclosures to equity-compensated startup employees.

A. Regulation in Search of Policy Objectives

It is difficult to identify the objectives and policy considerations that guide the regulation and deregulation of equity compensation, as the SEC has written fairly little on this subject. The legislative history indicates that it was industry pressure rather than systematic thinking and clear policy goals that drove reforms in this domain.

Still, the principal rationales behind the SEC’s actions could be distilled from the Commission’s releases and from the Forum on Small Business’s annual reports. In 1999, as part of a major reform of Rule 701 that replaced the rule’s original volume limitations, the SEC explained that this domain should be deregulated because “[t]he type and amount of disclosure needed in a compensatory securities transaction differ from that needed in a capital-raising transaction.”

108 See Cable, supra note 5, at 627–28 (“What policy rationale underlies this liberalization of equity compensation regulation . . . ? The regulatory and legislative history is surprisingly uninformative.”).

109 Id. at 628 (“[I]t is reasonably clear that Rule 701, its continued expansion . . . were efforts to accommodate Silicon Valley startups. But it is not at all clear which attributes of this particular workforce, or this particular investment context, warranted the break with private placement tradition.”).

110 See supra note 92 and accompanying text.


112 Exempt Offerings Pursuant to Compensatory Arrangements, 64 Fed. Reg. at 11,097.
The SEC further explained that “[i]n a bona fide compensatory arrangement, the issuer is concerned primarily with compensating the employee-investor rather than maximizing its proceeds from the sale.”

Although the argument is presented as a single reasoning, it incorporates two distinct claims: one regarding employees’ need for information and the other regarding the issuer’s motives. The first argument is that in a compensatory securities transaction, the need for information is relaxed compared to a capital-raising transaction. According to the SEC, “[b]ecause the compensated individual has some business relationship, perhaps extending over a long period of time, with the securities issuer, that person will have acquired some, and in many cases, a substantial amount of knowledge about the enterprise.” However, in the same release, the SEC also explains that under certain conditions (large volume offerings), employees do need some information to make well-informed investment decisions: “we believe that a minimal level of disclosure consisting of risk factors and Regulation A unaudited financial statements is essential to meet even the lower level of information needed to inform compensatory-type investors such as employees and consultants.”

The second argument that seems to guide the deregulation initiatives of equity compensation is that granting equity compensation is considerably different from a capital-raising transaction because the former is intended to reward employees rather than to maximize the issuer’s proceeds. Similarly, the 1985 Forum on Small Business Annual Report offered the following distinction:

Where the arrangement is fundamentally an investment transaction (e.g., employee stock purchases at fair market value, perhaps as part of an offering to outside investors), the investor protection principles of securities law should continue to prevail. In many cases, however, the nature of the transaction

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113 Id.
114 Id.
115 Id.
is essentially compensatory, to provide benefits to the employee, rather than investment-oriented (e.g., below-market sales or favorable stock options). In these cases, while an investment element may exist, the compensatory aspects are predominant and should not be thwarted by securities law impediments designed primarily to protect investors in fund-raising transactions.\footnote{See 1985 REPORT, supra note 92, at 27.}

The regulatory policy towards equity-based compensation is thus built on two arguments: employees have limited need for information, and employers have (mostly) the best intentions at heart. These arguments fall short of establishing an adequate justification for a regulatory exemption because they disregard the economic realities of the equity compensation market and the basic principles of securities law, as discussed in the following Section.

B. Weakness in the SEC's Reasoning

Overall, the SEC's reasoning regarding employees' relaxed need for information fails to take into account that the most important investment decision—i.e., whether or not to accept a job offer—is made prior to the start of employment, before the employee develops an extended relationship with the issuer and obtains inside knowledge about the company.\footnote{See NAT'L CTR. FOR EMP. OWNERSHIP, supra note 63, at 4; see also Interviews, supra note 29 (quoting L04: “I would argue the big investment decision was the day you decided to take the offer.”); see also infra Section V.C.} Moreover, as discussed in Section II.B above, an employee who holds a position that allows him or her to access relevant financial information does not depend on a Rule 701 exemption (as, according to Ralston Purina, well-informed, highly ranked employees can be included in a private offering).\footnote{See supra Section II.B.}

Furthermore, if employees indeed enjoy access to sufficient information, why should they receive enhanced disclosures
once the $10 million threshold has been triggered? Similarly, if employees indeed need a “minimal level of disclosure” to be able to make well-informed “compensatory-type” investment decisions, why shouldn’t employees of companies that issue less than $10 million worth of equity awards in a year receive this information?

The argument that the issuer is “primarily” concerned with “compensating the employee-investor rather than maximizing its proceeds,” is also far from convincing. First, the weight given to the issuer’s intentions is inconsistent with a fundamental principle of securities law according to which the motivation of the issuer does not matter; only the offeree’s need for information matters.119 Furthermore, as established in Section II.A above, the case law that evolved following the decision in Daniel and the no-sale doctrine recognize that when an equity grant is entirely aimed at benefiting the employee, there is no need for disclosure because there is no sale to begin with.120 Hence, the type of arrangements covered by Rule 701 are those that involve some value transfer by the employee as part of a bargained-for compensation package. The fact that the issuer does not seek to maximize immediate proceeds from the sale does not imply that the issuer does not wish to maximize other gains, such as reducing employee mobility.

Moreover, many prospective employees are swayed by the idea that they could earn windfall gains by accepting equity instead of cash and are therefore willing to take a sizable pay cut in return for an equity stake.121 Start-up employees often

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120 See supra Section II.A.

121 Out of 525 college-educated technology workers who were asked if they would rather be paid $110,000 annual cash salary or be paid $100,000 annual cash salary and shares representing 0.5% ownership stake an early-stage start-up, 75% (416 respondents) preferred equity over cash. Out of 589 respondents who were asked if they would rather be paid $130,000 annual cash salary or be paid $100,000 annual cash salary and shares representing
need to weigh competing job offers and/or decide on the tradeoff between cash and equity in their compensation packages—decisions that require them to estimate the potential value of the equity being offered.\textsuperscript{122} Some employees also strategically time their resignations to meet vesting schedule requirements,\textsuperscript{123} and others make bets on startups’ 0.5% ownership stake, 60% (353 respondents) preferred equity over cash. See Aran, supra note 30.

\textsuperscript{122} For depictions of this phenomenon in popular media outlets, see e.g., Herry Lian, You Got an Offer at a Startup. Now What?, HACKERNOON (Feb. 25, 2017), https://hackernoon.com/you-got-an-offer-at-a-startup-now-what-4de80a6935f4 [https://perma.cc/7FPM-S2VV] (“Many people take a startup role instead of a big corporation gig in hopes of striking rich with their stock options . . ..”); Napala Pratini, Salary vs Equity: How to Decide What’s Right For You, HIRED (Mar. 21, 2018), https://hired.com/blog/candidates/salary-vs-equity-how-decide-whats-right/ [https://perma.cc/5LSS-9A5X] (“In the world of tech jobs, it’s common—and often expected—that companies offer their employees at least some part of their compensation package in the form of stock options . . . how should you weigh the tradeoffs between the two forms of compensation—whether you’re choosing between two different job offers or a company has offered you a choice of salary packages??”); William Baldwin, Should You Take A Bigger Salary Or Employee Stock Options?, FORBES (June 29, 2017), https://www.forbes.com/sites/baldwin/2017/06/13/how-much-are-those-employee-options-worth/#c61798564cfa [https://perma.cc/77P6-28AY] (describing the stories of employees who are confronting these decisions).

\textsuperscript{123} See Ry Sullivan, Employment Tenure at Startups, CARTA (Mar. 7, 2018), https://carta.com/blog/employment-tenure-startups/?utm_source=mkto&utm_medium=email&utm_campaign=better-offerletter&mkt_tok=euyjlpjoiotd9m01qgmfpfrev5txjpmsitsinqlqiojhsrnx2vntzumncstvcxrmznjzsln5ut7rhtc8zulvktlnrjrfjumehrur21yc0qbf2zgc2doufredieuwzqftvjcz2lplufhdmkn4wuvvqzwzvefr6alzhcpeqmmvwrnmlwounknth0xc9rnifjrexdnk52torzwjaq2xaenphwdhec34syj9 [https://perma.cc/6T3X-LMM7] (reporting data on startup employee departure patterns “consistent with four-year vesting schedules commonly seen among startups and private companies” and noting that “[i]t’s common for vesting schedules to include a one-year cliff, and strategic behavior would suggest that employees consider voluntarily leaving startups when they reach this milestone [as suggested by the data]”; see also Jay Bhatti, How Startups Should Deal with Cliff Vesting For Employees, BUS. INSIDER (May 7, 2011), https://www.businessinsider.com/everything-you-need-to-know-about-cliff-vesting-2011-5 [https://perma.cc/Q5DB-XZZ4] (“I have known people who
equity that can result in severe financial consequences.\footnote[124]{See Aran, supra note 4, at 1267 (explaining the tax implications of leaving a startup and exercising stock options); see also Cable, supra note 5 at 617 (discussing the case of Good Technology employees); Matt Levine, Work for Uber, Wind Up in Debt, BLOOMBERG OPINION (December 12, 2017), https://www.bloomberg.com/opinion/articles/2017-12-13/work-for-uber-wind-up-in-debt [https://perma.cc/5ELQ-5CXT] (bringing the story of two Uber employees who took on debt to exercise stock options).} Indeed, the description of equity compensation arrangements as merely a benefit is not only inaccurate from a legal and economic standpoint but also does not coincide with the way most employees view these arrangements.\footnote[125]{Out of 1,114 college-educated technology workers who were asked to complete the sentence “[m]ost of my friends and colleagues think about equity-based compensation from a start-up as a form of ___,” only 22% (244 respondents) answered “bonus or benefit.” 24% (272 respondents) chose “investment or savings plan”; 13% (145 respondents) chose “salary, wage or pay”; 21% (236 respondents) chose “incentive or incentive alignment device”; 7% (80 respondents) chose “lottery ticket”, and 12% (137 respondents) chose “They never think about it.” See Aran, supra note 30.}

Taken together, neither of the SEC’s arguments fit within the broader regulatory framework that governs securities offerings to employees, nor do they recognize the economic realities behind these arrangements. The SEC’s explanations, therefore, fall short of providing an adequate basis for crafting and guiding the disclosure regime that governs securities offerings to employees. The following Section offers alternative reasoning to guide the regulation of equity-based compensation of start-up employees.
C. Alternative Reasoning for Regulating Start-up Equity Compensation

The rationales offered by the SEC for the disclosure provisions of Rule 701 are unpersuasive, revealing a need for a more contextualized understanding of the equity compensation market. This Section argues that rather than comparing employees to the paradigmatic case of the non-accredited capital investor and debating whether employees need access to the firm’s financial statements or not, the SEC’s policy should take into account the unique attributes of the start-up equity market. Unlike that of public exchanges, this market is inefficient and illiquid, and information cannot be assumed to be reflected in equity’ prices.

1. Employees are (Generally) Unsophisticated Investors

The starting point for the discussion about employees’ need for information lies with the recognition that, in general, rank-and-file employees are unsophisticated investors.126 As such, smart and talented as they are, they typically lack the skills and knowledge needed to properly read and analyze

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126 See SEC v. Ralston Purina Co, 346 U.S. 119, 126 (1952) (“Absent . . . a showing of special circumstances, employees are just as much members of the investing ‘public’ as any of their neighbors in the community.”). Ample economic research on employee stock options in public companies has demonstrated that employees’ evaluation of equity-based compensation does not accord with financial models and tends to fall on the overvaluation side. See, e.g., Oliver G. Spalt, Probability Weighting and Employee Stock Options, 48 J. FIN. & QUANTITATIVE ANALYSIS 1085, 1087 (2013) (explaining employees’ preference for stock options using prospect theory’s probability weighting function which holds that people tend to overreact to small probability events and underreact to large probabilities); see also Kevin F. Hallock & Craig A Olson, The Value of Stock Options to Non-Executive Employees 19 (Nat’l Bureau of Econ. Research Working Paper 11950, 2006) (demonstrating that most employees value their options at a value greater than their Black-Scholes value); Cynthia E. Devers et. al., The Effects of Endowment and Loss Aversion in Managerial Stock Option Valuation, 50 ACAD. MGMT. J. 191, 192 (2007) (arguing that endowment effect and loss aversion explain employees’ exercise decisions).
financial statements. The employees interviewed for this research had either not viewed their employer's financial statements, or did not know what to make of them.\footnote{See Interviews, supra note 29 (referencing E03 accessing the firm's financial statements via intranet portal but having “no idea what they meant”); see also Interviews, supra note 29 (referencing E05 and E08 explaining that despite having access to Rule 701 disclosures, they never attempted to read them).} Likewise, the lawyers interviewed for this research held that very few employees use and find value in the opportunity to access these documents.\footnote{See Interviews, supra note 29 (quoting L04: “I think most employees are not gonna take advantage of looking at this information. You will have some former employees who sometimes want to get access to that information and you can imagine why, especially if they're going to go work for a competitor.”).} From the perspective of some employers, employees who ask to review the financial statements are signaling that they are planning to leave the company.\footnote{Id.}

The notion that employees need such information resembles a concept that underlies much of the early legal theory on securities regulation— that mandatory disclosure of financial information enables small, unsophisticated investors to make well-informed investment decisions.\footnote{John C. Coffee, Jr., Market Failure and the Economic Case for a Mandatory Disclosure System, 70 VA. L. REV. 717, 723 (1984) (“Easy as it is today to criticize the original premise of the federal securities laws—i.e., that mandatory disclosure would enable the small investor to identify and invest in higher quality and lower risk securities—such criticism does not take us very far because its target has shifted.”).} The problem with this premise, as the law and economics theorists Frank Easterbrook and Daniel Fischel put it, is that it is just “as unsophisticated as the investors it is supposed to protect.”\footnote{See Frank H. Easterbrook & Daniel R. Fischel, Mandatory Disclosure and Protection of Investors, 70 VA. L. REV. 669, 694 (1984) (explaining that the idea that unsophisticated investors rely on financial disclosure in their investment decisions disregards the role of the capital market in reflecting information through prices, and positing that}
Easterbrook and Fischel go so far as to suggest that unsophisticated investors are “simply made worse off if information is foisted on them” because rather than taking a “free ride” on a price that is determined by the actions of informed traders, they must read the information or discard it without it being of any use to them.\(^\text{132}\) Some scholars have criticized Easterbrook and Fischel for underplaying the role investor protection plays in the mandatory disclosure regime.\(^\text{133}\) However, the basic insight that unsophisticated investors do not benefit directly from receiving financial disclosures, but rather indirectly through the price-setting function of the market, is widely accepted and stems directly from the semi-strong form of the efficient market hypothesis.\(^\text{134}\)

In the context of private companies, the problem is that employees’ attempts to “free-ride” on the information that is provided to the market by the investment decisions of sophisticated investors are doomed to fail. Unlike the public securities markets, the market for start-up stock is restricted unsophisticated investors have no reason to sort through the detailed information in the financial statements because by the time such investors make their investment decisions, the market has already absorbed the information.

\(^\text{132}\) Id.

\(^\text{133}\) See, e.g., Lynn A. Stout, *The Investor Confidence Game*, 68 BROOK. L. REV. 407, 414 (2002) (“[A]s any law student who has taken a course in securities regulation knows, the Congress . . . gave every appearance of taking the need for government-imposed investor protection quite seriously.”); see also Coffee, supra note 130, at 723 (“[S]uch criticism does not take us very far because its target has shifted. The securities markets have evolved significantly since the 1930’s . . . .”); John J.A. Burke, *Re-Examining Investor Protection in Europe and the US*, 16 E. L. AW J. 1, 8 (2009) (“the legislative evidence of any sophisticated legal regime supports a contrary viewpoint and argument.”).

\(^\text{134}\) See Lawrence A. Cunningham, *Firm Specific Information and the Federal Securities Laws: A Doctrinal, Etymological, and Theoretical Critique*, 68 TUL. L. REV. 1409, 1451 (1994) (“[Easterbrook & Fischel’s] statement is, of course, the classical definition of the semi-strong form of the ECMH [Efficient Market Hypothesis]. Thus federal mandatory disclosure cannot be defended as protecting investors because, under the ECMH, they do not need protection.”).
and the deals made by sophisticated investors do not provide a straightforward indication that can facilitate price discovery. That is because, as discussed in the following Section, the securities purchased by sophisticated investors are different from those earned by employees.

2. The Complexity of Startups’ Capital Structures

Unlike public companies’ stock, venture capital-backed firms—especially those that have undergone multiple financing rounds and reached ultra-high valuations—tend to have multiple classes of shares, each with different economic values. Employees’ incentives derive their value from the company’s common stock. The common stockholders have a residual claim against the assets and cash flows of the firm. Venture capital investments, in contrast, are structured as convertible preferred stock, wherein the investors acquire shares with superior cash flow and control rights. Investors’ conversion rights allow them to enjoy a dual position: in downside scenarios, such as a bankruptcy or acquisition for a low sum, their investments have a debt-like priority—meaning that they will be paid in full before any payments are made to the common stockholders. If the company is sold for a price below the sum owed to the preferred stockholders, the common stockholders will not participate in the proceeds. In favorable scenarios such as an acquisition for a large sum or

135 See generally William Gornall & Ilya A. Strebulaev, Squaring Venture Capital Valuations with Reality, J. Fin. Econ. (forthcoming 2019) (manuscript at 2-3), [https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2955455](https://perma.cc/7KCJ-4KLG) (“Unlike public companies, who generally have a single class of common equity, VC-backed companies typically create a new class of equity every 12 to 24 months when they raise money . . . . Deciphering the financial structure of these companies is difficult . . ..”);

136 See Gornall & Strebulaev, supra note 135, at 3.

137 See id.
an IPO, the preferred shareholders can convert their shares into common stock and fully participate in the upside as common stockholders.\textsuperscript{138}

The primary characteristic of preferred stock is called liquidation preference, meaning that upon a sale or liquidation of the company, holders of preferred stock are entitled to receive a fixed amount of the proceeds of the sale or liquidation before any payments to holders of common stock. The most common form of liquidation preference is called “1x non-participating liquidation preference” and gives the preferred stockholders the right to receive back the amount invested before any proceeds from the sale or liquidation may be paid to common stockholders. Numerous variations of liquidation preferences are used in venture capital financing. For example, some preferences give the preferred stockholders the right to receive accrued dividends in addition to the price paid for the preferred stock. Occasionally, the preferred stockholders receive the right to receive a fixed amount above their cost (up to two or three times their cost) before any payments are made to common stockholders (namely, “multiple x liquidation preferences”). Another variation involves a participation right that allows the preferred stockholders, after receiving their liquidation preference, to share in the remaining proceeds with the common stockholders as if they had converted their shares to common (“participating preferred”). Such participating preferred shares yet again may exhibit another variation of being “capped” to various degrees. Holders of a series of preferred stock with a capped participation right will receive a distribution equal to their initial liquidation preference and then also share in the proceeds on a pro-rata basis with common stockholders until the agreed-upon return cap is reached. The cap is typically set at a multiple of the price per share paid by the investor with the amount of the initial preference typically being included in the cap.

Other terms that preferred shareholders can negotiate with the company include voting rights, such as the right to

\textsuperscript{138} Id.
elect a certain number of directors, the right to veto activities that significantly change the capital structure of the firm, and anti-dilution protections. The latter provisions are designed to protect the preferred shareholders from future issuances of stock at lower valuations than the valuation used in their original investment. The most common form of anti-dilution protection is called a “ratchet” and comes in either severe (“full”) or moderate (“weighted average”) form. A ratchet is a form of price protection that adjusts the conversion ratio from preferred to common stock and allocates additional shares to the investor if the IPO offering price falls below a pre-agreed-upon threshold. Typically these provisions seek to guarantee that investors would “at least break even in IPOs.” However, occasionally, investors go further and negotiate some guaranteed return.

Each financing round typically leads to the creation of a new series or class of shares senior to, or on parity with, the earlier preferred shareholders. The seniority structure, also known as the “preference stack,” determines where each class of shares is located in the payout order. The total sum of proceeds payable to the various preferred classes before the common shareholders receive any money in liquidation is called the “aggregate liquidation preference.” With each funding round the preference stack becomes more complicated, and the aggregate liquidation preference amount increases. Understanding how the proceeds will be distributed among the various shareholders is often mathematically and structurally challenging due to numerous investors holding different contractual rights and seniority statuses.

The rights assigned to each class of preferred shares affect the likelihood of different exit scenarios and the distribution of cash flows upon an exit. The economic value of each class of shares, including the common stock, is therefore responsive to

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139 See id. at 17; see also Jennifer S. Fan, Regulating Unicorns: Disclosure and the New Private Economy, 57 B.C. L. Rev. 583, 603 (2016) (discussing the ratchet provision in the context of Square’s IPO).
140 Gornall & Strebulaev, supra note 135, at 17.
141 See id.
the specific terms of each round. As discussed in the following
Section, the combination of employees’ lack of sophistication
with start-ups’ complicated capital structures increases the
likelihood of employees’ overvaluing their equity incentives.

3. Price Signaling and Overvaluation in Start-up
Equity Markets

Most employees do not understand what liquidation
preferences are and how they might influence the value of
their equity grants.142 Signals such as obtaining a high
valuation or raising large sums of venture capital may
increase the company’s attraction regardless of their actual
impact on employee compensation.143 For example, employees
tend to view an offer from a start-up that has raised large
sums of venture capital money as more attractive than an
otherwise identical offer from a start-up that has raised less
from venture capital firms (suggesting that they do not
understand the debt-like properties of venture capital
finance).144

142 See Interviews, supra note 29 (referencing F05 assessing that only
a small fraction of employees who are veterans of other startups ask about
the capital structure). See also Interviews, supra note 29 (quoting VC02: “I
think most employees don’t have any idea . . . . They just wouldn’t have the
tool set to know how to evaluate what the actual financial implication of
structure is.”); Interviews, supra note 29 (quoting L04: “I would say most
employees don’t fully appreciate the preferred versus common stock
structure.”).

143 See id. (quoting VC02: “My guess is, if you talk to employees and you
gave them two identical offers, one with a company at five hundred million
and one with a company at a billion, even with a punitive structure, my
guess is psychologically they would assume the billion dollar company is
doing better and therefore a better value proposition even though it has
double the price today.”).

144 A sample of 1,114 college-educated technology workers were asked:
“All else equal, including the companies’ valuations and cash reserves,
which equity-based compensation offer is more valuable—an offer from a
start-up that has raised more money from venture capital investors or an
offer from a start-up that has raised less?” Only 18% (200) answered
correctly, i.e., that the offer from the start-up that has raised less is more
Due to employees’ lack of relevant financial proficiency, and given the properties of the private securities market, when employees attempt to “free-ride” on information regarding the price per share paid by sophisticated investors, they typically overvalue their compensation’s worth. Employees misguided assume that all the shares of a single company have similar value and therefore infer that the value of their compensation is proportionate to their ownership stake. This gap between the perceived and the fair market value; 53% (588) replied that the more valuable offer is the one made by a start-up that has raised more venture capital investments; 16% (175) answered “don’t know”, and 14% (151) responded that the offers are of similar value. The result suggests that employees do not understand that venture capital investors typically get their investment money back first when a company is sold. See Aran, supra note 30.

145 See Anat Alon-Beck, Unicorn Stock Options—Golden Goose or Trojan Horse? 107 Colum. Bus. L. Rev. 107, 183 (2019) (“One of the main problems with unicorn firm employee stock option plans is that employees are misinformed about their rights and the status of the company.”). Therese H. Maynard et. al. further explain that:

[T]he equity incentive value of a company’s common stock, as junior equity security, takes into account the effect of the priority rights and powers of the preferred stock . . . . Consequently, the value of the common stock is usually substantially discounted from the per-share price of the preferred stock. In many cases, the discount is 80 percent to 90 percent off the price paid by investors in the most recent issuance of preferred stock.

146 See Gornall & Strebulaev, supra note 135, at 7 (“Many employees use post-money valuation as a reference when valuing their common stock.

value of a start-up’s common stock tends to grow over time because later series of shares tend to have superior rights compared with those of previous rounds, and are thus more valuable.\textsuperscript{147}

The problem is most prevalent amongst the so-called “unicorns” (private companies with reported valuations of $1 billion or more). Closing a round of financing that values a start-up at a billion dollars or more provides the firm with added visibility due to press coverage and is generally considered to be a reputational boost. Because equity-compensated employees pay attention to media reports about start-up valuations, companies are incentivized to inflate their valuation even at the price of providing extensive downside protections to late-stage investors.\textsuperscript{148} As

or option grants, which can lead them to dramatically overestimate their wealth.”); see also Interviews, supra note 29 (quoting VC02: “I think for most rank and file employees, all they will ever hear is a billion dollars and they will do the math in their head and they will say, ‘Okay, I own one percent of the company, so therefore whatever, I have ten million dollars now of implied value in this company.’”); Connie Loizos, Employees Wise Up, TECHCRUNCH (July 17, 2015), https://techcrunch.com/2015/07/17/employees-wise-up/?_ga=2.13951476.294674010.1520981441-126147202.1517863110 [https://perma.cc/262N-9QCT] (citing VC investor Stacey Bishop: “I think a lot of employees think, ‘I have 20,000 shares and therefore [my holdings] are worth X.”).\textsuperscript{147} See Keith C. Brown & Kenneth W. Wiles, Opaque Financial Contracting and Toxic Term Sheets in Venture Capital, 28 J. APPLIED CORP. FIN. 72, 73 (2016) (“[P]otential investors in subsequent funding rounds will almost certainly pressure the firm to offer them similar or even more favorable terms than those provided earlier investors . . . .”); see also Gornall & Strebulauv, supra note 135 at 3 (“[P]referred shares that were issued early frequently junior to preferred shares issued more recently.”).

\textsuperscript{148} Brown & Wiles support this notion in stating that:

[A]chieving unicorn status is now considered to be such an important event for many market participants—if only for the public relations, marketing, and recruiting benefits . . . that companies appear to be pursuing it as a goal in itself . . . in their quest to reach unicorn status, managers at some companies may have the incentive (or otherwise feel
demonstrated by recent empirical research on the financial structure of American unicorns—the magnitude of the overvaluation is striking.\textsuperscript{149}

William Gornall and Ilya Strebulaev have collected information on the financial structure of 135 US unicorns. By accounting for the specific cash flow and control rights attached to each class of shares in every company, the two were able to use the share price in the latest round of financing to reverse-engineer the fair market value of the company's equity (both preferred and common shares). As could be expected, their research reveals that all unicorns are overvalued. That is to say, the post-money valuation in the latest financing round ("reported valuation") is higher than the fair market value of the company. The extent of the overvaluation is, nonetheless, astonishing. On average, the unicorns are overvalued by 48%, and the common shares of these companies are overvalued by 56%.\textsuperscript{150}

More specifically, Gornall and Strebulaev demonstrate that contractual rights assigned to the preferred shares, that are virtually invisible to employees under the current

\textsuperscript{149} Gornall & Strebulaev, \textit{supra} note 135, at 1.
\textsuperscript{150} \textit{Id.} Gornall and Strebulaev define a company's overvaluation "as the ratio of the post-money valuation to the implied fair value [by their model]," and common stock's overvaluation "as the ratio of the most recent round's share price to the fair value of a common share." \textit{Id.} at 14.
disclosure regime, have a dramatic influence on the value of the common stock. For example, if a company is raising $100 million at a post-money valuation of $1 billion, a shift from the standard liquidation preference of 1x to a 1.25x liquidation preference increases the overvaluation of the common stock from 28% to 43% (the shift meant that instead of receiving 100% of the dollar amount of their investment before the common stock is paid, the preferred shareholders receive 125% that amount). A shift to 2x liquidation preference (200% of the dollar amount of the investment) further increases the overvaluation of the common stock to 109%.

Under the same conditions, if the new investors receive non-capped participation rights (the right to receive only the dollar amount of their investment and then participate in the residual distribution along with the common stockholders), the common stock will be overvalued by 56%. A participation right with a 2.5x cap (the right to choose between receiving up to 250% of the investment sum and converting to common stock) lowers the overvaluation of the common stock to 53%. Likewise, downside protections such as conversion veto rights and ratchets, which are quite common in late-stage financing, have a dramatic impact on common stock overvaluation.

151 Id. at 7.
152 Id.
153 Id.

154 According to a recent report by the law firm Fenwick and West, that examined US unicorn financings deals in 2017 and first half of 2018, these contractual terms are quite prevalent. Thus, 30% of 2017 financing deals included automatic conversion veto rights (36% in the first half of 2018), and 16% included ratchet provisions (12% in the first half of 2018). See CYNTHIA CLARFIELD HESS, ET. AL., FENWICK & WEST, UNICORN FINANCINGS: FIRST HALF 2018 7 (2018).

155 Gornall and Strebulaev calculate that a 1x IPO ratchet (meaning that investors convert their preferred shares to a number of common stock shares whose aggregate value, calculated at the IPO price, equals their original investment amount) would bring the overvaluation of the common stock to 60%. A 1.25x IPO ratchet (which provides a guaranteed return of 25%) would increase the overvaluation of the common stock to 83%. A veto
Gornall and Strebulaev worry that the gap between perceived and fair value “can lead [employees] to dramatically overestimate their wealth.” They conclude that “[b]etter reporting would benefit limited partners, employees with stock options, and the entire venture capital ecosystem.” Similar calls for reform were made by securities law scholars who have cautioned about the lack of sufficient disclosure requirements for mature private companies.

Part II above establishes that pre-negotiated equity-based compensation is a form of investment and that, by and large, employees are presumed to need the Securities Act’s protection. Part III explores the need for regulatory protection in the context of start-up equity compensation: it casts doubt on the rationales put forward by the SEC for deregulation and argues that employees’ lack of financial proficiency vis-à-vis the characteristics of venture-capital financing can generate overoptimistic expectations that sophisticated employers can exploit to their advantage. The following Part argues that unless the broken disclosure system is fixed, information asymmetry could adversely affect the efficiency of the start-up labor market.

right conferring the ability to block an IPO at a price that would not return the last-round investment sum, brings the overvaluation of the common stock up to 59%. See Gornall & Strebulaev, supra note 135, at 7.

156 Id. at 4.
157 Id. at 23.
158 See Fan, supra note 139, at 604 (calling for enhanced disclosure requirements for unicorn companies and stating that “the current disclosure regime is woefully inadequate”); see also Alon-Beck, supra note 145, at 186 (“Perhaps certain private companies, such as unicorns, should adhere to the same financial disclosure requirements as public companies.”); Elizabeth Pollman, Information Issues on Wall Street 2.0, 161 U. Pa. L. Rev. 179, 221–28 (2012) (discussing the need for scaled disclosure requirements due to the emergence of secondary private equity markets); Pollman, supra note 135, at 4–5 (“Some scholars have recently begun studying unicorns, the largest startups by valuation, and have expressed concern about their lack of disclosure and lack of discipline on founders.”). Cf., Cable, supra note 5, at 642 (cautioning that “[i]t seems premature, however, to pursue any particular reform agenda”).
III. CONSEQUENCES OF INFORMATION ASYMMETRY IN START-UP LABOR MARKETS

The securities regulation regime has traditionally focused almost exclusively on information disclosure in the capital markets and overlooked the labor market. However, the widespread and growing practice of equity-based compensation transformed the relationship between high-skilled employees and their employers into one that involves a significant investment component.159 It is therefore time for securities law to catch up with market dynamics and address the challenges of human capital investments by employees of private issuers. As the first step, this Part of the Article repeats a few fundamental securities law conventions about disclosure’s role in modern capital markets and discusses the adjustments needed to account for the difference between financial capital raising transactions and human capital raising transactions.

A. Misallocation of Human Capital

According to the standard theory of capital market regulation, financial disclosure is needed because without it, information and incentive problems would hamper the efficient allocation of capital through the market.160 The goal of securities disclosure is, therefore, not only to protect individual investors from fraud, but also to sustain market efficiency. As Easterbrook and Fischel stress, “[a]ccurate information is necessary to ensure that money moves to those who can use it most effectively and that investors make optimal choices about the contents of their portfolios. A world

159 See Eisfeldt et al., supra note 19 and accompanying text.
160 See e.g., Paul M. Healy & Krishna G. Palepu, Information Asymmetry, Corporate Disclosure, and the Capital Markets: A Review of the Empirical Disclosure Literature, 31 J. ACCT. & ECON. 405, 407 (2001) (“Information and incentive problems impede the efficient allocation of resources in a capital market economy. Disclosure and the institutions created to facilitate credible disclosure between managers and investors play an important role in mitigating these problems.”).
with fraud, or without adequate truthful information, is a world with too little investment, and in the wrong things to boot.”

As with cash, human capital is a scarce resource. In some technological districts, such as Silicon Valley, human capital is considered scarcer than financial capital. Typically, the resource invested in exchange for securities is money. However, the definition of “sale” or “sell” under the Securities Act is not limited to monetary investments; it encompasses “every contract of sale or disposition of a security or interest in a security, for value.” As established in Part II.A above, when employees pre-negotiate equity compensation, a sale of a security takes place. The primary difference between this transaction and the paradigmatic case of capital investment is that the value being transferred to the issuer is in the form of human capital, not cash. From the employee perspective,

161 Easterbrook & Fischel, supra note 131, at 673.
162 See, e.g., Will Gaybrick, Tech’s Ultimate Success: Software Developers Are Now More Valuable to Companies Than Money, CNBC (Sept. 6 2018), https://www.cnbc.com/2018/09/06/companies-worry-more-about-access-to-software-developers-than-capital.html [https://perma.cc/G8LU-RKB3] (reporting the results of a survey by Stripe and Harris Poll according to which “[a] majority of companies say lack of access to software developers is a bigger threat to success than lack of access to capital”); Eric Ries, Foreword, in SCOTT KUPOR, SECRETS OF SAND HILL ROAD: VENTURE CAPITAL AND HOW TO GET IT, xi (2019) (“Possibly for the first time in history, we’re talent-constrained instead of capital-constrained.”); Vijay Govindarajan et. al., Why We Need to Update Financial Reporting for the Digital Era, HARV. BUS. REV. (June 8, 2018), https://hbr.org/2018/06/why-we-need-to-update-financial-reporting-for-the-digital-era [https://perma.cc/SFY2-LTBQ] (arguing that in digital companies “[f]inancial capital is assumed to be virtually unlimited, while certain types of human capital are in short supply” and “[t]he CEO’s principal aim therefore is not necessarily to judiciously allocate financial capital but to allocate precious scientific and human resources to the most promising projects”).
this investment takes the form of an opportunity cost rather than out-of-pocket cost.

The efficient allocation of employees to jobs is a critical challenge for economic growth.\textsuperscript{164} While traditional corporate law accounts of the employee-firm relationship see employees as fungible, in many fields skilled employees are hard to come by and often prove irreplaceable.\textsuperscript{165} Many employers would like to attract skilled workers to build their products and to turn their business ideas into reality. In theory, when employees are paid in cash only, the firm that most highly values the employee’s human capital will offer him or her the highest pay, leading to an efficient match.\textsuperscript{166} A competitive model of the labor market further predicts that were wages to be cut, employees would leave their jobs and flow toward firms

\textsuperscript{164} See, e.g., Kevin. M Murphy et. al., The Allocation of Talent: Implications for Growth, 106 Q.J. Econ. 503, 504 (1991) (arguing theoretically and empirically that “the allocation of talent has significant effects on the growth rate of an economy”); see also Muge Adalet McGowan & Dan Andrews, Labor Market Mismatch and Labor Productivity: Evidence from PIAAC Data, in SKILL MISMATCH IN LABOR MARKETS 200 (Solomon W. Polachek et al. eds., 2017) (“In this context, the ability of economies to efficiently deploy their existing stock of human capital will take on heightened significance in order to combat the slowing growth and rising inequality that these projections imply.”).

\textsuperscript{165} Pollman, Startup Governance, supra note 135, at 34 (“Traditional accounts of employees assume they are fungible and their inputs can be easily obtained through market contracts.”). Cf., A.D. AMAR, MANAGING KNOWLEDGE WORKERS: UNLEASHING INNOVATION AND PRODUCTIVITY 7 (2002) (“Knowledge organizations should look upon every employee as uniquely and extremely complex . . . . the uniqueness of each human being is going to be so prominent that theorizing or systematizing it will result in lack of the full utilization of one’s potential.”); Interviews, supra note 29 (quoting F04: “An employee who leaves [the company] takes with him all the knowledge that he has accumulated, which causes massive damage to the company.”).

\textsuperscript{166} This is true in theory because it is unlikely that the labor market is ever in equilibrium given that supply and demand are dynamic. For our purposes, it is safe to assume that the market is always in a state of moving toward equilibrium. See e.g., Murphy et al., supra note 164, at 503 (“When they are free to do so, people choose occupations that offer them the highest returns on their abilities.”).
that offer higher wages.\textsuperscript{167} Theoretically, these flows of employees in a competitive market keep compensation in rough equilibrium across the labor market—workers are supposedly paid equal to the value they contribute to their firms.\textsuperscript{168}

However, once equity compensation is added to the mix, an information problem arises, because some portion of the employee’s salary is granted in the form of securities—namely, claims to the firm’s future cash flows. Consequently, employees’ ability to choose the best offer of employment is clouded by the difficulty of estimating the value of the securities offered.

The founder typically has better knowledge than the prospective employee about the firm’s value. The founder also has an incentive to overstate this value. The founder can artificially inflate the company’s valuation to increase its attractiveness to new and existing employees.\textsuperscript{169} The founder can also withhold information regarding financial distress to create leeway for the company to overcome a crisis without the additional burden of employee departure or renegotiation.\textsuperscript{170}


\textsuperscript{168} Id.

\textsuperscript{169} Sarah Frier & Eric Newcomer, \textit{The Fuzzy, Insane Math That’s Creating So Many Billion-Dollar Tech Companies}, BLOOMBERG (Mar. 17, 2015), https://www.bloomberg.com/news/articles/2015-03-17/the-fuzzy-insane-math-that-s-creating-so-many-billion-dollar-tech-companies [https://perma.cc/GH3P-66SW] (“Here’s the secret to how Silicon Valley calculates the value of its hottest companies: The numbers are sort of made-up. For the most mature startups, investors agree to grant higher valuations, which help the companies with recruitment and building credibility, in exchange for guarantees that they’ll get their money back first if the company goes public or sells.”); see also Interviews, \textit{supra} note 29 (quoting VC02: “This competition for employees and this need that the CEOs feel... I need that stock price to always go up in order for me to be able to retain my existing employees and to recruit new ones.”).

As one of the founders interviewed for this research put it: “my main challenge as an entrepreneur is keeping employees’ morale high despite whatever difficulties that the company is experiencing. It’s like being a marine commander leading his troops to the battlefield; if I’ll tell them the truth, which is, we’re all going to die, they will run away.”

Information asymmetry between founders and employees is especially acute in start-up labor markets because, in these economies, equity incentives tend to play a significant role in the compensation of non-executive employees, and these securities are not priced by an active liquid market. When employees are compensated with securities they cannot value, labor supply elasticity might decrease, as employees may not

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171 Interviews, supra note 29 (quoting F04); see also Interviews, supra note 29 (quoting VC03: “the goal of course is to avoid a situation where an employee feels that they’ve been misled or that information has been hidden or omitted, and that in some ways they’ve been taken advantage of. It happens, and unfortunately those stories perpetuate a mythology that VCs are evil or that even management teams are not to be trusted.”).


173 The securities that private issuers offer as equity compensation are generally restricted, i.e., subject to resale limitations, and the issuer does not need to publicly disclose financial information. See supra Part II.C (discussing disclosure requirements); see also Exemption for Offers and Sales of Securities Pursuant to Certain Compensatory Benefit Plans and Contracts Relating to Compensation, 17 C.F.R. § 230.701(g)(1) (2018) (“Securities issued under this section are deemed to be ‘restricted securities.’”).
respond to changes in their compensation’s value. This incentive to withhold bad news is particularly high in high-velocity labor markets such as Silicon Valley where employers stand to gain significantly by lowering employee mobility.174

Thus, information asymmetry might prevent employees from moving towards their highest-value use, thereby misallocating the limited supply of highly-skilled workers in the market. The following Section describes another problem stemming from information asymmetry—the potential breakdown of the market.

B. Equity Compensation as Lemons Market

Asymmetric information can cause the market mechanism to collapse, a problem known as the “market for lemons.”175 Consider a situation where half of start-ups offer high-quality equity incentives and the other half offer low-quality equity incentives. Both employees and founders are rational and value these securities based on the information available to them. The theory predicts that if employees cannot distinguish between the two types of start-ups, founders of start-ups with low-quality securities will try to claim that their equity incentives are as valuable as the securities offered

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174 See Aran, supra note 4, at 1246 n.56 (citing literature on employee mobility in Silicon Valley). Evidence of the incentive to Silicon Valley employers to engage in legally questionable practices to reduce employee mobility is found in a famous antitrust case involving several Silicon Valley tech firms, including Adobe, Apple, Google, Intel, Intuit, Pixar, Lucasfilm, and eBay, which colluded to refrain from poaching each other’s employees to reduce turnover and labor costs. See United States v. Adobe Systems Inc., No. 10 CV1629, 2011 WL 10883994, at *2 (D.D.C. Mar. 7, 2011) (action by the Antitrust Division of the Department of Justice); United States v. Lucasfilm, Inc., No. 10-02220 (RBW), 2011 WL 2636850, at *1 (D.D.C. June 3, 2011) (action by the Antitrust Division of the Department of Justice); see also In re High-Tech Emp. Antitrust Litig., 985 F. Supp. 2d 1167, 1172–73, 1175 (N.D. Cal. Oct. 24, 2013) (civil litigation).

by the other start-ups.\textsuperscript{176} The theory further predicts that realizing this possibility, employees will value all start-up equity grants at an average level.\textsuperscript{177} Consequently, the labor market will rationally undervalue some equity incentives and overvalue some others relative to the information available to the founders.

Hence, an adverse selection problem arises. Because equity-based compensation is central to startups’ culture,\textsuperscript{178} founders of high-quality start-ups would probably still offer equity grants to employees, but these grants would play a lesser role in the company’s recruitment strategy. Instead of offering a large volume of high-quality securities to employees at a discount, these founders will attract employees with cash and other sought-after benefits, and use their high-quality equity to raise financing from sophisticated investors who can better estimate its value.\textsuperscript{179} Possibly, when facing the tradeoff

\textsuperscript{176} Cf. id. at 488 and 495 ( “[T]here is incentive for sellers to market poor quality merchandise [to be dishonest]” and “the presence of people who wish to pawn bad wares as good wares tends to drive out the legitimate business.”).
\textsuperscript{177} See id. at 490.
\textsuperscript{178} See supra note 4 and accompanying text.
\textsuperscript{179} This result is not necessarily a bad outcome—most economists think that employees are inefficient suppliers of capital compared with sophisticated investors such as venture capitalists, and therefore equity compensation should not be encouraged. See, e.g., Brian Hall & Kevin Murphy, \textit{The Trouble with Stock Options}\textsuperscript{11, 13} (Nat’l Bureau of Econ. Research, Working Paper No. 9784, 2003). Economic analysis points out that the value of equity compensation to a rational employee should be lower than the value of the same securities to a sophisticated investor because employees cannot diversify their investment or protect themselves through hedging or other techniques. \textit{Id.} However, if one believes that there is value in equity compensation, then one should care about asymmetric information and its effect on labor market dynamics. Among the arguments offered in the literature in favor of equity compensation are the potential for better distribution of the wealth created by start-up companies, see \textsc{Joseph R. Blasi \textit{et al.}}, \textit{supra} note 4, at 195; better motivation for the employees, see \textsc{Booth}, \textit{supra} note 63, at 273; \textsc{Corey Rosen}, \textit{The Record of Employee Ownership}, \textsc{Fin. Mgmt.}, Spring 1990, at 39, 41, and a better form of protection for research and development and human capital investments.
between obtaining a high valuation and protecting the value of the common stock, founders would be more likely to choose the former. Gradually, the value of the securities offered as compensation to employees across the industry would decline, and the attractiveness of equity incentives for recruitment purposes would diminish. Consequently, employees will adjust their cash salary expectations, and the cost of starting a new venture might rise.

by the company (compared to non-compete agreements) that allows for efficient allocation of skilled employees in the start-up labor market. See Aran, supra note 4, at 1273–78.

Regarding the tradeoff between terms and valuation see supra Section III.C.3.

Founders are incentivized to protect the value of the common stock because they too hold this class of shares. However, founders can and often do extract value from the company via management incentive plans, loans and other transactions that create a wedge between them and the employees. See infra Section IV.C.

Some of the interviewees of this research view it as a fair description of eroding attraction of equity compensation in Silicon Valley. See, e.g., Interviews, supra note 29 (referencing VC01 reckoning that in the past the expectation was that a senior employee should be able to buy a house after a successful IPO and a rank and file employee should be able to buy a car. Whereas today, the equity stakes are less significant.); id. (quoting F01: “I think employees are getting less stocks than they used to than in the early days. It seemed like it’s a way to defer cash.”); Interviews, supra note 29 (citing F03 estimating that nowadays startup employees view equity as a bonus, and it no longer provides a significant incentive for recruiting purposes); Interviews, supra note 29 (referencing VC03 estimating that due to influx of venture capital in some markets such as Silicon Valley, New York, and Boston—start-up employees in these areas receive competitive cash salaries, and therefore in these markets, equity compensation is no longer a significant factor in recruiting efforts). Survey respondents explain their preference for cash only compensation schemes in the following terms: “Based on my experiences, equity-based compensation has never really paid off for me. While I used to view it as a lottery ticket, I now view it as more of a liability. When I negotiate salary with a new employer these days, I ask them not how much equity they can give me, rather I ask them how much equity can I give up or give back to them in exchange for a higher salary”; “I have participated in start-ups that offered equity and failed. A bird in the hand is better than two in the bush”; “Start-up stock is normally only good for wall-papering”. See Aran, supra note 30.
This problem could be solved if employees used an intermediary to help them understand the economic value of the equity grants.\textsuperscript{183} However, start-ups are typically not covered by rating agencies or buy-side analysts,\textsuperscript{184} and most employees do not consult with experts before making their decisions regarding equity compensation.\textsuperscript{185}

Likewise, in theory, founders of top-quality companies can voluntarily disclose financial information to convince prospective employees that their securities are of greater value than the market baseline. Those companies will presumably enjoy a recruiting advantage, which will force other above-average companies to follow suit in a process of “unraveling.”\textsuperscript{186} However, in practice, very few companies

\textsuperscript{183} See Frank Rose, THE ECONOMICS, CONCEPT, AND DESIGN OF INFORMATION INTERMEDIARIES: A THEORETIC APPROACH 70 (1999) (“Intermediaries may help to overcome market failures caused by informational asymmetries.”).

\textsuperscript{184} See e.g., Al Schneider, HOW TO VALUE YOUR STARTUP, SOCALTECH (May 27, 2008), https://www.socaltech.com/articles/how-to-value-your-startup/a-00035.html [https://perma.cc/8N53-MSW5] (“There are no ‘rating agencies’ (as in the world of bond investments) that offer third party risk assessment. There are no widely followed ‘buy side’ analysts (as in some public equity markets) who package critical market, financial and other analyses.”).

\textsuperscript{185} Out of 182 employees who reported being offered equity-based compensation (not through workplace pension or retirement plan) in the past—only 20% (37 respondents) reported seeking professional advice (from a lawyer, financial adviser, etc.); 50% (91 respondents) reported that they had not consulted with anyone before making their decision, an additional 5% (10 respondents) reported that they had only looked up for information online, and 24% (44 respondents) reported seeking unprofessional advice from a friend, family member, or colleague. See Aran, supra note 30.

\textsuperscript{186} The term “unraveling” is first used by Professor Viscusi who provides an example in the context of labor markets where firms with above-average probabilities of successful job outcomes will invest in quality certification to distinguish themselves from the industry. W. Kip Viscusi, A NOTE ON “LEMONS” MARKETS WITH QUALITY CERTIFICATION, 9 BELL J. ECON. 277, 278 (1978). In theory, if a seller possesses better information about the quality of their goods and services than consumers do and there is zero cost to verifiably disclose it, sellers will always disclose simply because rational consumers will infer nondisclosure as having the lowest quality. See
adopt full transparency of cap table information, including waterfall analysis and valuation information.\textsuperscript{187}

As the theory predicts, for unraveling to take place, the disclosure needs to be costless and credible. In practice, disclosure involves the costs of preparing and disseminating the information, and the cost of revealing sensitive information.\textsuperscript{188} Moreover, the credibility of voluntary disclosure is questioned due to the lack of verification and monitoring mechanisms,\textsuperscript{189} and the absence of a penalty for dishonesty.\textsuperscript{190} Litigation between startups and employees is


\textsuperscript{187} Jeron Paul, \textit{Will Cap Table Transparency Help Your Startup?}, CapShare BLOG (June 2, 2015), https://www.capshare.com/blog/will-cap-table-transparency-help-your-startup/ [https://perma.cc/8J7A-9FBK] (assessing that “most companies” provide employees only with the legal paperwork of the equity grant which includes “number of shares, vesting plan details, vesting trigger information, exercise details, and expiration dates”; some companies disclose “the fully-diluted ownership percentage of the shares at the time of the grant”; “a few” companies reveal to employees “their fully-diluted ownership percentage”; and “even fewer companies” provide more than this).


\textsuperscript{189} See Easterbrook & Fischel, \textit{supra} note 131, at 674–75, 677 (discussing verification and inspection costs in securities markets).

\textsuperscript{190} Easterbrook & Fischel argue that a rule against fraud without an additional mandatory disclosure rule “is most beneficial when enforcement
rare and reputational damage from false disclosures is negligible.\textsuperscript{191}

Thus, the lack of mandatory disclosure may adversely affect the startup labor market by diminishing employees’ trust in this compensation device and, consequently, their willingness to accept lower cash salaries in return for equity incentives. The following Section describes another reason for these dynamics—the agency costs imposed by preferred shareholders control of the board.

C. Agency Costs and Human Capital Expropriation

Information asymmetry in the equity compensation domain might also cause an agency problem: the conflict of interest that arises in any relationship where one party is expected to act in another’s best interests.\textsuperscript{192} Typically, in the context of capital investments, equity compensation is regarded as a means to mitigate the agency problem between

\textsuperscript{191} See e.g., Interviews, supra note 29 (quoting E04: “I wish I could say that there are reputational implications for bad behavior in Silicon Valley, but I do not think that’s true. There would always be a new sucker. Silicon Valley is no longer a small community.”).

\textsuperscript{192} The traditional analysis of the agent-principal problem generally views employees as the agents and shareholders as the principals. See Michael C. Jensen & William H. Meckling, Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure, 3 J. FIN. ECON. 305, 309 (1976) (“[T]he problem of inducing an ‘agent’ to behave as if he were maximizing the ‘principal’s’ welfare is quite general.”).
capital investors and management. However, to employee-equity holders, the agency problem is the reverse—employees are principals whereas the management and board of directors are agents.

Equity-compensated employees typically do not play an active role in the company’s decisionmaking process. Strategic decisions are made by the board of directors, which both the founders and the venture capital investors appoint, and the management carries out these decisions. Consequently, once employees have accepted equity

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193 In the venture capital-backed company, see generally Ronald J. Gilson, Engineering a Venture Capital Market: Lessons From the American Experience, 55 STAN. L. REV. 1067, 1076–92 (2003) (discussing agency costs between venture capitalists and entrepreneurs); Gilson & Schizer, supra note 172, at 880; Fried & Ganor, supra note 190, at 971; Alon-Beck, supra note 145, at 124–25.

194 As holders of stock options or RSUs, employees do not enjoy voting rights. Even employees who have exercised their stock options and own shares typically do not tend to use their voting rights because their equity stake is too small to have significant influence. Employee-equity holders also sometimes assign their voting rights away in a proxy, since these shares are viewed as having been granted almost exclusively for economic reasons, and not as intended to influence decisionmaking. Theoretically, employees can coordinate their voting behavior to gain more influence, but they rarely do so. See DAVID LARCKER & BRIAN TAYAN, CORPORATE GOVERNANCE MATTERS: A CLOSER LOOK AT ORGANIZATIONAL CHOICES AND THEIR CONSEQUENCES 149–51 (Jeanne Glasser et al. eds., 2011) (discussing the differences in employee representation at the board level between U.S. and Europe (mostly German) companies and reviewing the relevant empirical literature). Cf., Paris Martineau, Amazon Employees Try a New Form of Activism, as Shareholders, WIRED (Apr. 11, 2019), https://www.wired.com/story/amazon-employees-try-new-activism-shareholders/ [https://perma.cc/M5L2-2KHA] (describing some Amazon employees’ coordinated effort to influence the company’s policy on climate change issues via proxy proposal. Stating that “the move could be a harbinger of a new genre of activism for stock-laden tech workers . . . ”).

195 See Fried & Ganor, supra note 190, at 987–88; see also Steven E. Boschner & Amy L. Simmerman, The Venture Capital Board Member’s Survival Guide: Handling Conflicts Effectively While Wearing Two Hats, 41 DEL. J. CORP. L. 1, 9 (2016) (“It is not unusual for an early-stage venture-backed company to have a board composed of the corporation’s CEO and otherwise general partners from the corporation’s funding venture firms-in effect potentially no independent and disinterested directors . . . ”).
compensation, self-interested founders and venture-capital-appointed directors occasionally have an incentive to make decisions that expropriate employees’ human capital and minority equity stake.\footnote{See Interviews, \emph{supra} note 29 (referencing VC02 assessing that “boards are quite good at working with legal counsel and, hopefully, doing things that appropriately keep them out of trouble,” yet recognizing that “employees are not in the room and would learn about the board’s decision only in retrospect[,]” a structure that naturally leads to “some externalities”); see also Interviews, \emph{supra} note 29 (citing VC03 describing “an emotional bias that comes with the VCs,” which is based on “fear and greed[,]” and assessing that “self-aware investors doesn’t put themselves in a position where that kind of moral hazard is something that might lead to illegal or fiduciary hazard . . . .”); see also Orly Lobel, \emph{The New Cognitive Property: Human Capital Law and the Reach of Intellectual Property}, 93 \textit{Tex. L. Rev.} 789, 790 (2015) (introducing “the growing field of human capital law at the intersections of IP law, contract and employment law, and antitrust law” and cautioning against human capital expropriation in these domains).}

Notably, the corporate governance literature has yet to recognize the role of employee-equity holders in the governance of the venture capital-backed company.\footnote{See Pollman, \emph{Startup Governance, supra} note 135, at 6 n.18 (noting that “[S]cholars have largely overlooked the role of non-founder employees in startup governance.”).} The traditional framework views the board of directors as the organ that monitors management and mitigates the agency problem arising out of the separation of ownership and control.\footnote{Jacqueline Garner et al., \emph{Boards of Directors: a Literature Review}, 43 \textit{Managerial Fin.} 1189, 1189 (2017) (“The board of directors is commonly described as an institution to advise and monitor . . . the monitoring function is intended to mitigate the classic agency problem between managers and shareholders.”).} However, due to the competing duties of venture-capital-appointed directors to the company and their funds, these directors operate with a conflict of interest in situations that involve disparity of outcomes between different classes of shares. Therefore, in practice, often it is management that
protects the common stockholders from expropriation by the board rather than the reverse. 199

Under Delaware corporate law, the board’s fiduciary duty is to maximize value for the long-term benefit of the common stockholders, 200 but in practice, self-interest and conflicting loyalties to the venture fund’s limited partners might very well cloud directors’ judgment. 201 The interests and risk

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199 See, e.g., Interviews, supra note 29 (quoting VC03: “Usually the person speaking on behalf of or trying to look out for the common shareholders is the CEO because most common shareholders are employees or sometimes friend and family investors. And so morally, usually it’s the CEO who is saying, ‘Let’s make sure that we’re doing the right thing.’”); see also Cable, supra note 5, at 632 (“[E]arly employees have a powerful ally in policing VC agency costs—the founder who will initially wield majority control and who stands with the employees as common equity holders.”).

200 Boschner & Simmerman, supra note 195, at 4 (“Corporate directors have fiduciary duties of loyalty and of care to stockholders of the company on whose board they serve. Significantly, these fiduciary duties tend to run primarily to the common stockholders, as the relevant case law views preferred stockholder rights as a function of, and protected primarily by, contract law—at least where the terms of preferred stock speak to a given issue, such as the allocation of proceeds to preferred stockholders in a sale of the company.”); see also Pollman, Startup Governance, supra note 135, at 32.

201 See Boschner & Simmerman, supra note 195, at 3 (“[C]onflicts of interest are never very far away in a venture-backed company”); see generally D. Gordon Smith, The Exit Structure of Venture Capital, 53 UCLA L. Rev. 315, 316 (2005) (analyzing potential conflicts between venture capitalists and entrepreneurs in exit scenarios); William W. Bratton, Venture Capital on the Downside: Preferred Stock and Corporate Control, 100 Mich. L. Rev. 891, 892–94 (2002) (explaining the use of preferred stock by venture capitalists); see also In re Trados Inc. S’holder Litig., 73 A.3d 17, 46–54 (Del. Ch. 2013) (discussing the personal and institutional conflict of interests of the VC-appointed directors that voted for the litigated merger deal and reviewing relevant literature); Frederick Hsu Living Tr. v. ODN Holding Corp., No. 12108-VCL, 2017 WL 1437308, at *36 (Del. Ch. Apr. 14, 2017) (One could “reasonably infer . . . that the directors acted to maximize the value of Oak Hill’s Preferred Stock rather than seeking to promote the long-term value of the Company for the benefit of the undifferentiated equity, and that the resulting transactions were unfair to the Company’s common stockholders.”); Mehta v. Mobile Posse, Inc., No. 2018-0355-KSJM, 2019 WL 2025231, at *7 (Del. Ch. May 8, 2019) (in a case involving a sale of
tolerance of the limited partners deviates from those of the common stockholders and employee option holders.\textsuperscript{202} Situations such as “down rounds,” end-stage transactions, and compensation decisions, determine how proceeds will be distributed among the parties, and as such, they often involve a disparity among the various classes of equity holders.

When founders lose control of the board or are being issued non-common stock incentives, the agency problems affecting employees intensify.\textsuperscript{203} These situations are not rare. Founders tend to lose board control in advanced financing

a venture capital-backed start-up in which the directors around the board table held nearly all of the preferred stock and a majority of the total outstanding voting power. The court denied the defendants’ motion for a judgment on the pleadings considering the directors’ conflict of interest and various technical foot faults in the sale approval).

\textsuperscript{202} \textit{See} Pollman, \textit{Startup Governance}, supra note 135, at 26 (“VCs and founders often diverge with respect to risk level, liquidity needs, and private benefits, which are often implicated in critical board-level decisions on financings, strategic direction, and exit.”); \textit{see also In re Trados Inc.}, 73 A.3d at 49–51 (finding that directors who are also venture capital investors might suffer from conflict of interest and citing relevant literature); Calesa Assocs., L.P. v. Am. Capital, Ltd., No. 10557-VCG, 2016 WL 770251, at *11 (Del. Ch. Feb. 29, 2016) (declining to dismiss a lawsuit by the common stockholders against a venture fund and its board representatives arising from a recapitalization transaction that increased the venture fund’s ownership stake and “squeezed out” the common stock).

\textsuperscript{203} \textit{See} Interviews, supra note 29 (quoting VC03: “The best companies and the best CEOs negotiate those carve-out plans so that every employee who’s still with the company, if it exits, gets something. The worst CEOs only put those plans in place for the senior leadership team.”). On this point, a different interviewee noted that:

[T]ypically what the board of directors does is they create a bonus pool equal to some percentage, typically somewhere between five and 10 percent of the sale price, and that bonus pool is in place to create an incentive for the management team to get the deal done in a responsible and appropriate manner . . . . It’s getting paid out as a bonus because otherwise you’d be discriminating against classes of equity.

Interviews, supra note 29 (quoting VC04); \textit{see also} Alon-Beck, supra note 145, at 141–43 (describing founder-friendly practices that might cause disparity between the founders’ interests and those of the common stockholders).
rounds and are often issued private benefits (such as a special class of preferred shares, parachute payments, and carve-outs) as incentives to cooperate with the preferred shareholders.


Lack of disclosure obligations of relevant information prevents employees from monitoring managerial decisions and alleviating conflicts of interest through the credible threat of resignation (a threat to “take the University Avenue Walk,” if you will\textsuperscript{206}). Employees’ failure to take measures against human capital expropriation by founders and directors further weaken employees’ trust in the value of start-up equity incentives.

IV. PRACTICAL PROBLEMS WITH RULE 701

Given the information asymmetry and agency problem that characterize the relationships between venture capital-backed start-ups and their employee equity-holders, as summarized in Part IV above, the failing of Rule 701 is not merely that it provides employees with either too much or too little information—it is both and more. As the lyrics of Johnny Mathis and Deniece Williams’s song go, it is “too much, too little, too little, too late.”

A. Too Much

Recall that when a private issuer crosses the $10 million Rule 701 threshold for securities sold in 12 consecutive months, it must deliver enhanced disclosure to all the recipients involved.\textsuperscript{207} The enhanced disclosure items include information about the risks associated with the investment and financial statements furnished in accordance with a Regulation A Offering Statement.\textsuperscript{208} The financial statements

\textsuperscript{206} In the corporate governance literature, the “Wall Street Walk” refers to a shareholder “voting with his feet and selling his shares, rather than attempting to be active.” Anat R. Admati & Paul Pfleiderer, The “Wall Street Walk” and Shareholder Activism: Exit as a Form of Voice, 22 REV. FIN. STUD. 2645, 2646 (2009). I suggest that the Silicon Valley equivalent idiom should be the University Avenue Walk after Palo Alto’s University Avenue, the epicenter of Silicon Valley high tech and start-up culture.


\textsuperscript{208} See § 230.701(e)(3)–(4).
should be dated not more than 180 days before the sale of securities executed in reliance on the Rule 701 exemption.\(^{209}\)

Financial statements contain sensitive information that is not otherwise available to the public; they provide an in-depth look at the company’s growth rate, margins, and financial constraints, along with other market-sensitive data.\(^ {210}\) The disclosure of such information might expose the company’s competitive advantage and business strategy.\(^ {211}\) Indeed, one of the reasons companies delay going public is to guard this information for as long as possible.\(^ {212}\) The requirement to disclose this information to employees (and ex-employees) before the company goes public is “too much”: it puts issuers at an unnecessary risk of information leakage to competitors—especially given that this information has only marginal value, if any, to employees, as explained in Section III.C.i above. Moreover, the requirement to refresh the disclosure documents every 180 days (which practically means every quarter) imposes a high financial and administrative burden on the issuer and its management.\(^ {213}\)

\(^{209}\) See § 230.701(e)(4).


\(^{211}\) See id. at 493.


\(^{213}\) Under Rule 701(e) information must be provided as of a date no more than 180 days before the date of sale. As a result, for issuers seeking to maintain current information, this has the effect of requiring financial statements to be available on at least a quarterly basis, and to be completed within three months after the end of each quarter, for sales to be permitted continuously. See 17 C.F.R. § 230.701(e)(4); see also Concept Release on Compensatory Securities Offerings and Sales, Securities Act Release No.
The lawyers interviewed for this research described the enhanced disclosure requirement as one of the primary pain points for large private issuers.\textsuperscript{214} The American Bar Association expressed similar concerns in a letter to the SEC: “In our experience, some private issuers intentionally avoid crossing the twelve month, $5 million [now $10 million] threshold under Rule 701 because they are very concerned about the competitive risks of providing financial information, especially to former employees.”\textsuperscript{215} Likewise, the accounting firm Ernst and Young (EY) urged its clients to comply with Rule 701 disclosures after discovering that “private companies . . . may not want or be able to provide financial statements, even confidentially, to participants in the offering for competitive reasons.”\textsuperscript{216}

To ease some of the concerns about information leakage, the SEC has permitted the use of several safeguards. In 1999, when the SEC replaced the Rule’s hard volume ceiling with enhanced disclosure requirements, the SEC announced that “[p]rivate issuers can use certain mechanisms, such as confidentiality agreements, to protect competitive

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\textsuperscript{214} See, e.g., Interviews, supra note 29 (quoting L01: “[Companies] do not want employees to walk around with potentially harmful information. Even more so, we do not want employees who are about to be laid off walking away with this information.”); see also Interviews, supra note 29 (quoting L04: “I think companies are typically okay giving almost any sort of information except their financials.”).
\textsuperscript{215} E-mail from Keith F. Higgins, Chair of the Comm. on Fed. Regulation of Sec., American Bar Ass’n, to Nancy M. Morris, Sec’y, Sec. & Exch. Comm’n (Sept. 20, 2007), https://apps.americanbar.org/buslaw/committees/CL410000pub/comments/20070920000000.pdf [https://perma.cc/SQU8-TEPZ].
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In 2009, the SEC issued a Compliance and Disclosure Interpretation (“C&DI”) on Rule 701, clarifying that the requirement to deliver the relevant disclosures to employees can be satisfied by providing electronic access (rather than a hard copy). Subsequently, in 2017, the SEC issued another C&DI permitting the use of additional safety measures, including “standard electronic safeguards, such as user-specific login requirements and related measures.” Notably, the SEC approved the use of these measures “either alone or in combination with other safeguards, such as the use of dedicated physical disclosure rooms” as long as the measures taken are not “so burdensome that intended recipients cannot effectively access the required disclosures.” This interpretation clarified some disputes regarding the delivery of financial information, but it also raised new questions such as whether employees could be banned from bringing advisers to a secured data room.

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220 Id.; see also Rolfe Winkler, Own Startup Shares? Know Your Rights to Company Financials, WALL ST. J., (May 24, 2016), https://www.wsj.com/articles/own-startup-shares-know-your-rights-to-company-financials-1464082203 [https://perma.cc/6A56-2RDZ] (“When complying, companies often give employees access to a password-protected website with financial information. Option holders are often required to sign a nondisclosure agreement first, says Daniel Neuman, an attorney with Carney Badley and Spellman.”).

Since their approval by the SEC, safeguards such as nondisclosure agreements, secured data rooms, and personal passwords for electronic access have become standard in the industry.\textsuperscript{222} However, even with these measures, it is impossible to prevent the unauthorized use of information by employees and ex-employees.\textsuperscript{223} The concern about information leakage is so severe that some companies allegedly choose to ignore the disclosure requirements. Thus, on two occasions, the SEC charged companies for issuing stock options without a valid exemption due to the companies’ failure to disclose financial statements and risk factors to their employees—Google in January 2005 and, more recently, Credit Karma, Inc. in March 2018.

\textsuperscript{222} Several interviewees commented on this trend, noting that:

\textquote[Interviews, supra note 29 (quoting from interviews with L01, L02, L04)].

\textsuperscript{223} See, e.g., Interviews, supra note 29 (referencing L01 explaining that even when the disclosure is delivered in a closed data room, it is impossible to prevent leaks); see also Interviews, supra note 29 (quoting L04: “So nothing’s full proof. There’s always ways for employees to get around these things.”); Pollman, \textit{Start-up Governance}, supra note 135, at 51 (“Companies are in a bind: employees are making investment decisions and are entitled to the information, but the company suffers when sensitive financial information is leaked. As companies get bigger and stay private longer, avoiding leaks becomes harder.”).
In 2003, pre-IPO Google faced the enhanced disclosure requirements of Rule 701. According to the SEC's allegations in a cease and desist order imposed in January 2005, Google's General Counsel, David Drummond, believed that disclosing financial statements to the company's employees would be “strategically disadvantageous,” as the statements' wide distribution among employees would likely result in a leak to competitors. Thus, according to the allegations, from 2002 to 2004, Google issued more than $80 million worth of stock options to the company's employees and consultants without registering the offering and without providing financial information to the recipients. Google eventually went public in August 2004. Before its IPO, the company filed a rescission offer for those options transactions after concluding that no exemption was available for the offerings. In January 2005, Google and Drummond settled with the SEC. As part of the settlement, Google and

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225 Id. (“Google viewed the public disclosure of its detailed financial information as strategically disadvantageous, as Drummond recognized, and the company was concerned that providing option recipients with the financial disclosures required by Rule 701 could result in the disclosure of this information to the public at large and, significantly, to Google's competitors.”).

226 Id.

227 The timing of Google's IPO was related to the Section 12(g) of the Securities Act, which set a 500 held-of-record threshold, before assuming reporting obligations. See Usha R. Rodrigues, The Once and Future Irrelevancy of Section 12(G), 2015 U. Ill. L. Rev. 1529, 1536–37 (discussing how companies like Facebook, Google, and Apple were “forced” to go public prior to the JOBS Act's amendment of section 12(g) because they had more than 500 shareholders and therefore had to register and become “reporting companies”).

Drummond agreed to a cease and desist order for Securities Act registration violations.\textsuperscript{229}

Similarly, according to an SEC’s cease and desist order, during late 2014 and 2015, the San Francisco-based fintech company Credit Karma issued almost $14 million worth of stock options to its employees in 12 consecutive months, thereby crossing the threshold that requires enhanced disclosure.\textsuperscript{230} Although senior executives were aware of the disclosure requirement, and even though the company had already created a virtual data room containing the required disclosure items, the company decided not to share the information with employees.\textsuperscript{231} Thus, between August 2015 and July 2016, the company’s employees paid more than half a million dollars to exercise options granted in violation of Rule 701.\textsuperscript{232} Only after the company had received an inquiry from the SEC seeking information and documents regarding its Rule 701 compliance did the company start to disclose detailed financial statements and risk factors to employees. Ultimately, the company agreed to pay a $160,000 penalty and consented to the SEC’s order without admitting or denying the allegations.\textsuperscript{233}

As these cases demonstrate, companies are fiercely protective of their financial information. At the same time, as established in Section III.C.3 above, these financial disclosures are of very little value to employees. Moreover, even if employees knew how to interpret financial statements, the value of a start-up company, let alone employees’ incentives, would not be reflected in them. According to standard accounting principles, the financial statements present past recorded transactions, whereas the value of a

\textsuperscript{229} Id.


\textsuperscript{231} Id.

\textsuperscript{232} Id.

\textsuperscript{233} Id.
company derives from its projected future transactions.\textsuperscript{234} Likewise, the accountants’ cost principle generally prohibits the recording of some of the key assets of a start-up company such as trademarks, brand names, and human capital, as an asset.\textsuperscript{235}

The SEC’s enforcement actions therefore seem obscure considering that in contrast to the mandatory disclosure of financial statements, information that is much more important to employees’ interest—including, companies’ valuation and exit waterfall—remains under seal, as discussed in the following Section.

B. Too Little

Imagine that employers would customarily offer prospective employees job offers that include their annual salary, but with one crucial twist—the offer did not state in what currency the salary would be paid.\textsuperscript{236} Imagine also that the prospective employee has no right to require an answer to this question, and instead he or she is expected to take a leap of faith and trust the employer that the offer is likely in dollars.

This sounds absurd, but this is how the equity compensation market currently operates.\textsuperscript{237} The typical


\textsuperscript{235} \textit{Id.}

\textsuperscript{236} Scott Belsky, \textit{A Founder-Turned-Venture-Capitalist Reveals How to Not Get Trampled by a Unicorn Startup if You’re an Employee with Stock Options}, BUS. INSIDER (Jan. 2, 2017), https://www.businessinsider.com/what-employees-should-know-about-stock-options-before-they-work-for-startups-2017-1 [https://perma.cc/MY8P-S8PE] (“To bring this home, it’s like negotiating your salary without specifying the currency you’re being paid in.”).

\textsuperscript{237} See Jeron Paul, \textit{supra} note 187 (”[M]ost companies fall under Level 1. This means that the only information employees have is whatever is provided in the legal paperwork for the option grant . . . . While this
scenario is that employers offer a number of stock options or restricted stock units (“RSUs”) as part of an offer letter, but the employers do not mention the total number of shares outstanding.238 Without this piece of information, the employee cannot know whether the grant represents a 1% ownership stake in the company, 0.1%, or any other percentage.239 The employee can ask for this information, but the employer is not required to provide it.

Moreover, despite the dramatic influence of preferred shareholders’ contractual terms on the value of the common stock and employees’ compensation,240 Rule 701 does not mandate their disclosure. Most start-up employees do not receive any disclosure other than a copy of the compensation plan.241 And even the employees who receive enhanced disclosure will not find an updated valuation and a list of all downside protections and other rights assigned to the preferred shares among the disclosure items.242

information is clearly useful and important, it gives the employee virtually no information to assess the value of the grant.”).


239 *See Jeron Paul, supra* note 187. *See also, e.g.*, Rolfe Winkler, Legal Fight Escalates Over Tech Startup’s Financials, WALL ST. J. (Aug. 18, 2016), https://www.wsj.com/articles/legal-fight-escalates-over-tech-startups-financials-1471512602 [https://perma.cc/KS3C-AA7E] (describing a claim brought by a start-up employee arguing that the founder has “promised him a specific ownership percentage in the company, but after receiving his shares, the company declined to tell him what percentage the shares represented”).

240 *See supra* Section III.C.3.

241 *See Jeron Paul, supra* note 187. Companies that issue up to $10 worth of equity incentives pursuant to Rule 701 exemption in a twelve month period must deliver to the recipients only a copy of the compensatory benefit plan or the contract. *See Asset Backed Securities, 17 C.F.R. § 229.1113(e) (2019).*

242 *Id.* Companies that cross the $10 million threshold are required to deliver financial statements furnished by Part F/S of Form 1-A—i.e., balance sheet, consolidated statements of income (loss), consolidated
To understand the financial effect of liquidation preferences, participation, veto, and anti-dilution rights on the value of their compensation, employees need access to the same information that founders and investors rely on when making their decisions—a waterfall analysis showing the distribution of proceeds in a range of exit scenarios.\footnote{See e.g., Jeron Paul, supra note 187 ("Helping employees understand what their shares might be worth in different scenarios involves helping them to understand the company's waterfall."); Kyle Engelken, Technology Tools to Make Managing Your Capital Raise Easier, WEALTHFORGE (Mar. 20, 2018), https://www.wealthforge.com/insights/technology-tools-to-make-managing-your-capital-raise-easier. [https://perma.cc/RKQ9-FTFN] (recommending that founders use cap table management software because, inter alia, "[o]ne interesting feature of a service like this is the exit waterfall analysis that models the allocation of value to security holders at varying liquidation values"); see also Heidi Roizen, How to Build a Unicorn From Scratch – and Walk Away with Nothing, Venture Capital, FORBES (May 18, 2015), https://www.forbes.com/sites/valleyvoices/2015/05/18/how-to-build-a-unicorn-from-scratch-and-walk-away-with-nothing/#212a5ecbc37e4 [https://perma.cc/5F5Y-P8AA] ("Before you close on any round, you should create a waterfall spreadsheet that shows what you and each other stakeholder would get in a range of exits – low, medium and high."); Michael Dempsey, Liquidation Preferences, a Waterfall Analysis, and Educating Startup Employees, MICHAEL DEMPSEY: BLOG (May 13, 2015), https://www.michaeldempsey.me/blog/liquidation-preferences-a-waterfall-analysis-and-educating-startup-employees/ [https://perma.cc/EQU7-77BK]}

According to a recent amendment—interim financial statements also may be required to make sure that the date of the most recent financial statements is never more than 180 days before the securities are sold or issued. See Ran Ben-Tzur et al., Private Companies Need to Update Rule 701 Financial Statement Disclosures, FENWICK & WEST (Mar. 4, 2019), https://www.fenwick.com/publications/Pages/Private-Companies-Need-to-Update-Rule-701-Financial-Statement-Disclosures.aspx [https://perma.cc/PW8H-EPVG]; see also Disclosure Update and Simplification, Securities Act Release No. 10532, 83 Fed. Reg. 50,148, 50,180 n.445 (Oct. 4, 2018). The information provided in the balance sheet and description of shareholder equity will allow sophisticated employees to learn relevant information, yet not in a manner sufficient to enable accurate reconstruction of the capitalization table, downside protections, and the distribution waterfall, and consequently, to understand the market value of the common stock.

\footnote{243}
Notably, in other contexts where investors’ payouts are based on complicated cash flow distribution arrangements, the SEC does require the disclosure of a waterfall analysis. For example, with regard to a public offering of asset-backed securities, Regulation AB requires that the registration statement address specific factors relating to the asset class, including “an appropriate narrative discussion of the allocation and priority structure of pool cash flows.”\(^\text{244}\) This description needs to include, inter alia, “the payment allocations, rights, and distribution priorities among all classes of the issuing entity’s securities.”\(^\text{245}\) In addition, the issuer is required to “present the flow of funds graphically if doing so will aid understanding.”\(^\text{246}\)

The vast majority of companies are reluctant to disclose valuation information and exit waterfalls.\(^\text{247}\) However, the secrecy around the capitalization table and contractual terms of preferred investors is dubious given that this information is included in the certificate of incorporation each company is required to file in its state of incorporation (because the vast majority of venture capital-backed companies are incorporated in Delaware, these documents are publicly available via the Delaware Division of Corporations).\(^\text{248}\)

(\(\text{providing waterfall analysis spreadsheet for the benefit of “both employees and founders to better understand how they can be affected by things such as stacked liquidation preferences over the course of their company’s financing history”); Inna J Efimchik, Waterfall Analysis (How VCs See the World), Avvo (May 2, 2012), https://www.avvo.com/legal-guides/ugc/waterfall-analysis-how-vcs-see-the-world[https://perma.cc/5C63-8TSL] (“In evaluating an investment, investors will usually run what is known as a waterfall analysis.”).\)

\(^{244}\) 17 C.F.R. § 229.1113(a).


\(^{246}\) 17 C.F.R. § 229.1113(a)(2); see also Asset-Backed Securities, 70 Fed. Reg. at 1546 (“A clear description of the flow of funds for the transaction is required.”).

\(^{247}\) See e.g., Jeron Paul, supra note 187.

\(^{248}\) DEL. CODE tit. 8, § 242 (2019); see also Gornall & Strebulaev, supra note 135, at 24–25 (describing retrieving unicorns’ capitalization table data
most cases, interested third parties can retrieve the company’s certificate of incorporation and reverse engineer the capitalization table and exit waterfall.

The reasons this study’s interviewees gave for not sharing capitalization table and liquidation preference information with employees included awkwardness of the conversation, fear of securities law liability, fear of placing a limitation on managerial discretion in the operation of the business, and fear of demoralization among employees if they knew the truth about the company. Some founders interviewed for this research mentioned the need to “sell the dream” to their employees, just as they do with their investors.

However, from a regulatory standpoint, these arguments cannot stand. As further described in Part VI below, replacing via publicly available certificates of incorporation); Interviews, supra note 29 (referencing L02 noting that a sophisticated party can obtain the company documents from Delaware and reverse engineer the capitalization table and exit waterfall. Although theoretically, a company can also completely hide this information and not include it in its incorporation documents).

249 See Interviews, supra note 29 (citing VC02 explaining that “it is easier to avoid these issues and there is no obligation to do otherwise”).

250 It is easier not to disclose information in the first place, than to make sure that it is accurate and not misleading. See e.g., Interviews, supra note 29 (quoting F06: “The employer does not want to disclose information because he does not want to be liable to the employee . . . . Given that I do not want to personally advise the employee, I can pay an attorney for that, but why would I want to bear the costs?! It’s a headache . . . .”); see also Jeron Paul, supra note 187.

251 See e.g., Interviews, supra note 29 (citing F09 explaining that “confidentiality serves as a tool in the managerial toolbox”).

252 See e.g., id. (referencing F04 describing his main challenge as an entrepreneur as “keeping employees’ morale high despite whatever difficulties that the company is experiencing” and using the following analogy: “It’s like being a marine commander leading his troops to the battlefield; if I’ll tell them the truth, which is, we’re all going to die, they will run away”).

253 Id.; see also id. (citing F03 predicting that total transparency to employees “would kill the venture capital industry,” and explaining that “founder sell a dream to their employees just as they do with their investors”).
the requirement to disclose financial statements with a requirement to disclose valuation information and waterfall analysis would better serve the interests of both parties. It will provide employees with an ongoing and realistic valuation of the return on their labor investments while protecting the confidentiality of start-ups’ market-sensitive data.

C. Too Late

One of the most curious aspects of the current disclosure regime is the timing for the delivery requirement. Under Rule 701(e)(6), the timing of the disclosure varies by the security granted: if the employee receives stock options, the disclosure must be delivered within “a reasonable period of time before the date of exercise.”254 If, on the other hand, the employee receives RSUs, a kind of equity-based security that, unlike stock options, does not involve an exercise decision by the employee,255 the disclosure must be delivered before the RSU award is granted.256 The result is somewhat paradoxical:

254 Exemption for Offers and Sales of Securities Pursuant to Certain Compensatory Benefit Plans and Contracts Relating to Compensation, 17 C.F.R. § 230.701(e)(6) (2018). In practice, lawyers from the leading firms in Silicon Valley advise their clients to deliver the disclosure before the employee’s grant starts vesting—typically, before the employee celebrates first work anniversary and reaches the one-year cliff of the vesting schedule. See Interviews, supra note 29 (quoting LO4: “There’s another bit of disagreement in terms of when that [reasonable time] takes place. I typically advise clients ‘let’s go back to that one-year cliff . . . you really want to provide a reasonable period of time before that . . .’”).

255 A detailed discussion on the mechanics of RSUs is beyond the scope of this Article. For more on the differences between stock options and RSUs and how the latter evolved in Silicon Valley, see Andy Rachleff, How Do Stock Options and RSUs Differ?, WEALTHFRONT (Feb. 6, 2014), https://blog.wealthfront.com/stock-options-versus-rsu/ [https://perma.cc/NY2N-DZ3Q].

employees being paid with low-risk securities (RSUs) receive information more promptly than do employees who receive high-risk securities (stock options). Either way, the information reaches employees only after they have made the most crucial decision as to whether to accept an offer that includes an equity component.

Such late disclosure is problematic on both legal and economic grounds. On the legal side, as noted above in Section II.A, grants that are offered to prospective employees as an inducement to accept employment generally constitute a “sale” of securities. It follows that disclosure should be given before the prospective employee makes an investment decision and the “sale” takes place. In other words, the disclosure should be given before the employee accepts a compensation arrangement that includes an investment component. On the economic side, late disclosure is inefficient and wasteful because it fails to guide the decisions of employee-investors. As discussed in Section IV.A, human capital is a scarce resource whose allocation is responsive to equity incentives. To facilitate the efficient allocation of this exemption, the date of sale is the date it is granted. As such, the issuer must provide the required information a reasonable time before the date the RSU award is granted.

257 On the differences between private companies’ RSUs and stock options, see generally Jeron Paul, RSUs vs. Options: Why RSUs (Restricted Stock Units) Could be Better Than Stock Options at Your Private Company, CapSHARE BLOG (Jul. 9, 2016), www.capshare.com/blog/rsus-vs-options/ [https://perma.cc/4YFJ-PHBW] (citing Bill Gates: “The fact is that the variation in the value of an option is just too great . . . . And so as soon as they saw that options could go both ways, we proposed an economic equivalent.”); see also Should You Ask for RSUs or Stock Options? FLOW FIN. PLANNING (Aug. 7, 2018), https://flowfp.com/rsus-vs-stock-options/ [https://perma.cc/W3YC-QL7S] (indicating “[a]n RSU is always worth something, unless the company goes bankrupt. An option is worth something only if the market price of the stock is above the strike price of your option . . . . You don’t have to make a choice. They just ‘happen’ as long as you stick around . . . .”).

258 See supra notes 58–62 and accompanying text.

259 Recall that according to Ralston Purina Co., employees’ access to information is prerequisite to their participation in a private offering. See SEC v. Ralston Purina Co., 346 U.S. 119, 127 (1953).
resource, employees need to receive information before they commit to an employment opportunity. Without timely disclosure, information asymmetry between entrepreneurs and employees might diminish employees’ trust and erode the sustainability of the equity compensation market as discussed in Section IV.B above.

As described in greater detail in Section VI.B.2 below, to allow information to serve its purpose, the timing of the disclosure requirement under Rule 701 should be amended: employers should disclose their valuation and waterfall exit information to prospective employees prior to employees’ acceptance of the job offer. Assuming that the prospective employee has accepted the offer, an ongoing disclosure obligation is needed to allow employees to continue monitoring the return on their labor investments and mitigate agency costs.

V. REWRITING RULE 701

The following Part sketches a proposal for a fundamental reworking of the disclosure regime governing the relationship between start-ups and their equity-compensated employees. It starts by reviewing two predominant proposals put forward—representing a maximalist approach and a minimalist one to the regulation of disclosures to start-up employees. Based on the advantages and disadvantages of these proposals, the Article then calls for the implementation of an intermediate approach, which differs from previous proposals in important ways, including the content, timing, and the threshold to trigger enhanced disclosure obligations under Rule 701.

A. Existing Proposals

Other authors have debated the need for reform in the regulation of equity-based compensation.260 The following Sections briefly describe these proposals.

260 See, e.g., Cable, supra note 5, at 639–41; Alon-Beck, supra note 145, at 175–90.
1. The Maximalist Approach

The most elaborate amendment proposal to the mandatory disclosure obligation was offered by Alon-Beck. This proposal is maximalist in the sense that it advocates adding further disclosure items on top of the existing ones. Alon-Beck recommends that in addition to the current requirement to deliver a copy of the compensatory benefit plan, or the contract, to Rule 701 offerees, unicorn companies would be required to disclose the following items:

(1) Information on the composition and compensation of the management team;
(2) any super-voting rights that were granted to the founders;
(3) current and future stock and debt issuances (including debt evidenced by convertible notes or simple agreements for future equity, known as “safes”);
(4) a list of investors holding more than a specified percentage (perhaps 1%) of the outstanding stock (including their liquidation preferences and conversion rights); and
(5) quarterly estimated fair market value of the stock. 261

In addition, Alon-Beck calls for mandating that the employer provide employees with the assistance of an experienced and independent purchaser representative, 262 and to subject unicorn companies to independent auditing of their financial statements. 263

Alon-Beck’s proposal essentially calls for the adoption of every measure that could address employees’ informational disadvantage and lack of investment proficiency. The proposal addresses the main challenges discussed in Part IV of this Article, including employees’ lack of sophistication (by requiring companies to hire an independent purchaser representative for their employees), the complicated capital structure that creates disparities in value of preferred and

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261 Alon-Beck, supra note 147, at 183–85.
262 Id. at 185.
263 Id.
common stock (by requiring the disclosure of all downside protections and debt arrangements), and the inability of the corporate governance framework to curb the agency problem that arises between employees and founders (by calling for the disclosure of management incentives and voting rights).

However, this proposal comes at the price of a substantive regulatory burden for start-ups, including the costs of hiring a purchaser representative to act on behalf of its employees, an auditing firm to perform an audit of its financial statements, and the cost of issuing quarterly estimates of the fair market value of its stock. This proposal also raises privacy concerns with regard to the sensitive information of the issuer and its investors. The proposal does not address start-ups’ legitimate concern about information leakage to potential competitors who can use it to negate the start-up’s advantage. It is therefore unsurprising that an entirely opposite approach is advanced by attorneys representing the issuers.

2. The Minimalist Approach

If Alon-Beck’s proposal is maximalist in the sense of requiring the disclosure of every piece of information that could be relevant to the investment decision of employees, the attorneys lobbying for the industry-side are advancing a minimalist approach in the sense of revealing as little as possible. Thus, in response to the SEC’s call for proposals regarding ways to modernize Rule 701,264 start-up attorneys have requested the regulator to do away with the disclosure of financial statements and replace it with a modest disclosure of the fair market value of the common stock. For example, the law firm Sullivan & Cromwell LLP has submitted a proposal to permit companies to provide Internal Revenue Code Section 409A valuation information regarding its securities in lieu of financial statements.265

264 *See supra* note 22 and accompanying text.

To understand the logic of this proposal, a few words on 409A valuations are necessary. Under Section 409A of the Internal Revenue Code, every private issuer that issues stock options to its employees is required to establish the fair market value of its common stock on the day of the grant.266 This value then determines the exercise price of the stock options.267 The valuation of the fair market value of the common stock is often referred to in the industry as a “409A valuation.”268 Start-ups can obtain these appraisals on their own,269 however, if they rely on an independent third party to appraise the value of the company’s equity, they enjoy a “safe harbor” protection should the IRS get involved (i.e., the burden of proof would be on the IRS to show that the valuation is too low).270 The safe harbor under the tax code has led to the creation of a cottage industry to conduct these appraisals.271

266 IRS Revenue Ruling 59-60 defines fair market value as “the price at which the property would change hands between a willing buyer and a willing seller when the former is not under any compulsion to buy and the latter is not under any compulsion to sell, both parties having reasonable knowledge of relevant facts.” See Rev. Rul. 59-60, 1959-1 C.B. 237.

267 Section 422 of the Code sets minimum exercise price with respect to Incentive Stock Options. Nonqualified Stock Options could be granted with an exercise price per share of less than the Fair Market Value of the Common Stock on the Grant Date if the Option either: (a) is not “deferred compensation” within the meaning of Section 409A; or (b) meets all the requirements for Awards that are considered “deferred compensation” within the meaning of Section 409A. See David Altman, 10 Business Organizations with Tax Planning § 133.04 (2019); see also Victor Fleischer, Options Backdating, Tax Shelters, and Corporate Culture, 26 Va. Tax Rev. 1031, 1043 (2007). Stock options are considered “nonqualified deferred compensation.” The grant of restricted stock and RSUs does not require a 409A valuation because these securities do have a strike price.

268 See Altman, supra note 267, at § 133.04.

269 Id.

270 Id.

Private issuers are required to update their 409A valuations every twelve months and anytime their value materially changes—for example, following a new funding round. The appropriate valuation methodology varies according to the company’s stage of development, but it almost always requires in one form or another the performance of a waterfall analysis. This analysis assumes that the company’s equity is sold and the proceeds are allocated in a “waterfall” down the different equity classes of shares, according to their respective liquidation preferences, until the common stockholders finally receive the residual claim, if any exists. The waterfall analysis itself would be

Commenting on this requirement, Altman notes that:

[T]he use of a value previously calculated under a valuation method is not reasonable as of a later date if the calculation fails to reflect information available after the date of the calculation that may materially affect the value of the corporation . . . . Furthermore, the value cannot have been calculated for a date that is more than 12 months earlier than the date for which the valuation is being used.

ALTMAN, supra note 267, at § 133.04(7). The consequences of not obtaining a 409A valuation and pricing the strike price of stock option grants in a less formal manner could cause significant tax penalties. Any option holders discovered to violate 409A will have to pay taxes plus a 20% federal penalty, any applicable state penalties, an IRS tax underpayment penalty, and any interest on unpaid taxes.


See Valuation Allocation Methods, supra note 273; see also Henry Ward, Transparent 409A, CARTA BLOG (May 3, 2016), https://carta.com/blog/transparent-409a/ [https://perma.cc/F7XS-WGY9] (“A proper 409A creates a waterfall on the capital structure of the company. The waterfall is the most important piece of a valuation because it captures the embedded liquidation preferences.”).

See id.
used to generate the final 409A valuation, but typically would not be included in the final report.\footnote{276}{Id. ("This is hidden in most reports.").}

Currently, the “409A valuation” is meant to serve the reporting obligation of companies towards the relevant tax authorities, not towards its employees.\footnote{277}{See William D. Cohan, Valuation Shell Game: Silicon Valley’s Dirty Secret, N.Y. TIMES DEALBOOK (Mar. 8, 2017), https://www.nytimes.com/2017/03/08/business/dealbook/valuation-shell-game-silicon-valleys-dirty-secret.html [https://perma.cc/SR5G-5F2Y] ("You want to know the dirty little secret of Silicon Valley? It’s called the 409A valuation.").} Companies typically try to keep their “409A valuation” as low as possible because a low “409A valuation” allows for setting a low strike price for employees’ stock options.\footnote{278}{For a classic but outdated treatment of the issue, see Gilson & Schizer, supra note 172, at 898 ("The key to a reduced tax bill, then, is to value the common stock based on a hypothetical immediate liquidation in which preferred stockholders claim almost everything."). See also Founders Circle, 10 Things to Know About 409A Valuation: Dispersion of Employee Wealth: 409A Valuation, MEDIUM (Aug. 3, 2017) https://medium.com/kitchen-table-series/everything-you-need-to-know-about-409a-valuation-dispersion-of-employee-wealth-e4adf647f4d5. [https://perma.cc/FX5B-ZBXV] (“Management typically wants to grant as many shares as possible at the lowest price as possible to incentivize for long-term wealth creation.”); Jeron Paul, 409A Valuations vs Venture Valuations, CAPSHARE BLOG (Aug. 7, 2018), https://www.capshare.com/blog/409a-valuations-vs-venture-valuations/ [https://perma.cc/8UPQ-39YJ] ("409A valuation firms pick a point estimate that is toward the low end of a defensible range of values. They do this because their clients want the valuation to be as low as possible. Clients want a low 409A valuation. This allows them to grant stock options to their employees at a low price."); Gornall & Strebulaev, supra note 135, at 9 (“Many companies push their 409A providers for lower valuations as this allows them greater freedom in setting option strike prices.”).} The lower the strike price is, the more useful employee stock options are for recruitment and retention purposes.\footnote{279}{See Founders Circle, supra note 278.} It is, therefore, a well-known secret that these valuations are highly inaccurate and can be negotiated
down by the company. Because the appraisal firm wishes to maintain a long-lasting business relationship with the company, and given that the valuation is based on information provided by the management team and is subject to board approval, the employer maintains nearly full control over the result.

Nevertheless, start-ups’ control over their 409A valuation tends to weaken as the company matures. That is because, in a mature company, significant cash flows could be equated to comparable public companies to generate valuation multiples that are used to calculate the fair market value. Moreover, employees of mature start-ups typically start trading their securities on secondary markets thereby generating market price indications. Besides, as the company matures, it is likely to shift to granting RSUs to its employees instead of relying on stock options. Such a shift eliminates the motivation to lower the 409A valuation to keep the exercise price attractive to employees.

As Sullivan & Cromwell’s proposal correctly points out, 409A valuations are more relevant to employees’ needs. However, two caveats are in order: these valuations only have

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280 See Cohan, supra note 277; see also Interviews, supra note 29 (referencing L02 expressing somewhat cynical view of the industry: “before 409A, we used to deal with common stock valuation in the following way: the common stock was generally valued at 10% of the preferred, and as we got closer to an IPO, the 10% gap shrank. Today there is an entire cottage industry around 409A valuations, but the result is similar”); Interviews, supra note 29 (quoting F07: “[I]t’s just a farce for the IRS.”); Interviews, supra note 29 (quoting F03: “409A valuations are irrelevant.”).

281 See Interviews, supra note 29 (citing F07 describing negotiations with 409A appraisal firms regarding the final result).

282 Founders Circle, supra note 278 (“[W]hen the company matures] [y]ou can rely more on the company’s financial forecast, and public comps become a more reliable benchmark.”); see also Cohan, supra note 277 (“Obviously this becomes a problem when an employee wants to sell his or her private stock . . . . This is often the point where the founder steps in and says, sorry, no sale, or at least not at the higher valuation.”).

283 Sullivan & Cromwell LLP, supra note 265, at 9 (“In our experience, valuation information is more useful for an employee to evaluate his or her equity award grant than early-stage financial information.”).
informational value for relatively mature start-ups, and only when accompanied by the waterfall analysis that was used to generate the final outcome. The disclosure of the 409A valuation, in and of itself, cannot satisfy employees’ need for information because it presents an estimate of the value of the common stock at a specific point in time. The disclosure of the valuation alone will not reveal the effect of the preferred shareholders’ right on the value of the common stock in various exit scenarios down the road.

The minimalist approach offered by Sullivan & Cromwell thus has clear benefits. Obviously, a company cannot have two different valuations; one to satisfy disclosure obligations towards employees, and another to comply with tax laws.\(^{284}\) Therefore, any reworking of the disclosure obligation towards employees needs to consider possible tax implications and must try to avoid adverse consequences, such as sabotaging companies’ ability to rely on stock options for recruitment purposes. Moreover, two auditing systems are impractical as they double compliance costs and managerial distraction. Still, 409A valuations without an accompanying exit waterfall analysis leave the most important information for employees’ needs out.

Thus far, we have explored two possible approaches – the maximalist approach, offered by Alon-Beck, and the minimalist approach, advanced, inter alios, by Sullivan & Cromwell LLP. Both approaches have advantages and disadvantages, and offer meaningful insights moving forward. Specifically, Alon-Beck’s proposal addresses the need to tailor the disclosure items to the capital structure of venture-backed companies and tackle the agency problems that arise between employees and management (via disclosure of management incentives, and the use of purchaser representatives). On the other hand, Sullivan & Cromwell’s proposal brings to front pragmatic considerations, including the futility of the requirement to disclose financial statements, and the need to unify companies’ disclosure obligations towards tax authorities and employees.

\(^{284}\) See, e.g., Gilson & Schizer, supra note 172, at 898.
The following Section offers a middle ground between the maximalist and minimalist approaches, which integrates practical considerations and ensures the timely and full disclosure to employees.

B. An Intermediate Approach to Disclosure

Pragmatism and comprehensive disclosures are often portrayed as competing objectives that regulators are rarely able to satisfy at the same time. However, in the context of private issuers’ disclosure to equity-compensated employees, it is possible to move forward on both fronts. The following Sections lay out the proposed amendments in the content, timing, and threshold to trigger an enhanced disclosure obligation towards start-up employees.

1. Content of the Disclosure

As argued in Section III.C.1, the starting point for drafting the disclosure requirement to start-up employees should be the recognition that, unlike in other disclosure contexts, the primary recipient of the disclosure here is an unsophisticated investor. Moreover, start-up employees do not participate in an active efficient market in which information is quickly absorbed in the stock’s price. Therefore, to create a disclosure framework that could serve this particular class of investors, there is a need to depart from standard disclosure forms that are designed to accommodate the needs of public market investors. In other words, employees’ lack of financial proficiency should guide not only the existence of a disclosure requirement but also the form of the disclosure. If disclosure to employees is packed with irrelevant information and is cluttered with financial and legal terms that a layperson does not understand, such disclosure would frustrate, not satisfy,

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285 See supra Section III.C.1.
286 See supra Section III.C.3.
the goal of allowing employees to form intelligent investment decisions.287

The fact that the financial structure of start-ups is often multilayered and complicated, as described in Section III.C.2, does not necessarily dictate that disclosure to employees should be complicated as well. Delivering all the information that the maximalist approach requires, including quarterly fair market value estimates and a full description of a company’s ownership structure, downside protections, and super-voting rights might be overwhelming to employees who, as established in Section III.C.1, on the whole, do not know how to account for the economic meaning of this information. However, most of the information that the maximalist approach calls to disclose, including details as to downside protections, management incentive programs, and the fair market value of the common stock, could be delivered in a more digestible, aggregate form in combining a 409A valuation and exit waterfall analysis through data visualization (graphical representation).

Over the years, multiple capitalization table software programs have evolved to help companies document, manage, and simulate capitalization table data and employee incentive programs, as well as to visualize the distribution of proceeds among the various equity holders in different exit scenarios.


288 According to a 2019 report by Orbis Research on the cap table management software market, the key players in this domain include:
One of the crucial functions that some of these programs automate is the exit waterfall analysis—i.e., the distribution of proceeds to the different classes of shareholders based on the capitalization table data accounting for liquidation preferences and other preferred rights, conversion scenarios, and the seniority of different share classes.289

An exit waterfall analysis provides the payout to every class of shares (or individual equity holder/optionee) under any given exit scenario. Thus, for each “exit valuation” x-value, the analysis would produce a y-value of an individualized “payout.” These values can then be presented in graphical form, in which the y-axis represents the payouts, and the x-axis represents the exit value—also known as a “breakpoint report.” The advantage of this report for disclosure purposes is that it provides individualized bottom-line information in a clear form, regardless of employees’ lack of understanding of the legal and algebraic meaning of provisions such as liquidation preferences, participation rights, caps to participation, dividends, ratchets, and so on.290

A middle ground between the minimalist and the maximalist approaches could thereby be reached by replacing the disclosure of financial statements, which from employees’ perspective, contain irrelevant and incomprehensible information,291 with the disclosure of a company’s 409A valuation accompanied by a graphical exit waterfall report


290 See supra Section III.C.2.

291 See supra Section III.A.
that reveals the payout to the specific employee under various exit scenarios. Such a shift would allow parties to meet halfway: employers would get to keep the confidentiality of their financial statements, and would only be subjected to an existing regulatory scheme with a minor modification (the disclosure of an exit waterfall report that includes a graphical representation of the range of possible payouts to employees). At the same time, employees would receive access to the information that is relevant to their valuation challenge, including all material information regarding the capital structure of the company and its anticipated impact on employee payout based on various exit valuations.

The proposed reform significantly reduces the burden on issuers by replacing the disclosure of financial statements with a much more modest form of disclosure—valuation information and exit waterfall analysis. Considering the amount of information included in this demand and the nonproprietary nature of the information, it would be reasonable to require companies to provide this information to prospective employees before they make an investment decision. Thus, this Article calls for the disclosure obligation to precede the commencement of the employment relationship by incorporating the relevant information in the offer letter—as explained in the following Section.

2. Timing of the Disclosure

The relationship between start-ups and their employee-equity-holders involves more than a single investment decision. The first decision facing the employee is whether to accept a job offer that includes an equity compensation component, reject the offer, or negotiate the levels of cash and equity in the compensation agreement. The second decision is an ongoing one—the decision to continue working for the firm in an effort to satisfy the vesting schedule. Once the

292 See supra Section III.C.3.
293 See supra note 248 and accompanying text.
294 See supra Section II.A.
equity grant is vested, employees who earn stock options (rather than restricted stock or RSUs) need to decide whether to exercise the options and purchase the shares. Finally, as shareholders, employees face the dilemma of when and how to sell their equity—that is, to “cash-out” in whole or in part.\(^{295}\)

To make these decisions in an informed manner, employees need information. First, in order to help guide employees’ decision of whether to enter into an employment relationship, the disclosure should be delivered with the offer letter. Such disclosure will allow prospective employees to compare different job offers and separate between low-quality and high-quality equity grants. An ex-ante disclosure regime is needed in order to resolve the market inefficiencies caused by information asymmetry, including suboptimal matches between companies and employees,\(^{296}\) and the downward spiral of price and quality (the lemons market problem).\(^{297}\)

An ex-ante disclosure regime might strike some readers as excessive. After all, at the offer letter stage, there is no guarantee that the candidate will accept the offer, and so the company might end up disclosing information to candidates.

\(^{295}\) Cf. Cable, supra note 5, at 615 (describing three investment decisions that are involved in equity compensation: “(1) accepting the option initially in exchange for valuable human capital, (2) continuing at the company as its business developed, and (3) exercising the option (typically through a cash payment equal to the exercise price) as the stated expiration date approached.”). As for the fourth decision – of whether and when to sell the shares—traditionally, the opportunity to consider this only became relevant after the company’s IPO, by which time, the company was already subject to public disclosure obligations and its share price had already been determined by an active market. However, today, companies stay private for longer durations, and secondary sales of employee securities via online private markets or company-sponsored programs become significant liquidity opportunity for employees. As such, for many employees, the decision whether to sell their shares becomes relevant before the company goes public. See Aran, supra note 4, at 1290; see also Pollman, supra note 158, at 195–202 (describing the evolution of online marketplaces for private companies’ stock, and detailing the trading volumes and the information available on two such marketplaces).

\(^{296}\) See supra Section IV.A.

\(^{297}\) See supra Section IV.B.
whom it will not ultimately hire. However, the same problem arises with the disclosure of information to potential capital investors. In addition, this problem can be addressed by non-disclosure agreements. 

After the initial disclosure, if the candidate accepts the offer, the following disclosures should be delivered every twelve months and following any material event that may change the valuation of the company. For practical reasons, and to avoid imposing additional administrative burdens on the issuer, the recommended conditions are similar to those set forth in Section 409A to the Internal Revenue Code. 

The definition of “material event” shall include, for example, a new funding round, resolution of material litigation, issuance of a patent, failure to meet a significant milestone, major change to the capitalization table, or board approval of a management incentive plan that could reasonably be expected to affect the value of the common stock. 

By unifying rules concerning the timing of appraisals and disclosures across tax regulation (Section 409A) and securities regulation (Rule 701), it is possible to lower the regulatory burden on issuers and deliver up-to-date information to employees. The following Section offers a new threshold to trigger the enhanced disclosure requirement.

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300 See ALTMAN, supra note 267, at § 133.04(7) (explaining that an update to a 409A valuation is required when “the [previous] calculation fails to reflect information available after the date of the calculation that may materially affect the value of the corporation . . . . Furthermore, the value cannot have been calculated for a date that is more than 12 months earlier than the date for which the valuation is being used.”).
3. Enhanced Disclosure Threshold

Under the current disclosure regime, issuers become subject to the enhanced disclosure requirement only when they issue more than $10 million worth of securities during a twelve-month period.\(^{301}\) The $10 million threshold effectively limits the enhanced disclosure obligation to very large, pre-IPO issuers,\(^{302}\) which means that disclosure is the exception rather than the rule for start-ups.\(^{303}\)

The maximalist approach offered by Alon-Beck calls to subject all unicorn companies to enhanced disclosure requirements.\(^{304}\) However, as discussed in Section III.C.3 above, private market valuations are somewhat arbitrary and are responsive to the risk allocation between preferred stockholders and common stockholders.\(^{305}\) Therefore, instead of focusing on the valuation, the intermediate approach calls to adopt a two-pronged test to trigger the enhanced disclosure requirement where: (1) the company has issued equity incentives in Rule 701 offerings to 100 employees or more; and (2) the aggregate ownership percentage of these employees on a fully diluted basis is more than 10% of a class of the company’s equity securities.

The 100-employee threshold is pragmatic and reasonable because employers of that magnitude are already expected to have human resources and legal departments in place. In addition, in such large organizations employees’ ability to access financial information and monitor managerial decisions declines, therefore the need for disclosure

\(^{301}\) See supra Section II.C.

\(^{302}\) See Interviews, supra note 29 (quoting L04: “[M]ost companies that are bumping into this $5 million limit are bigger companies. In fact, they’re usually on the verge of a liquidity event.”).

\(^{303}\) See Alon-Beck, supra note 145, at 182 (noting that “[t]he Economic Growth Act . . . leaves employees holding potentially tens of millions of dollars of illiquid stock at the mercy of the majority, without access to detailed financial statements and adequate disclosures of risks and prospects to help guide their investment decisions”).

\(^{304}\) See supra Section VI.A.1.

\(^{305}\) See supra Section III.C.3.
increases. Some commentators view the 100-employee threshold as a stage at which the company ceases to be a start-up. More importantly, start-ups that issue equity incentives to more than 100 employees would find it difficult not to use capitalization table management software (which is often requested by investors as part of a due diligence process) and to avoid hiring an external valuation firm to provide their valuation. Therefore, the disclosure requirement would not impose a significant cost on start-ups by forcing them to pay for additional services. The 100-employee threshold is also consonant with the general notion of employment law, whereby employers of 100 employees are considered large enough to conform with certain regulatory requirements.

Moreover, companies with over 100 employees have generally advanced their business beyond the seed and Series A financing round stages. As the start-up transitions from its early-stage to a phase of rapid growth and scaling, it will typically turn to raise additional rounds of funding, which will likely increase the complexity of its capital structure and the

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306 See Cable, supra note 5, at 631 (expressing the view that employees of early-stage startups are well positioned to gain inside knowledge and monitor management).


308 See e.g., Sarath C P, The Benefits of Cap Table Management Software for Startups, HACKERNOON (Dec. 27, 2018), https://hackernoon.com/benefits-of-using-cap-table-management-software-in-startups-7365ddd442d [https://perma.cc/3FE3-3LHD] (“[Without cap table management software] you might not be able to raise money easily or wouldn’t be able to raise money at all.”).

corresponding aggregate liquidation preferences amount. Therefore, the need for enhanced disclosure will dramatically intensify.

By limiting the enhanced disclosure requirement to companies that rely on Rule 701 to issue equity incentives to 100 employees or more, the proposed amendment is reflecting a practical approach. As discussed in Section VI.A.2, 409A valuations of early-stage start-ups tend to be unreliable.\(^\text{310}\) These appraisals, however, become more reliable as the company matures.\(^\text{311}\)

Moreover, by requiring the disclosure of the 409A valuation and exit waterfall to employees and prospective employees, the new Rule 701 is likely to encourage these mature companies to move from relying on stock options to using RSUs as their main equity incentive. That is because using stock options as a recruitment device is effective predominantly when the 409A valuation is low,\(^\text{312}\) whereas for retention purposes, companies typically wish to signal that their valuation is rising.\(^\text{313}\) The shift from stock options to RSUs would be an indirect benefit in and of itself because these securities are less risky and do not have the same propensity to limit employee mobility as stock options.\(^\text{314}\)

\(^{310}\) See supra notes 277, 280–1 and accompanying text.

\(^{311}\) See supra note 282 and accompanying text.

\(^{312}\) See supra note 278 and accompanying text.

\(^{313}\) See supra Section III.C.3.

\(^{314}\) Alon-Beck offers a more detailed description of the benefits of RSUs, noting that:

There are several advantages to using RSUs. First, RSUs are not as risky for employees; unlike options, RSUs have downside protection, because they do not have a strike price. Second, unlike options, RSUs will not be worthless as they are not subject to the unicorn stock price fluctuations. RSUs will always have value equal to the price of the stock regardless of when they were granted to employees. Third, granting RSUs helps the company mitigate the risk of employees trading on secondary markets, as RSUs cannot be sold prior to an IPO.

Alon-Beck, supra note 145, at 169.
The 10% aggregate ownership threshold is in line with the securities laws’ notion that 10% ownership is a significant stake that conveys “insider” status and privileged access to company information. For example, Section 16(a) of the Securities Exchange Act of 1934 requires any beneficial owners of more than 10% of a class of a company’s equity securities to file certain reports regarding their transactions and changes to their ownership stake.\(^{315}\) Moreover, the typical size of the employee stock option pool in venture capital-backed companies is roughly ten to fifteen percent.\(^{316}\) The proposed threshold is therefore designed to capture companies that are structured after the typical model of a start-up company, which includes a significant ownership stake by rank-and-file employees.\(^{317}\) The threshold is not intended to capture other corporations in which equity ownership is limited to executives and the aggregate ownership stake of other employees is negligible.

To recap, the proposed amendments to Rule 701 reflect an intermediate approach that balances employees’ need for reliable and up-to-date information with issuers’ legitimate concerns regarding the confidentiality of their financial information and their compliance costs. Specifically, rolling back the requirement to disclose financial statements and replacing it with the disclosure of 409A valuation information and an exit waterfall analysis would improve the informational and regulatory environment for employees and issuers alike. Moreover, by unifying rules concerning the timing of appraisals and disclosures across tax regulation (Section 409A) and securities regulation (Rule 701), it is possible to lower the regulatory burden on issuers while still delivering up-to-date information to employees. Given the moderate burden that this regulation would impose on issuers, and due to the practical changes that start-ups

\(^{315}\) Section 16 insiders include the company’s directors, officers, and shareholders who beneficially own more than ten percent of a class of the issuer’s equity securities. See 15 U.S.C. § 78p(a)–(b) (2012).

\(^{316}\) See Ward, supra note 99; see also Bowden, supra note 99.

\(^{317}\) See Blasi, supra note 4 and accompanying text.
undergo as they grow, imposing the enhanced disclosure requirements on companies that rely on Rule 701 to issue equity compensation to 100 employees or more is both sensible and appropriate.

VI. CONCLUSION

Start-ups rely heavily on equity compensation to compete for talent with more established public firms. Even though start-ups’ reliance on broad-based equity compensation is not a new phenomenon, the legal literature on this subject is just starting to emerge.318 The scarcity of academic legal discussion regarding employee equity compensation is especially puzzling given corporate law’s obsession with executive equity compensation.319 This Article lays the foundations for a securities regulation approach to human capital investments by start-up employees. It establishes that, as opposed to the notion promoted by deregulation advocates, pre-negotiated equity compensation is a form of investment, not merely a bonus or incentive. As such, this sort of compensation demands the protection of the securities laws.

318 See Cable, supra note 5, at 619 note 14 (citing relevant literature and noting that only “[a] small number of law review articles analyze private company equity compensation’’); see also Aran, supra note 4; Alon-Beck, supra note 145; Booth, supra note 63; Thomas A. Smith, The Zynga Clawback: Shoring Up the Central Pillar of Innovation, 53 SANTA CLARA L. REV. 577, 580 (2013); Pollman, supra note 158, at 195–202 (describing the evolution of online marketplaces for private companies’ stock).

319 Executive equity compensation has been one of the most well-studied and well-debated issues in corporate law for more than 80 years, starting with Adolf Berle and Gardiner Means. See generally ADOF A. BERLE & GARDINER C. MEANS, THE MODERN CORPORATION AND PRIVATE PROPERTY (1932). On the debate regarding executive equity incentives, see generally LUCIAN BEBCHUK & JESSE FRIED, PAY WITHOUT PERFORMANCE: THE UNFULFILLED PROMISE OF EXECUTIVE COMPENSATION 7 (2004); see also MICHAEL C. DORF, INDISPENSABLE AND OTHER MYTHS: WHY THE CEO PAY EXPERIMENT FAILED AND HOW TO FIX IT 5–6 (2014) (doubting the theoretical justifications for executive equity compensation pay and calling instead for salary-based pay); cf. e.g., Michael C. Jensen & Kevin J. Murphy, CEO Incentives—It’s Not How Much You Pay, but How, 68 HARV. BUS. REV. 138, 145 (1990) (advocating for equity executive compensation).
Thus far, the securities regulation regime has focused almost exclusively on cash investments. However, following the information technology revolution and the rise of the venture capital-backed firms, human capital investment by employees became an integral part of the business model of high-growth entrepreneurial companies. It is therefore time for the securities regulation regime to catch up with market dynamics and address the challenges of human capital investments by employees.

As this Article establishes, both on theoretical and pragmatic grounds, employees' investments are susceptible to expropriation, agency problems, and information asymmetry—just as other forms of capital investments are. The current regulatory framework under Rule 701 fails to address these concerns, and at the same time it places an undue burden on some issuers by requiring the disclosure of market-sensitive data.

This Article offers an outline for a better regulatory scheme covering the relationship between private issuers and their equity-compensated employees. It calls to revisit Rule 701 disclosure requirements and to tailor the disclosure to the distinct attributes of the venture capital-backed firm—namely, the existence of multiple classes of stock with different voting and cash-flow rights tied to each class. The proposed disclosure of valuation information along with an exit waterfall analysis is not only materially relevant to the investment and employment decisions of employees, but is also easier to comply with and cost-effective.

Better disclosure to employees is needed not only to promote fairness and transparency, but also to prevent the market for equity-based compensation from becoming a market for lemons. If no alterations to Rule 701 are adopted, employees might lose trust in this compensation device. Such market failure might in turn stifle the competition for talent and increase the costs of creating new entrepreneurial firms.