

SHOULD MUTUAL FUNDS
INVEST IN STARTUPS?
A CASE STUDY OF FIDELITY MAGELLAN
FUND'S INVESTMENTS IN UNICORNS (AND
OTHER STARTUPS) AND THE REGULATORY
IMPLICATIONS*

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Mutual funds are acting like venture capitalists. Contrary to longstanding practice and to their reputation for investing in public companies, mutual funds, including some of the most prominent, are allocating portions of their portfolios to private venture-stage firms, including famous unicorns like Airbnb and Uber. Through a case study of Fidelity Magellan Fund's startup portfolio, this Article analyzes the regulatory implications of this development. I argue that the new interest in venture investing poses several potential investor-protection concerns: lack of awareness among mutual fund investors, lack of liquidity for mutual fund shares, lack of venture capital expertise among mutual fund management, and lack of accountability over how funds value their ownership stakes in startups for purposes of calculating their net asset values, which creates an opportunity for management to manipulate such estimates.

Based on Magellan's practices, liquidity is not a salient concern, but the other gaps appear significant. Magellan's disclosures on its website, and in its prospectus, statement of additional information, and quarterly reports, provide investors with little meaningful information about the fund's investments in startups. They also provide nothing to suggest that Magellan has experience in this area. At the same time, however, the fund reports returns from its startup portfolio that far exceed the public market and the average in the venture capital industry. While exceptional performance from a novice does not prove

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misconduct, it reinforces concerns about the dependability of fund valuations.

To address the above risks, I suggest new rules governing how mutual funds value their startup investments, which tie changes to objective evidence, and new disclosure requirements that would shed light on the rationale for valuation changes and provide mutual fund investors with notice that startups are in their portfolios and that these investments pose certain risks.

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INTRODUCTION

Much has been made of the proliferation of “unicorns,” startups with valuations of at least \$1 billion.¹ The neologism, coined at a time when such firms were rare,² now comes with an ironic twist, as these firms now seem to be everywhere.³ One trend that has fueled their rise, but attracted far less attention than the unicorns themselves, is that mutual funds—the somewhat stodgy savings tool for retail investors with an eye towards retirement⁴—have begun to act like venture capital funds—the flashy portfolio ornament for wealthy individuals and institutional investors.⁵ In a break with their past, mutual funds have begun investing significant sums in these young private firms.⁶

1. Andrew Ross Sorkin, *Main Street Portfolios Are Investing in Unicorns*, N.Y. TIMES: DEALBOOK (May 11, 2015), <http://www.nytimes.com/2015/05/12/business/dealbook/main-street-portfolios-are-investing-in-unicorns.html> [<https://perma.cc/X4GR-WGFX>].

2. See Aileen Lee, *Welcome to the Unicorn Club: Learning from Billion-Dollar Startups*, TECHCRUNCH (Nov. 2, 2013), <https://techcrunch.com/2013/11/02/welcome-to-the-unicorn-club/> [<https://perma.cc/5K4S-DR5U>] (coining the term).

3. See Scott Austin, Chris Canipe & Sarah Slobin, *The Billion Dollar Startup Club*, WALL ST. J. (Feb. 18, 2015), <http://graphics.wsj.com/billion-dollar-club/> [<https://perma.cc/D57A-THDL>] (showing list and valuation of firms as of May 2017); Ben Zimmer, *How ‘Unicorns’ Became Silicon Valley Companies*, WALL ST. J. (Mar. 20, 2015, 10:26 AM), <http://www.wsj.com/articles/how-unicorns-became-silicon-valley-companies-1426861606>.

4. See Kimberly Burham, Michael Bogdan & Daniel Schrass, *Characteristics of Mutual Fund Investors, 2014*, 20 ICI RES. PERSP., no. 9, Nov. 2014, at 1, <https://www.idc.org/pdf/per20-09.pdf> [<https://perma.cc/AZY5-JU7Q>].

5. See Chad Brooks, *What Is Venture Capital?*, BUS. NEWS DAILY (Apr. 1, 2013, 12:16 PM), <http://www.businessnewsdaily.com/4252-venture-capital.html> [<https://perma.cc/F8S2-ESKJ>].

6. See Sergey Chernenko, Josh Lerner & Yao Zeng, *Mutual Funds as Venture Capitalists? Evidence from Unicorns* 30 fig.1 (Jan. 10, 2017) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2897254 [<https://perma.cc/TW93-7U9C> (staff-uploaded archive)]; Tim McLaughlin & Heather Somerville, *U.S. Mutual Funds Boost Own Performance with Unicorn Mark-Ups*, REUTERS (Aug. 11, 2016, 7:03 AM),

This Article analyzes the regulatory implications that arise from mutual funds amassing venture-capital-type portfolios. I argue that their investments in startups pose several potential concerns. One is investor awareness. Since venture investing runs counter to historical practices,⁷ mutual fund investors might not realize that their funds are purchasing these atypical assets. Another concern is liquidity. Investors expect to be able to redeem mutual fund shares nearly instantly.⁸ Since startups are private, however, their shares do not trade on a liquid market, which makes it more difficult for mutual funds to meet their shareholders' redemption expectations.

Finally, these investments raise concerns about competence and candor. Mutual fund portfolio managers are not typically experts in venture capital valuation, which casts their investing decisions in this arena into doubt. Moreover, once they have made these investments, funds are required to value them each day.⁹ With no market price to go on, the valuations are within management's discretion.¹⁰ The values managers posit impact the price that shareholders receive when they cash out and what newcomers pay when they invest.¹¹ Because mutual fund managers lack the experience and expertise to appropriately value their startup holdings, these prices might be inaccurate.

Fund discretion in valuation also creates the potential for misconduct. Funds are incentivized to choose high values, which among other benefits to the fund, makes them appear more successful than their peers and increases the fees collected from investors.¹² They might also be tempted to smooth returns, that is, report losses

<http://www.reuters.com/article/us-funds-valuations-idUSKCN10M0CP> [<https://perma.cc/7NQ2-TUJ9>].

7. See *supra* text accompanying note 6.

8. See *Mutual Funds and Exchange-Traded Funds (ETFs)—A Guide for Investors*, U.S. SEC. & EXCH. COMM'N, <https://www.sec.gov/investor/pubs/inwsmf.htm> [<https://perma.cc/GQF7-LJCQ>] [hereinafter *Guide for Investors*] (last updated Jan. 26, 2017).

9. See 17 C.F.R. § 270.22c-1(b)(1) (2016).

10. See *infra* Section II.C.

11. See *infra* Section II.C.1.

12. See *infra* Section II.C.3. While this concern has drawn little attention, funds have made headlines for marking down the values of their startups. See, e.g., Rolfe Winkler, *Fidelity Marks Down Startups Including Dropbox, Zenefits*, WALL ST. J. (Mar. 30, 2016, 1:34 PM), <http://www.wsj.com/articles/fidelity-marks-down-startups-including-dropbox-zenefits-1459346847>; Rolfe Winkler, *T. Rowe Price Marks Down Most of Its Tech Startups*, WALL ST. J. (Apr. 15, 2016, 6:52 PM), <http://www.wsj.com/articles/t-rowe-price-marks-down-most-of-its-tech-startups-1460759094>.

and gains when most advantageous for the fund rather than when they occur.¹³

This range of concerns should sound familiar to the Securities and Exchange Commission (the “SEC”). While mutual fund interest in startups is a new phenomenon, many have long invested in other illiquid assets, such as mature private firms¹⁴ and thinly traded debt instruments,¹⁵ which expose investors to risks similar to those noted above.¹⁶ That being the case, the securities laws contain rules that are at least partially responsive. The pertinent issues are, therefore, whether the existing, generally applicable, regulatory regime is sufficiently robust to handle venture-capital style investing or whether, and if so what, specially tailored rules might be advisable. I argue that entry into this new arena presents novel types and degrees of risk and, because of this, suggest targeted reforms that would mitigate the investor-protection concerns that result.

To assess the extent to which risks to investors remain despite existing safeguards, I describe the relevant rules, present a case study of Fidelity Magellan Fund’s compliance therewith, and scrutinize the fund’s startup valuations. Magellan is an iconic mutual fund. It is actively managed,¹⁷ which means its portfolio managers select securities with the hopes of beating the stock market’s return rather than duplicating it like an index fund,¹⁸ and it has about \$15 billion in assets and 156 million shares outstanding,¹⁹ making it one of the

13. For a discussion of smoothing, see AHMED RIAHI-BELKAOU, *ACCOUNTING THEORY* 56 (5th ed. 2004).

14. See Restricted Securities, Accounting Series Release No. 113, Investment Company Act Release No. 5847, 35 Fed. Reg. 19,989, 19,989 (Oct. 21, 1969).

15. See generally Money Market Fund Reform; Amendments to Form PF, Securities Act Release No. 9616, 79 Fed. Reg. 47,736 (July 23, 2014) [hereinafter Money Market Fund Reform] (codified at 17 C.F.R. pts. 230, 239, 270, 274, 279) (discussing mutual fund investments in illiquid debt).

16. Mutual fund liquidity has arisen as a concern at the SEC of late, as funds have increasingly diversified their holdings. See Kara M. Stein, Commissioner, U.S. Sec. & Exch. Comm’n, *Mutual Funds—The Next 75 Years*, Address to the Brookings Institution (June 15, 2015), https://www.sec.gov/news/speech/mutual-funds-the-next-75-years-stein.html#_ftnref35 [https://perma.cc/7U4U-98PX].

17. See Brett Owens, *Secure Your Retirement with These Top 4 Fidelity Funds*, *FORBES* (Jan. 29, 2017, 8:36 AM), <https://www.forbes.com/sites/brettowens/2017/01/29/secure-your-retirement-with-these-top-4-fidelity-funds/#7e31cd603e0c> [https://perma.cc/6UPF-GB9A (staff-uploaded archive)].

18. See VANGUARD, *ACTIVE AND PASSIVE INVESTING: WHAT YOU NEED TO KNOW* 2 (2016), https://www.vanguard.co.uk/documents/adv/literature/client_material/active-passive-investing-guide.pdf [https://perma.cc/5JX4-Y6UK].

19. See *Fidelity Magellan Fund: Summary*, FIDELITY, <https://fundresearch.fidelity.com/mutual-funds/summary/316184100> [https://perma.cc/MYZ5-4QCL]. The number of shares was calculated by dividing portfolio net assets by the fund’s net asset value.

largest and most popular actively managed equity mutual funds.²⁰ Most significantly, the fund is also an active investor in unicorns and, as it turns out, other startups.²¹

There are several reasons why Magellan is an attractive fund on which to focus. Because it is an industry leader with the resources to hire top counsel, its valuation processes and compliance activities are likely suggestive of larger industry practices, and, more specifically, because it is a Fidelity fund, its practices are likely suggestive of those in Fidelity's fund family, which has been at the forefront of startup investing.²² In addition, even if Magellan is an outlier in its approach to these securities, to the extent its practices raise investor-protection concerns, its scale means that a significant number of individuals could be harmed. This alone would warrant regulatory scrutiny.

Based on the above three-step analysis of risk, regulation, and case-study data, I conclude that, while liquidity does not appear to be a concern, there is reason to suspect that investors fail to realize that their mutual funds are investing in unicorns (and potentially other startups), that mutual fund investments in these securities are inadequately informed, and that the valuations that mutual funds report publicly and serve as the basis of redemptions and purchases may be inflated. The most significant findings are that Magellan's disclosures surrounding its startup investments and its valuation practices are opaque, and that its reported valuations indicate that the fund has done surprisingly well with this portion of its portfolio.²³ Its reported returns far outpace its other investments, the venture capital industry, and the public markets.²⁴ Such success does not necessarily indicate misconduct—it may owe to luck or skill that belies the fund's inexperience. Greater oversight, however, would provide increased confidence that the outstanding performance owes to these benign explanations.

While a study solely of Magellan's practices cannot prove reform is necessary, the findings and analysis herein lend credence to

20. See William Baldwin, *Mutual Fund Ratings: The Biggest Domestic-Stock Funds*, FORBES (June 26, 2015, 5:29 PM), <http://www.forbes.com/sites/baldwin/2015/06/26/mutual-fund-ratings-the-biggest-domestic-stock-funds/#4d7d69dd276b> [https://perma.cc/M5HY-C4LQ (staff-uploaded archive)].

21. See *infra* Table 1.

22. See Chernenko et al., *supra* note 6, at 19; Beth Healy, *Fidelity Funds High on Hot Startups*, BOS. GLOBE (Jan 13, 2017), <https://www.bostonglobe.com/business/2017/01/13/fidelity-funds-high-hot-startups/ZzJMQHiFbLjBMsd2MNSNxM/story.html> [https://perma.cc/A9HH-D2PS (staff-uploaded archive)].

23. See *infra* Sections II.C.5.c, II.C.6.c.

24. See *infra* Section II.C.6.c.

investor-protection concerns and, therefore, suggest that reforms are worth consideration. I argue for stricter rules regarding startup valuation methods and enhanced disclosures related to the venture portion of fund portfolios.²⁵

To limit the discretion over valuations that funds enjoy today, I suggest that rules should mandate valuation changes when, and only when, they are based on publicly available information. Funds would also be required to publicly disclose the information on which such changes are based. To improve investor awareness, I propose rules that would mandate prominent disclosure of the presence of venture-stage investments and the risks they pose. Disclosures of varying length and specificity would be necessary in certain advertisements and in several mandated filings, including the fund's prospectus (its primary sales document) and its statement of additional information (the "SAI") (a supplement to the prospectus with additional detail), the latter of which would contain a separate section devoted to the startup portion of the fund's portfolio. This combination of substantive restraints and additional transparency requirements would enhance the credibility of valuations and provide investors with adequate notice that their fund is involved in the venture capital arena.²⁶

Part I of this Article describes the rise of unicorns and the corresponding rise of mutual fund investments therein, the history of Fidelity's Magellan Fund, and the makeup of Magellan's venture-stage portfolio. In Part II, I discuss the investor-protection concerns that mutual fund investments in venture-stage firms give rise to and assess—through a juxtaposition of the current regulatory structure against Magellan's investing, valuation, and compliance practices—whether today's regulations are sufficient to protect investors. The analysis reveals gaps with respect to investor awareness and fund valuation practices for emerging firms. Part III proposes reforms that would mitigate these concerns.

25. *See infra* Part III.

26. Because investors have historically shown muted interest in fund disclosures, mandating additional transparency would have only a qualified impact. *See* ABT SRBI, MANDATORY DISCLOSURE DOCUMENTS TELEPHONE SURVEY 56, 78 (2008), <https://www.sec.gov/pdf/disclosedocs.pdf> [<https://perma.cc/WER9-RW67>] (finding that almost two-thirds of a sample of 1000 investors rarely, very rarely, or never read mutual fund prospectuses). Improved disclosures, however, would reach some investors, and provide constructive notice that legitimizes the new practice of investing in startups. Disclosure reform therefore serves as a worthwhile complement to the substantive portion of this Article's proposal, which would protect everyone regardless of their willingness and ability to read and understand fund disclosure documents.

I. UNICORNS, MUTUAL FUNDS, AND MAGELLAN

A. *The Proliferation of Unicorns*

Unicorns have upended norms in entrepreneurial capital raising, and, in so doing, have captured the attention of a growing number of mutual fund managers. There are currently 157 unicorns,²⁷ with Dropbox, Airbnb, and Uber among the most famous. Indeed, all of these companies are valued at over \$10 billion, which qualifies them for “decacorn” status.²⁸ Like these well-known firms, unicorns tend, by and large, to be Silicon Valley-based technology companies.²⁹

Conventionally, companies with such rich valuations would go public to allow founders, employees, and early-stage investors to cash in on the firm’s success. Unicorns, however, have shunned this path.³⁰ Travis Kalanick, the controversial CEO of Uber, captured the prevailing sentiment when he said that he would take the company public “one day before [his] employees and significant others come to [his] office with pitchforks and torches.”³¹

To remain private, these companies raise money under Rule 506(b) of the securities laws.³² So long as they limit participation to “accredited investors” and comply with several other restrictions, the rule allows them to collect round after round of venture capital without having to publicly register or provide investors with any specific disclosures.³³ The rules define accredited investors as

27. See Austin et al., *supra* note 3.

28. See *id.*; Sarah Frier & Eric Newcomer, *The Fuzzy, Insane Math That’s Creating So Many Billion-Dollar Tech Companies*, BLOOMBERG: TECH (Mar. 17, 2015, 9:00 AM), <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/NTD5-XHE8>] (noting use of the “decacorn” terminology).

29. See Frier & Newcomer, *supra* note 28.

30. See Jim Kerstetter, *Daily Report: When Employees Want to Cash Out Private Stock*, N.Y. TIMES (Aug. 12, 2016), <http://www.nytimes.com/2016/08/13/technology/daily-report-when-employees-want-to-cash-out-private-stock.html> [<https://perma.cc/TZ2L-5W7W>] (“It has become common wisdom among tech start-ups that an initial public offering of shares is something that should occur only after all other options have been exhausted.”).

31. Kevin Maney, *Silicon Valley Is Hoarding Wealth by Skipping IPOs*, NEWSWEEK (June 27, 2016, 9:25 AM), <http://www.newsweek.com/2016/07/08/silicon-valley-unicorns-ipo-474898.html> [<https://perma.cc/TCU9-QZBA>]. For a broader discussion on the decline in IPOs and potential explanations, see generally Jeff Schwartz, *The Twilight of Equity Liquidity*, 34 CARDOZO L. REV. 531 (2012).

32. See 17 C.F.R. § 230.506(b) (2016); see also Jennifer S. Fan, *Regulating Unicorns: Disclosure and the New Private Economy*, 57 B.C. L. REV. 583, 592 (2016) (“Typically venture-backed companies rely on Rule 506(b) . . .”).

33. See § 230.506(b).

individuals and institutions that meet certain financial thresholds.³⁴ Individuals must have a net worth of greater than \$1 million (excluding their principal residence) or sustained income of greater than \$200,000 per year,³⁵ while institutions must have greater than \$5 million in assets.³⁶

Typical startup investors include “angels” and venture capital funds.³⁷ Angels tend to be wealthy individuals who qualify as accredited investors.³⁸ Venture capital funds range in size, but they can have over a billion dollars in assets under management in their family of funds.³⁹ The investors in venture capital funds, technically limited partners, are all accredited.⁴⁰ It is only recently that mutual funds have shown interest in putting their enormous resources behind emerging firms.⁴¹ Funds from the largest families, including Vanguard, Fidelity, and Blackrock, have lately begun steering investor assets toward unicorns.⁴² Allocations have risen sharply over the last few years and now total over \$10 billion spread across over 250 funds,⁴³ with Fidelity’s funds leading the way.⁴⁴ And while nascent statistics focus on unicorn investments, other startups might be on fund ledgers as well. One surprise from this Article’s study of Fidelity’s Magellan Fund is that it has reached beyond these giants of the startup world.⁴⁵

While angel and venture capital investing is generally confined to accredited investors, anyone can invest in the mutual funds run by these well-known fund families and their peers.⁴⁶ Mutual fund

34. *See id.* § 230.501(a).

35. *See id.* § 230.501(a)(6)–(7).

36. *See id.* § 230.501(a)(3).

37. *See* Stephen G. Morrisette, *A Profile of Angel Investors*, 10 J. PRIV. EQUITY 52, 52 (2007).

38. *See id.* at 54.

39. *See* Tanya Benedicto Klich, *VC 100: The Top Investors in Early-Stage Startups*, ENTREPRENEUR (Feb. 19, 2015), <https://www.entrepreneur.com/article/242702> [<https://perma.cc/M3KY-RK5F>].

40. *See* Jeffrey Estes, Benedict Kwon & Michael Brown, *Venture Capital Investment in the United States: Market and Regulatory Overview*, PRAC. L. (Mar. 1, 2015), <http://us.practicallaw.com/7-501-0057?source=relatedcontent> [<https://perma.cc/KXD6-ZGNG>].

41. *See supra* text accompanying note 6.

42. Scott Austin et al., *Startup Stock Tracker*, WALL ST. J. (Jan. 17, 2017, 1:20 PM), <http://graphics.wsj.com/tech-startup-stocks-to-watch/> [<https://perma.cc/K22B-K27S>] (charting mutual fund investments in startup stocks).

43. *See* Chernenko et al., *supra* note 6, at 30 fig.1.

44. *Id.* at 19; Healy, *supra* note 22.

45. *See infra* Table 1.

46. *See* Jeff Schwartz, *Reconceptualizing Investment Management Regulation*, 16 GEO. MASON L. REV. 521, 521 (2009); *see also* MUTUAL FUND EDUC. CTR., <http://mfec.com>

investors are not wealthy individuals seeking out risky investments in young companies. They are retail investors, many of whom take part in mutual funds through their workplace 401(k) plans.⁴⁷ While angels and venture capital limited partners are likely to be sophisticated parties (or at the very least have an interest in and understanding of investing), mutual fund investors likely give investing little thought. They may even fear and dislike investing, but participate in mutual funds anyway because they have no other option to save for retirement.⁴⁸ They are among the least sophisticated investors in the securities markets.⁴⁹ If anyone needs protection in the venture capital space, it is them.

B. *Fidelity's Magellan Fund*

Magellan concentrates its investing in the publicly traded equities of large U.S. companies, but it has a pronounced newfound interest in startups.⁵⁰ Founded in 1963, Magellan grew from \$18 *million* in assets under management in 1977 to \$19 *billion* in 1990 under the acclaimed investor, Peter Lynch, who averaged a 29.2% annual return.⁵¹ Even after Lynch's tenure, the fund continued to prosper. In 2000, it was worth \$110 billion.⁵²

More recently, however, Magellan has struggled. Over the last ten years, it has trailed the S&P 500 Index, as well as peer funds.⁵³ As

/learn/mutual_funds/why_mutual_funds/content_tabbed/default.fs [https://perma.cc/K6ZU-Y7L4].

47. See Jeff Schwartz, *Rethinking 401(k)s*, 49 HARV. J. ON LEGIS. 53, 56–57 (2012); see also *Investing in Your 401(k)*, FIN. INDUS. REG. AUTH., <http://www.finra.org/investors/investing-your-401k> [https://perma.cc/8D43-8TKP].

48. See Jeff Schwartz, *Fairness, Utility, and Market Risk*, 89 OR. L. REV. 175, 256–57 (2010); see also *Investing in Your 401(k)*, *supra* note 47.

49. See *supra* text accompanying notes 46–48. Ninety-seven percent of mutual fund shares are owned by individual investors rather than institutions. See Sean Collins, *The IMF on Asset Management: Sorting the Retail and Institutional Investor “Herds”*, ICI VIEWPOINTS (June 4, 2015), https://www.ici.org/viewpoints/view_15_imf_gfsr_05 [https://perma.cc/RQE9-LYQF].

50. See *Fidelity Magellan Fund: Composition*, FIDELITY, <https://fundresearch.fidelity.com/mutual-funds/composition/316184100> [http://perma.cc/754G-XQ9Q] (showing composition as of March 31, 2017).

51. Matthew Schiffrin, *Peter Lynch: 10-Bagger Tales*, FORBES (Feb. 23, 2009, 6:00 PM), http://www.forbes.com/2009/02/23/lynch-fidelity-magellan-personal-finance_peter_lynch.html [https://perma.cc/46A7-AKMR (staff-uploaded archive)]; see also *Fidelity Magellan Fund: Summary*, *supra* note 19.

52. Eleanor Laise, *Can Anyone Steer This Ship?*, WALL ST. J. (Apr. 23, 2011, 12:01 AM), <http://www.wsj.com/articles/SB10001424052748704547604576263183921903172>.

53. See FIDELITY MAGELLAN FUND, PROSPECTUS 5 (May 28, 2016) [hereinafter FIDELITY MAGELLAN FUND, PROSPECTUS]; see also *Fidelity Magellan Fund: Summary*, *supra* note 19.

a result, it has suffered massive shareholder redemptions⁵⁴ and currently has assets under management of \$15.5 billion, a large figure to be sure but one well beneath its peak.⁵⁵ While Magellan is still one of the largest equity mutual funds, its rivals have gained at its expense.⁵⁶

The fund is also likely a victim of broader headwinds facing actively managed mutual funds. Empirical evidence has shown that investing in such funds is a poor choice. They routinely yield subpar returns and charge high fees, leaving investors worse off than if they had put their money in passively managed index funds.⁵⁷ While the futility of active management has been known for some time,⁵⁸ this knowledge has only recently had a major impact on investor decision making. Index funds are now seizing sizable chunks of market share.⁵⁹ In fact, the threat index funds pose may partially explain the startup-investing trend. Since there is no venture-capital index for passively managed funds to track, they cannot follow actively managed funds into this unexplored territory.

The Table below shows Magellan's venture investments.⁶⁰ It has invested a total of about \$134 million since the second quarter of 2012 (when its interest in startups appears to have begun).⁶¹ It held seventeen unique investments in twelve companies during the period

54. See Katy Marquardt, *Fidelity Magellan on Its New Course*, KIPLINGER (Nov. 16, 2006), <http://www.kiplinger.com/article/investing/T041-C009-S001-fidelity-magellan-on-its-new-course.html> [<https://perma.cc/7C3U-KNZM>].

55. See *Fidelity Magellan Fund: Summary*, *supra* note 19 (showing \$15.5 billion in portfolio net assets as of May 3, 2017); see also Laise, *supra* note 52.

56. See Baldwin, *supra* note 20 (including a table showing Magellan's recent size ranking among top equity funds).

57. See Laise, *supra* note 52.

58. See, e.g., Anne M. Tucker, *The Outside Investor: Citizen Shareholders & Corporate Alienation*, 11 U. ST. THOMAS L.J. 99, 139 (2013) (noting that "[t]he fees associated with active management and attempts to consistently beat the market are 'widely believed by experts to be a futile practice.'" (quoting Matthew D. Hutcheson, *Uncovering and Understanding Hidden Fees in Qualified Retirement Plans*, 15 ELDER L.J. 323, 345 (2007))).

59. See *id.*; Jason Zweig, *Are Index Funds Eating the World?*, WALL ST. J.: MONEYBEAT (Aug. 26, 2016, 11:46 AM), <http://blogs.wsj.com/moneybeat/2016/08/26/are-index-funds-eating-the-world/>.

60. The data in the table is based upon Fidelity Magellan Fund's quarterly N-CSR and N-Q reports filed with the SEC between June 2012 and March 2016. For a collection of these filings and reports, see generally *EDGAR Search Results: Fidelity Magellan Fund CIK#: 0000061397*, U.S. SEC. & EXCH. COMM'N, <https://www.sec.gov/cgi-bin/browse-edgar?company=fidelity+magellan&match=&CIK=&filenum=&State=&Country=&SIC=&owner=exclude&Find=Find+Companies&action=getcompany> [<https://perma.cc/JYP7-VDRZ>].

61. I reviewed all SEC quarterly filings going back to the fourth quarter of 2009 until March 2016. No startup investments appeared prior to the June 2012 filing. See *id.*

under review—the sixteen quarters beginning June 2012 and ending March 2016. While seven out of Magellan’s twelve venture investments are in unicorns, the Table shows that Magellan has been willing to invest in smaller startups as well. In addition, two of the firms—Meituan and Mobileye—are international companies (China- and Israel-based, respectively).⁶² Some of the firms listed below have gone public, but they were all private at the time of Magellan’s acquisition.

Table 1: Fidelity Magellan Fund Startup Investments

Company	Acquisition Date	Acquisition Price per Share (\$)	Investment Amount (\$)	Security Purchased
bluebird bio, Inc. [*]	July 23, 2012	.50	1,711,000	Preferred Series D
Cloudflare, Inc. [†]	Nov. 5, 2014	6.13	3,502,000	Preferred Series D
DocuSign, Inc. [†]	Oct. 21, 2013	5.56	90,000	Common Stock
	Mar. 3, 2014	13.18	99,000	Preferred Series B
	Mar. 3, 2014	13.34	30,000	Preferred Series B-1
	June 29, 2012	4.64	11,000,000	Preferred Series D
	Mar. 3, 2014	13.17	71,000	
	Mar. 3, 2014	13.13	1,831,000	Preferred Series E
HubSpot, Inc. [*]	Oct. 25, 2012	5.62	15,000,000	Preferred Series E
KaloBios Pharmaceuticals, Inc. [*]	May 2, 2012	3.40	8,000,000	Preferred Series E
Malwarebytes Inc.	Dec. 21, 2015	10.37	35,000,000	Preferred Series B
Meituan Corp. [†]	Jan. 26, 2015	6.32	10,000,000	Preferred Series D
Mobileye N.V. ^{*†}	Aug. 15, 2013	34.90	8,878,000	Preferred Series F
Nutanix, Inc. [†]	Aug. 26, 2014	13.40	6,193,000	Preferred Series E

62. See *About Us*, MOBILEYE, <http://www.mobileye.com/about/> [https://perma.cc/YQZ6-AENP]; *Meituan.com*, CRUNCHBASE, <https://www.crunchbase.com/organization/meituan-com#/entity> [https://perma.cc/J2Q3-5Z4P (staff-uploaded archive)].

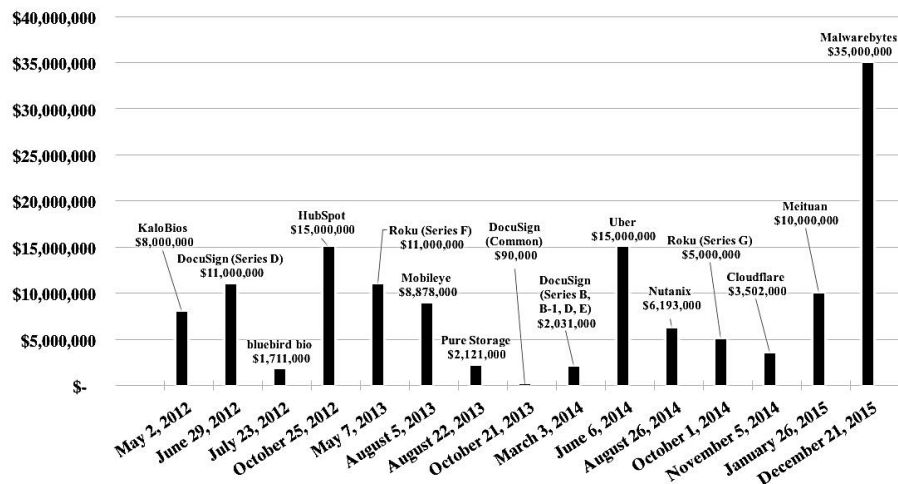
Company	Acquisition Date	Acquisition Price per Share (\$)	Investment Amount (\$)	Security Purchased
Pure Storage Inc. ^{*†}	Aug. 22, 2013	6.93	2,121,000	Preferred Series E
Roku, Inc.	May 7, 2013	.91	11,000,000	Preferred Series F
	Oct. 1, 2014	1.30	5,000,000	Preferred Series G
Uber Technologies, Inc. [†]	June 6, 2014	62.05	15,000,000	Preferred Series D
		Total	134,526,000	

* Indicates that the company has gone public.

† Indicates that the company is a “unicorn.”

The following timeline provides a sense of the scale and timing of these investments. Since its first investment in May 2012, Magellan has consistently backed several startups a year. It had never invested more than \$15 million until more than tripling that amount in its latest \$35 million bet on Malwarebytes.⁶³

Figure 1: Fidelity Magellan Startup Investments Timeline



The discussion above provides an overview of Magellan and its investment practices without getting into valuation and returns data

63. See Fidelity Magellan Fund, Quarterly Holdings Report (Form N-Q) (Feb. 26, 2016).

for the fund's startup portfolio. This information is presented as part of the investor-protection analysis below, in Section II.C.6., which assesses the performance of the fund's venture-style investments and weighs the soundness of its valuations.

II. INVESTOR-PROTECTION ANALYSIS

Mutual funds' recent interest in startups raises concerns about investor awareness and fund liquidity, and about the competency and motivations of mutual fund managers. While current mutual fund regulations partially address these concerns, an analysis of Magellan's holdings, disclosures, and venture-stage firm valuations suggests that the current rules provide insufficient protection.

A. *Investor-Awareness Concerns*

Mutual fund investors may not realize that their funds are investing in startups. Ordinarily, investors might be relatively unconcerned about the exact portfolio holdings of their funds. After all, a major attraction of mutual funds is that investing decisions are delegated to fund management. Venture investments, however, raise special concerns.

Although investors delegate stock picking to the fund manager, law and policy dictate that the investors' reasonable expectations for the contents of their portfolios set the boundaries of that authority. Since mutual funds are known for investing in public securities,⁶⁴ their stakes in startups, which are private, are likely contrary to such expectations. The only way to ensure that such investments align with reasonable expectations is for funds to give meaningful notice to their investors. The concern is whether they are providing it.

While the relevant securities laws make no explicit appeal to "reasonable expectations,"⁶⁵ the principle has purchase in this context because of the contractual and fiduciary roots of the relationship between the mutual fund managers and the investors.⁶⁶ The representations that management makes about its fund can be viewed as outlining the terms of a contract between the fund and its investors,

64. See Steve Schaefer, *Getting Into the Unicorn Boom: 10 Mutual Funds with Stakes in Pre-IPO Tech Stars*, FORBES (Oct. 14, 2015, 3:25 PM), <https://www.forbes.com/sites/steveschaefer/2015/10/14/unicorns-funds-fidelity-trowe-uber-dropbox/#4b4409a02a92> [https://perma.cc/T3G7-VBVM] (describing mutual funds as "players who do the bulk of their work in public companies" and "largely composed of more liquid public stocks").

65. See *infra* Section II.A.1.

66. See 15 U.S.C. § 80a-35 (2012).

who accept when they purchase their shares,⁶⁷ and the principle that reasonable expectations form contractual boundaries is a central tenet of contract law.⁶⁸ For example, when parties act in ways that are counter to the reasonable expectations of their counterparties, they violate the duty of good faith.⁶⁹ Similarly, counterparties are only bound to boilerplate terms if such terms comport with reasonable expectations.⁷⁰ By extension, mutual fund investments are only appropriate if they match the reasonable expectations of the fund's investors.⁷¹ Given their history, investments in public companies like Home Depot and Apple would fall within investor expectations, while venture-style investments in private companies would likely fall outside them.⁷² Meaningful disclosure—which would expand such expectations—is the only cure.

Part of why such investments would otherwise fall outside investor expectations—and why this is worrisome—is the unique risks that startups, including unicorns, pose. Since startups are valued internally,⁷³ these investments present risks regarding the accuracy of their valuations that are foreign to a portfolio consisting of the equity of publicly traded firms, where valuation simply equates to market prices. While other types of investments might also pose the risk of faulty valuations, here that risk is especially acute. Because startup valuation is particularly subjective, there is more room for error and bias. These unique risks make meaningful notice all the more important. For notice to be *meaningful*, funds must provide more than just a note that startups are present; unless investors are also

67. For a discussion of the contractual nature of the mutual fund relationship, see Wallace Wen Yeu Wang, *Corporate Versus Contractual Mutual Funds: An Evaluation of Structure and Governance*, 69 WASH. L. REV. 927, 939–41 (1994). Lawsuits where management is alleged to have violated the terms of the relationship, however, are typically brought under the securities laws. See Richard L. Levine, Yvonne Cristovici & Richard A. Jacobsen, *Mutual Fund Market Timing*, 52 FED. LAW., Jan. 2005, at 28, 32–33 (discussing legal theories underlying claims that funds failed to follow announced policies regarding market timing).

68. See *Nw., Inc. v. Ginsberg*, 134 S. Ct. 1422, 1431–32, 1432 n.2 (2014) (listing the reasonable expectations doctrine as one of many core concepts of contract law); see also Jay M. Feinman, *Good Faith and Reasonable Expectations*, 67 ARK. L. REV. 525 (2014) (analyzing the role and importance of the reasonable expectations doctrine in contract law).

69. See Feinman, *supra* note 68, at 557.

70. See RESTATEMENT (SECOND) OF CONTRACTS § 211 cmt. b (AM. LAW INST. 1981).

71. See *supra* text accompanying notes 67–68.

72. See *supra* text accompanying notes 6, 64.

73. See discussion *infra* Section II.C.

informed of the associated risks, they cannot plausibly be viewed as informed.

Fiduciary law buttresses the conclusion that proper notice is required. Because of the trust investors bestow in them, mutual fund managers are fiduciaries of the funds they manage and, by extension, their shareholders.⁷⁴ Fiduciaries may not violate the reasonable expectations of those whom they serve,⁷⁵ and full disclosure is required if candor is called into question.⁷⁶ These longstanding fiduciary doctrines suggest that—since investments in startups would come as a surprise, and since the valuation of such investments raises concerns about management integrity—mutual fund managers should provide full and fair disclosure.

While investors might not normally focus on the precise contours of their fund's portfolio, startups are different. Core common law principles dictate that when managers choose to invest in this unique and heretofore largely unprecedented asset class that poses unusual challenges, they provide investors with clear notice of the practice and the concomitant risks.

1. The Relevant Securities Laws and Magellan's Compliance Efforts

The securities laws, primarily the Investment Company Act⁷⁷ and the regulations thereunder,⁷⁸ contain a number of rules designed to provide investors with information about fund holdings and to prevent misrepresentations with respect thereto. The rules about quarterly reports, prospectuses, fund advertisements, and fund naming conventions are all relevant. A survey of Magellan's efforts to comply with these regulations gives insight into whether the requirements are effective. While the fund provides information about startup investments in response to such rules, it does not do so in a way that would be helpful to most fund investors. Since

74. See 15 U.S.C. § 80a-35 (2012) (listing causes of action for breach of fiduciary duty); see also U.S. SEC. & EXCH. COMM'N, STUDY ON INVESTMENT ADVISERS AND BROKER-DEALERS 21–22 (2011), <https://www.sec.gov/news/studies/2011/913studyfinal.pdf> [<https://perma.cc/V7D8-JU7J>]; Donald C. Langevoort, *Private Litigation to Enforce Fiduciary Duties in Mutual Funds: Derivative Suits, Disinterested Directors and the Ideology of Investor Sovereignty*, 83 WASH. U. L. Q. 1017, 1021 (2005). Since the duty is technically owed to the fund, private causes of action are derivative in nature. See *Joy v. North*, 692 F.2d 880, 887 (2d Cir. 1982); Anita K. Krug, *Investment Company as Instrument: The Limitations of the Corporate Governance Regulatory Paradigm*, 86 S. CAL. L. REV. 263, 293–99 (2013); Langevoort, *supra*, at 1025.

75. See RESTATEMENT (SECOND) OF AGENCY §§ 383, 385 (AM. LAW INST. 1958).

76. See *id.* § 390 cmt. a.

77. 15 U.S.C. §§ 80a-1 to -64 (2012).

78. 17 C.F.R. §§ 270.0-1 to 270.60a-1 (2016).

Magellan's disclosures appear compliant, the lack of meaningful information looks to be the result of a regulatory gap.

a. Quarterly Reporting Obligations

Mutual funds are required to file quarterly reports,⁷⁹ and these forms must contain a listing of their investments.⁸⁰ A knowledgeable investor could pull the filings from the SEC's website and see, at least as of quarter-end, what firms were present. Investors might recognize the unicorns; if not, an online search of unfamiliar names would reveal their presence. As required, Magellan lists its holdings, including unicorns and other startups, in these reports.⁸¹

Despite their inclusion, only sophisticated investors would be able to pick out the investments in young firms and understand the risks they entail. When Magellan and others invest in such companies, they typically purchase shares in a particular series of preferred stock.⁸² Since the rules require that funds include the nature of their holdings in their quarterly reports,⁸³ Magellan notes when it has purchased this type of security.⁸⁴ While seeing that a fund holds shares in a series of a company's preferred stock is a giveaway to sophisticated investors that the issuer of such securities is probably a startup, retail investors would likely miss the signal.⁸⁵ Magellan never plainly states that these are investments in venture-stage firms.

The reports also provide only hints that such firms are private and the associated risks. Footnotes appended to these holdings reveal that the securities are "restricted," and Magellan explains therein that restricted securities have not been registered under the securities laws.⁸⁶ Unbeknownst to the lay reader, this legal jargon means that

79. *See id.* § 270.30b1-5.

80. *See* U.S. SEC. & EXCH. COMM'N, OMB NO. 3235-0570, FORM N-CSR, Item 6 [hereinafter FORM N-CSR], <http://www.sec.gov/about/forms/formn-csr.pdf> [https://perma.cc/J9HM-34HT]; U.S. SEC. & EXCH. COMM'N, OMB NO. 3235-0578, FORM N-Q, Item 1 [hereinafter FORM N-Q], <https://www.sec.gov/about/forms/formn-q.pdf> [https://perma.cc/W5WA-ALDL].

81. *See, e.g.*, FIDELITY MAGELLAN FUND, ANNUAL REPORT 5–15 (2016) [hereinafter FIDELITY MAGELLAN FUND, ANNUAL REPORT].

82. *See* Katie Benner, *When a Unicorn Start-Up Stumbles, Its Employees Get Hurt*, N.Y. TIMES (Dec. 23, 2015), <https://www.nytimes.com/2015/12/27/technology/when-a-unicorn-start-up-stumbles-its-employees-get-hurt.html> [https://perma.cc/PKY7-VS3R]; *see also supra* Table 1.

83. *See* 17 C.F.R. § 210.12-12 (2016); FORM N-Q, *supra* note 80, Item 1.

84. *See, e.g.*, FIDELITY MAGELLAN FUND, ANNUAL REPORT, *supra* note 81, at 5–15.

85. Even sophisticated investors would need to conduct further research to be sure. Such companies are not the only ones that issue preferred shares and, in fact, public companies also issue them.

86. FIDELITY MAGELLAN FUND, ANNUAL REPORT, *supra* note 81, at 13.

such securities are not publicly traded, and the companies in which they represent an ownership interest may not be public either.⁸⁷ Several pages later, in a discussion of “Significant Accounting Policies,” the fund explains a key risk associated with private holdings, noting that restricted securities “may be difficult” to resell.⁸⁸ The fund does not further connect the dots in that it never informs investors that, when securities are difficult to resell, the fund’s valuation of those securities is in its discretion; nor, of course, does it mention the inherent problems with the fund having such power.

While Magellan’s quarterly disclosures may provide enough for sophisticated and diligent investors to be wary, this is of little comfort given that mutual funds are aimed at the very people who would lack the knowledge to find the relevant information in these reports and then ascertain its meaning.⁸⁹

b. Prospectus Disclosure Requirements

The securities laws shape the mutual fund prospectus as the primary resource for fund investors.⁹⁰ As such, it would be a promising location for disclosure of venture investments. At least in Magellan’s case, however, meaningful disclosure is lacking.

The regulations require that the prospectus discuss, along with the fund’s investment objectives, its principal strategies for reaching those objectives, and the attendant risks.⁹¹ More detailed rules that expand on these requirements dictate whether this broad disclosure mandate means that funds that invest in startups must so disclose. As noted, funds need only describe “principal” strategies.⁹² According to the rules, whether an investment strategy is a “principal” one “depends on the strategy’s anticipated importance in achieving the Fund’s investment objectives[.]”⁹³ To make this determination, in addition to considering the amount of fund assets deployed pursuant to a particular strategy, funds are also required to assess “the likelihood of the Fund’s losing some or all of those assets from

87. *See Rule 144: Selling Restricted and Control Securities*, U.S. SEC. & EXCH. COMM’N, <https://www.sec.gov/investor/pubs/rule144.htm> [<https://perma.cc/U5ES-82QD>].

88. FIDELITY MAGELLAN FUND, ANNUAL REPORT, *supra* note 81, at 21, 26.

89. *See supra* text accompanying notes 46–49.

90. *See, e.g.*, 15 U.S.C. §§ 80a-1 to -64 (2012); 17 C.F.R. §§ 270.0-1 to 270.60a-1 (2016).

91. *See* U.S. SEC. & EXCH. COMM’N, OMB NO. 3235-0307, FORM N-1A, Item 9, at 11 [hereinafter FORM N-1A], <https://www.sec.gov/about/forms/formn-1a.pdf> [<https://perma.cc/SUN8-ATUB>].

92. *See id.* Item 4, at 6, Item 9, at 11.

93. *Id.* Item 9(b)(1), Instruction 2, at 11.

implementing the strategy.”⁹⁴ As part of its principal-strategy discussion, funds are to note, among other things, “the particular type or types of securities in which the Fund principally invests or will invest.”⁹⁵

Finally, to meet the risk disclosure obligation, funds must describe “the principal risks of investing in the Fund, including the risks to which the Fund’s particular portfolio as a whole is expected to be subject and the circumstances reasonably likely to affect adversely the Fund’s net asset value, yield, or total return.”⁹⁶ The wording of these rules provides funds with a large degree of discretion in choosing what to say and how to say it.

Magellan did not view such requirements as necessitating disclosure of its venture investments. In a recent prospectus, the fund describes its objective as “capital appreciation.”⁹⁷ It explains that its strategy for achieving capital appreciation is to purchase “growth” or “value” stocks or both.⁹⁸ As for the type of securities that underpin this strategy, Magellan says it invests in equities, including “common stocks, preferred stocks, convertible securities, and warrants.”⁹⁹ It decides how to allocate the fund’s money through “fundamental analysis, which involves a bottom-up assessment of a company’s potential for success in light of factors including its financial condition, earnings outlook, strategy, management, industry position, and economic and market conditions.”¹⁰⁰ Finally, Magellan describes, in general terms, three categories of fund risks: “Stock Market Volatility,” “Foreign Exposure,” and “Issuer Specific Changes”—none of which mention, or have special relevance to, startups.¹⁰¹

The fund’s broad descriptions of its strategy and the associated risks fail to clearly indicate the presence of startups within the fund’s portfolio. Though Magellan does allude to investments in preferred stock,¹⁰² as noted above, few retail investors are likely to connect this

94. *Id.*

95. *Id.* Item 9(b)(1), at 11.

96. *Id.* Item 9(c), at 11.

97. FIDELITY MAGELLAN FUND, PROSPECTUS, *supra* note 53, at 3.

98. *Id.* at 4.

99. *Id.* at 7.

100. *Id.* Form N-1A also instructs mutual funds to discuss non-principal strategies and the related risks in their SAIs. FORM N-1A, *supra* note 91, Item 16(b), at 19. Magellan’s SAI contains no additional disclosures, however, perhaps because the fund views its description of its principal strategies and risks as broad enough to capture all of its investing activities.

101. FIDELITY MAGELLAN FUND, PROSPECTUS, *supra* note 53, at 7–8.

102. *See id.* (defining “equity securities” as “common stocks, preferred stocks, convertible securities, and warrants” under a heading marked “Description of Principal

disclosure to the fund's practice of investing in emerging firms. Nor are the young companies in which the fund invests listed in the prospectus.¹⁰³ While Magellan's sweeping generalizations about strategy and risk theoretically capture venture investing, given the historical practices and reputations of funds like Magellan, investors would likely view these disclosures as pertaining to public equities.¹⁰⁴ The institutional context means that only direct disclosures would reframe investors' reasonable expectations.

c. Limitations on Mutual Fund Advertisements

Extensive rules pertain to mutual fund advertisements,¹⁰⁵ including the contents of their websites,¹⁰⁶ but the only relevant requirement is that they not be materially misleading.¹⁰⁷ This backstop rule leaves mutual funds free to describe venture investments, but nothing requires them to do so.

Magellan's website makes no specific disclosures about its investments in young firms.¹⁰⁸ Rather, it reinforces the impression that Magellan invests solely in big public companies. The top ten holdings list a series of household names including Apple, Facebook, and Wells Fargo.¹⁰⁹ The included "Style Map" describes Magellan as a large cap growth fund that focuses on companies valued at more than \$10 billion.¹¹⁰ The message is that Magellan managers seek to pick out the best investments from the largest listed companies.¹¹¹

Security Types" and acknowledging that "[t]he fund normally invests primarily in common stock and securities convertible into common stock, but may also invest in other types of securities in seeking its objective").

103. See generally *id.* (containing no listing of venture firms).

104. See *supra* Section I.B.

105. See, e.g., 17 C.F.R. § 230.482 (2016).

106. Mutual funds are subject to the registration requirements of the Securities Act of 1933, see *id.*, which limit sales practices over the Internet, see THOMAS LEE HAZEN, TREATISE ON THE LAW OF SECURITIES REGULATION, 1 LAW SEC. REG. § 2:29 & n.11 (7th ed. 2016).

107. See 17 C.F.R. § 230.156(a) (2016).

108. See *Fidelity Magellan Fund: Summary*, *supra* note 19.

109. *Id.*

110. *Id.*

111. A particularly interested investor could find the fund's list of holdings through a "Prospectus and Reports" link on its website. See *id.* Investors are unlikely to take this step, however, and, as noted, a portfolio list provides only part of what investors need to know to understand the implications of their fund's foray into venture investing. See Section II.A.1.a.

d. *Fund Name Regulations*

A mutual fund's name can play an important role in shaping investors' expectations.¹¹² A clear and descriptive name could put investors on notice that startups are present; a vague or misleading one, on the other hand, could imply just the opposite. Despite their potential to inform, the securities laws do not harness fund names as a regulatory tool. Rather than prescribe that a fund's name gives some indication of its strategy, the rules police the boundaries of naming practices.

The central rule is that names may not be "materially deceptive or misleading."¹¹³ In discussing this language, the SEC has said that a name could be misleading if it does not fit the investment strategy of the fund.¹¹⁴ Detailed rules police the fit issue in certain contexts.¹¹⁵ The rules require that if a fund's name suggests that it will focus its investing on a particular type of investment, like stocks or bonds, or a particular industry or industries, it must adopt a policy that it will invest eighty percent of its assets in accordance with those representations.¹¹⁶ Essentially the same rule applies to funds purporting to invest in certain geographic regions or countries and those purporting to invest in tax-exempt instruments.¹¹⁷ If a fund's name lacks such specificity, the fund has a great degree of latitude.

The name "Magellan" takes advantage of this freedom. It conjures the image of the famed Portuguese explorer, and in doing so, suggests boldness and exploration, but ultimately provides no insight into what is actually in the fund.

112. See Michael J. Cooper, Huseyin Gulen & P. Raghavendra Rau, *Changing Names with Style: Mutual Fund Name Changes and Their Effects on Fund Flows*, 60 J. FIN. 2825, 2825 (2005).

113. See 15 U.S.C. § 80a-34(d) (2012).

114. See Investment Company Names, Investment Company Act Release No. 24,828, 66 Fed. Reg. 8509, 8514 (Jan. 17, 2001) (codified at 17 C.F.R. § 270.35d-1 (2016)) ("In determining whether a particular name is misleading, the Division will consider whether the name would lead a reasonable investor to conclude that the company invests in a manner that is inconsistent with the company's intended investments or the risks of those investments.").

115. See 17 C.F.R. § 270.35d-1 (2016); see also Investment Company Names, 66 Fed. Reg. at 8509 ("Today the Commission is adopting new rule 35d-1 to address certain investment company names that are likely to mislead an investor about a company's investment emphasis.").

116. See § 270.35d-1(2)(i); Investment Company Names, 66 Fed. Reg. at 8510.

117. See § 270.35d-1(3)-(4).

2. Summary—and a Note on Scale

Magellan never tells investors that it invests in emerging firms; nor does it describe the risks that the practice entails. Even worse, the two most likely sources of information—the fund prospectus and website—leave investors with the contrary impression. In all likelihood, the vast majority of the fund’s participants have no idea that Magellan has transformed them into venture capital investors.

This is problematic even though, as of its March 2016 quarterly report, Magellan had \$166 million invested in venture-stage firms, which is only 1.1% of its \$15 billion asset base.¹¹⁸ I argued above that notifying investors of venture investments is important because, otherwise, such investments would fall outside their reasonable expectations, and that adherence to such expectation was particularly important here because of the fiduciary character of the manager-shareholder relationship and the potential for manipulation that such investments give rise to.¹¹⁹ The relative size of a fund’s exposure vis-à-vis the remainder of its portfolio does not alter that analysis. As is the case with Magellan, the absolute stakes can still be large. Regardless, because of the risk of misconduct, transparency is necessary even if stakes are small (in relative or absolute terms).¹²⁰

This idea is reflected in central doctrines from corporate and securities law, which mandate disclosure when there is the risk of manipulation, or where incentives are misaligned, even if the amounts involved would otherwise appear inconsequential. Corporate law requires complete disclosure of conflicts of interest regardless of amount.¹²¹ Investment advisers, like Fidelity, are bound by the same standard.¹²² The strict nature of these obligations stems from the

118. FIDELITY MAGELLAN FUND, ANNUAL REPORT, *supra* note 81, at 12. For the calculations underlying this analysis, see Jeff Schwartz, Fidelity Magellan Spreadsheet (on file with the North Carolina Law Review).

119. See *supra* text accompanying notes 64–76.

120. Nor does it matter that losses would be spread across the fund’s many investors. See Floyd Norris, *Pile of Pennies Is Adding Up to a Scandal in Mutual Funds*, N.Y. TIMES, Nov. 1, 2003, at C1 (discussing how small individual losses result in a windfall for those who stand to gain).

121. See, e.g., 8 DEL. CODE ANN. tit. 8 § 144 (LEXIS through 2016 Legis. Sess.) (providing that conflicts of interest render corporate transactions voidable absent full disclosure); see also *Anadarko Petroleum Corp. v. Panhandle E. Corp.*, 545 A.2d 1171, 1174 (Del. 1988) (“It is a basic principle of Delaware General Corporation Law that directors are subject to the fundamental fiduciary duties of loyalty and disinterestedness. Specifically, directors cannot stand on both sides of the transaction nor derive *any* personal benefit through self-dealing.” (emphasis added)).

122. See U.S. SEC. & EXCH. COMM’N, *supra* note 74, at 22. As part of its fiduciary duty, an adviser must fully disclose to clients all material information that is intended “to

fiduciary nature of the relationships at issue—management and shareholder in the former and investment adviser and client in the latter.

In addition, although “materiality” is the guiding principle for disclosure in securities regulation,¹²³ quantitatively immaterial information has long been called for when there is the risk of shareholder abuse. For example, nearly every detail of executive compensation must be disclosed irrespective of the amount.¹²⁴ Similarly, all conflict of interest transactions exceeding \$120,000 must be disclosed—a minute figure for even the smallest public companies.¹²⁵

More generally, the doctrine of qualitative materiality recognizes that misstatements with respect to small amounts might be material if they implicate management integrity. According to the SEC, a small misstatement would be material, for example, if it increases “management’s compensation[,]” “masks a change in earnings or other trends[,]” or conceals an “unlawful transaction.”¹²⁶

Although Magellan’s venture-style holdings are relatively small, they still amount to an enormous sum, and even if the fund was less exposed, the potential for misconduct inherent in such investments militates in favor of disclosure nonetheless. That the presence of venture investments, and the risks they entail, is never made clear to investors indicates noncompliance by Magellan or a regulatory gap.

3. Inadequate Rules or Compliance Deficit?

While Magellan could have done more to inform investors, it does not appear that the fund fell short of its legal obligations. One could argue that, because of the large downside risk associated with investing in startups, the strategy qualifies as a “principal” one necessitating disclosure in the prospectus.¹²⁷ But Magellan has a good

eliminate, or at least expose, *all* conflicts of interest which might incline an investment adviser—consciously or unconsciously—to render advice which was not disinterested.” *Id.* (quoting *SEC v. Capital Gains Research Bureau, Inc.*, 375 U.S. 180, 191–92 (1963) (emphasis added)).

123. *Cf.* *TSC Indus., Inc. v. Northway, Inc.*, 426 U.S. 438, 449 (1976) (determining that, under the standard of materiality cited in § 240.14a-9, a fact is material if “there is a substantial likelihood that a reasonable shareholder would consider it important in deciding how to vote”).

124. *See* Regulation S-K, Item 402, 17 C.F.R. § 229.402 (2016).

125. *See* Regulation S-K, Item 404, 17 C.F.R. § 229.404 (2016).

126. SEC Staff Accounting Bulletin No. 99, 64 Fed. Reg. 45,150, 45,152 (Aug. 12, 1999).

127. *See supra* text accompanying notes 91–93.

argument that even large losses would have a small impact on its bottom line: even a 50% loss would be one-half of 1% of its total assets. One could also argue that Magellan's website is materially misleading, but again the size of the investment cuts against this position, and diligent investors can find holdings information linked to the fund's website.¹²⁸ Finally, it could be argued that the principle of qualitative materiality just described suggests that, notwithstanding the language of the rules, Magellan should have included more information.

But SEC guidance seems to bless the basic and high-level disclosures that Magellan offers. Rule changes in 1998¹²⁹ eased the disclosure requirements with respect to fund strategies in an attempt to render the documents less lengthy and complicated.¹³⁰ In proposing the rule, the SEC even expressed concern that companies were unnecessarily discussing "illiquid securities" that were not part of a fund's principal investment strategy.¹³¹ The best interpretation of Magellan's conduct seems to be that it is complying with the rules, such as they are, but the SEC did not foresee the venture-investing trend and sanctioned a level of disclosure that leaves investors with inadequate information.

B. *Liquidity Concerns*

Startup investing also poses liquidity risk. The lack of a market for venture investments runs contrary to the legally grounded investor expectation that they will be able to redeem mutual fund shares almost immediately.¹³² By rule, funds are required to redeem their investors' shares within seven days of such requests,¹³³ but the

128. See *supra* note 111 and accompanying text.

129. See Registration Form Used by Open-End Management Investment Companies, Securities Act Release No. 7512, 63 Fed. Reg. 13,916, 13,916, 13,920 (Mar. 13, 1998).

130. See Registration Form Used by Open-End Management Investment Companies, Securities Act Release No. 7398, 62 Fed. Reg. 10,898, 10,900 (Feb. 27, 1997).

131. *Id.* at 10,909. The SEC's defense of its rule change includes the following:

The investments described often include instruments, such as illiquid securities, repurchase agreements, and options and futures contracts, that do not have a significant role in achieving a fund's investment objectives. Disclosing information about each type of security in which a fund might invest does not appear to help investors evaluate how the fund's portfolio will be managed or the risks of investing in the fund. This disclosure also adds substantial length and complexity to fund prospectuses, contributing to investor perceptions that prospectuses are too complicated and discouraging investors from reading a fund's prospectus.

Id.

132. See *Guide for Investors*, *supra* note 8.

133. See 15 U.S.C. § 80a-22(e) (2012).

industry norm is to do so within one day.¹³⁴ Since holdings in venture-stage firms are illiquid, and therefore unavailable to meet such requests, if a large percentage of a fund's portfolio is allocated to them, a fund might be unable to meet its obligations in times of stress. Such holdings also threaten other aspects of the fund's strategy. With these holdings unavailable for sale, other assets must be traded to generate the cash to repurchase shares from investors even if a fund would prefer to retain them.

Venture holdings are among the most illiquid financial assets. Like other private firms, there is no active market on which to trade such securities.¹³⁵ Much debt, in contrast, while appropriately described as illiquid, is often thinly traded.¹³⁶ In times of stress, the relative illiquidity of debt is problematic, but at least on a routine basis there is somewhere to sell. That is not the case with startups.

To counter illiquidity risk and police the seven-day redemption requirement, SEC guidelines limit mutual fund investments in illiquid assets to 15% of their portfolios.¹³⁷ The agency defines such assets as those "which may not be sold or disposed of in the ordinary course of business within seven days at approximately the value at which the mutual fund has valued the investment[.]"¹³⁸ Because the SEC has

134. See Open-End Fund Liquidity Risk Management Programs; Swing Pricing; Re-Opening of Comment Period for Investment Company Reporting Modernization Release, Securities Act Release No. 9922, Investment Company Act Release No. 31,835, 80 Fed. Reg. 62,274, 62,277 (Sept. 22, 2015) [hereinafter Liquidity Risk Management].

135. See Schwartz, *supra* note 31, at 556–60 (discussing the rise and decline of private-share trading platforms like SharesPost and SecondMarket); see also Katie Benner, *Airbnb and Others Set Terms for Employees to Cash Out*, N.Y. TIMES (Aug. 10, 2016), <http://www.nytimes.com/2016/08/12/technology/airbnb-and-others-set-terms-for-employees-to-cash-out.html> [<https://perma.cc/SL3A-BAEH>]. The most likely avenue for a mutual fund looking to exit would be a sale back to management or to a private equity buyer. See VENTURE CAPITAL: INVESTMENT STRATEGIES, STRUCTURES, AND POLICIES 396 (Douglas J. Cumming ed., 2010). To mitigate liquidity risk, there is evidence that funds negotiate for greater redemption rights than other venture-stage buyers. See Chernenko et al., *supra* note 6, at 23 (finding that redemption rights are fifteen percent more prevalent in venture funding rounds where mutual funds are investing). Redemption rights, however, offer little comfort. See Scott Edward Walker, *Demystifying the VC Term Sheet: Redemption Rights*, VENTUREBEAT (July 4, 2011, 6:00 AM), <http://venturebeat.com/2011/07/04/demystifying-the-vc-term-sheet-redemption-rights/> [<https://perma.cc/7W4H-YFTY>].

136. See Money Market Fund Reform, *supra* note 15, at 47,813–14 (stating that "most money market portfolio securities are not frequently traded" and that "many debt securities held by other types of funds do not frequently trade").

137. Revision of Guidelines to Form N-1A, Securities Act Release No. 6927, Investment Company Act Release No. 18,612, 57 Fed. Reg. 9828, 9829 (Mar. 12, 1992).

138. *Id.*

said that shares in private companies presumptively meet this definition,¹³⁹ startup holdings count against the 15% cap.

In the context of equity mutual funds, where the remaining holdings are predominantly in public companies, this 15% cap provides ample protection.¹⁴⁰ Thus, so long as funds are complying with the rule, there is little concern that they will be unable to meet their redemption commitments. And Magellan does not come close to the 15% limit. The allocation to venture-stage firms in the period studied never exceeded around 1%.¹⁴¹ Outside of one anomalous quarter, its total investment in illiquid assets has remained below 2%.¹⁴² If other funds are behaving like Magellan, the illiquidity of startup investments does not appear to be a large concern.

C. Investment and Valuation: Management Competency and Candor

Although the illiquidity of startups may not pose a major threat to the ability of funds to timely redeem investor shares, investing in emerging firms and later valuing them raises significant concerns about management competence and candor. While regulations do little to directly police the competency of portfolio managers to invest in and value startups, overlapping securities laws and accounting rules contain a number of procedural and disclosure requirements designed to instill rigor and honesty into the valuation process. Despite its safeguards, however, this regulatory approach appears insufficient. Judging by Magellan's disclosures and valuations, the risk remains

139. Resale of Restricted Securities; Changes to Method of Determining Holding Period of Restricted Securities Under Rules 144 and 145, Securities Act Release No. 6862, Exchange Act Release No. 27,928, Investment Company Act Release No. 17,452, 55 Fed. Reg. 17,933, 17,940 (Apr. 23, 1990).

140. See Revisions of Guidelines to Form N-1A, 57 Fed. Reg. at 9828 & n.9; Jason Zweig, *Buy the ETF, Not the Mutual Fund*, WALL ST. J. (Dec 18, 2015, 1:19 PM), <http://blogs.wsj.com/moneybeat/2015/12/18/buy-the-etf-not-the-mutual-fund/>. Mutual funds are also investing in other illiquid assets, which may pose liquidity challenges. See Stein, *supra* note 16; Liquidity Risk Management, *supra* note 134, at 62,281. For that reason, the SEC has proposed new liquidity rules that would complement the fifteen percent cap. See generally Liquidity Risk Management, *supra* note 134, at 62,275–76 (proposing reforms that would “address issues arising from modern portfolio construction[.]” provide “a new pricing method[.]” and furnish “fuller disclosure of information regarding . . . [fund] liquidity”).

141. For the calculations underlying this analysis, see Schwartz, *supra* note 118.

142. See *id.* This figure represents the portion of Magellan's portfolio invested in Level 2 or Level 3 assets. See *id.* For a discussion of this nomenclature, see *infra* text accompanying notes 205–08. In the fourth quarter of 2012, the fund had 4.4% of its assets in one of these two categories, the vast majority of which fell in level 2. See Schwartz, *supra* note 118.

that management is making bad investments and then inappropriately valuing them.

1. Why Improper Valuations Are a Problem

Bad investments are clearly harmful to fund shareholders, but flawed valuations are problematic as well. In fact, because of the central role that valuations play in mutual fund operations, the SEC has referred to valuation accuracy as “a primary principle underlying the Investment Company Act[.]”¹⁴³

Once a mutual fund makes an investment, it is required to ascribe a value to that investment each day.¹⁴⁴ These daily valuations are the key component of the firm’s net asset value (“NAV”), which is the total value of the fund.¹⁴⁵ When mutual fund shareholders redeem their shares, they receive the per share NAV.¹⁴⁶ This is also the price at which fund shares are purchased.¹⁴⁷ If this value is incorrect, both redeemers and buyers will transact at the wrong price.¹⁴⁸

To see the problem with incorrect prices, assume a fund’s venture portfolio and, by extension, its net assets, are overvalued. Those redeeming their shares will receive too high a price and those buying will pay too high a price. The excess returns the redeeming shareholders receive are an indirect transfer from the remaining mutual fund investors, who see the value of their holdings inappropriately diluted.¹⁴⁹ The buyers of overpriced shares would also suffer if they redeem after the valuation has been corrected.

On a broader lever, exaggerated valuations cause a misallocation of resources in the fund marketplace and between investors and management. Buyers may have been wrongfully induced to invest in a

143. See Money Market Fund Reform, *supra* note 15, at 47,777.

144. See 17 C.F.R. § 270.22c-1(b)(1) (2016).

145. See *id.* § 270.2a-4(a); Money Market Fund Reform, *supra* note 15, at 47,777 n.480.

146. See § 270.22c-1(a).

147. See *id.*

148. Unlike the prices of shares in a publicly traded company, which would adjust to take into account the trading of sophisticated parties, fund NAVs remain static even if they depart from fundamental value. While the disparity conceivably opens up a profit opportunity that would be realized when the fund updates its pricing, the opportunity would be difficult to exploit because it would be hard for investors to gauge the extent of the mispricing and estimate the time frame for correction.

149. See Money Market Fund Reform, *supra* note 15, at 47,778 (discussing the impact of redemptions at inflated prices on remaining shareholders). The impact would be felt when valuations are rectified. At that point, the NAV will have been artificially reduced by the exaggerated payment to the redeeming shareholder without an offset for the inflated valuation.

certain fund based on the inflated values, which would have artificially exaggerated past returns. The inflated figures would also have led to inappropriately high compensation for the managers, whose pay is based on the NAV, and comes out of the returns of fund shareholders.¹⁵⁰ The multifaceted reliance on NAVs, and the potential harms to investors and other funds that stem from inaccurate estimates of its components, underlie the weight placed on getting valuations right.

Valuing venture-stage firms correctly is important even if inaccuracies would impact only a small percentage of a fund's portfolio—as is the case with Magellan¹⁵¹ and other mutual funds.¹⁵² While the effect on a fund's per share NAV may be slight, that minor error would impact every investor transaction that takes place at the wrong price, magnifying it greatly. Also, even returns from a small portion of a fund's portfolio can meaningfully alter total fund returns.¹⁵³ While large moves can lead to changes measured in percentage points,¹⁵⁴ in the mutual fund industry, even a basis-point change in total returns can alter a fund's standing vis-à-vis its competitors.¹⁵⁵

2. Fund Manager Competence Concerns

There are a number of reasons to doubt the capacity of mutual funds to make wise startup investments and then value those investments accurately. Venture capital investing poses novel challenges for fund managers who presumably have built their careers investing in public companies.

150. See Jeff Schwartz, *Mutual Fund Conflicts of Interest in the Wake of the Short-Term Trading Scandals: Encouraging Structural Change Through Shareholder Choice*, 2 N.Y.U. J.L. & BUS. 91, 98 (2005).

151. See *supra* text accompanying note 118.

152. See KATIE REICHART, MORNINGSTAR, UNICORN HUNTING: MUTUAL FUND OWNERSHIP OF PRIVATE COMPANIES IS A RELEVANT, BUT MINOR CONCERN FOR MOST INVESTORS 4 (2016), <http://corporate1.morningstar.com/ResearchArticle.aspx?documentId=780716> [<https://perma.cc/RT6E-SPFA> (staff-uploaded archive)]. Katie Reichart of Morningstar downplays the significance of mutual-fund investments in unicorns because these investments make up a small portion of the industry's \$8.6 trillion in assets. *Id.* at 1. The allocation to startups relative to the size of the industry as a whole, however, is mostly irrelevant for public policy.

153. See *infra* text accompanying notes 234–35.

154. See *infra* text accompanying note 235.

155. See *Large Growth: Total Returns*, MORNINGSTAR, [http://news.morningstar.com/fund-category-returns/large-growth/\\$FOCA\\$LG.aspx](http://news.morningstar.com/fund-category-returns/large-growth/$FOCA$LG.aspx) [<https://perma.cc/36PW-5HEU> (staff-uploaded archive)] (showing closely clustered returns for large-growth mutual funds).

First, skills honed in the public markets do not readily translate to the startup world. While the fundamentals of company valuation are constant, the particular techniques involved differ greatly across these different spheres. Valuing public companies involves poring through SEC disclosures and press releases to obtain figures that get plugged into models based on the Capital Asset Pricing Model (“CAPM”) and its progeny.¹⁵⁶ The key valuation figure is profits or some stripped down version of it, like EBITDA.¹⁵⁷ But startups usually have no profits and CAPM plays, at most, a modest role. Instead, valuation is based largely on guesstimates of the company’s growth prospects.¹⁵⁸ The process is much less mathematically rigorous and much more dependent on relationships and experience.¹⁵⁹

Second, the security being purchased is a different animal. On the public markets, mutual funds typically invest in plain vanilla common stock.¹⁶⁰ Venture capital investments in preferred shares involve much more complicated ownership and liquidation rights that would be largely foreign to a public-markets devotee.¹⁶¹ Because mutual fund managers do not live in the venture capital world, there is a distinct possibility that they are buying at the peak of a startup bubble.

Their inexperience in valuing startups also calls the subsequently reported valuations into doubt. When mutual funds invest in publicly traded equities, there is no risk of misreporting the carrying value of those firms. Because there is a liquid market, and a precise market price, the NAV calculation is a matter of arithmetic. Since startups are private, however, there is no such market price. Nevertheless, mutual funds must estimate a price each day—a task they are ill equipped to perform.

Indeed, even valuation savants could not do what is being asked of these venture capital neophytes. It is one thing to price Uber once;

156. See CHARLES P. JONES, INVESTMENTS: ANALYSIS AND MANAGEMENT 226–33, 245–70 (11th ed. 2010).

157. See *id.* at 378 n.10.

158. See JOSH LERNER, FELDA HARDYMON & ANN LEAMON, VENTURE CAPITAL AND PRIVATE EQUITY: A CASEBOOK 181–200 (5th ed. 2012) (describing venture capital valuation techniques).

159. See Mary Jo White, Chairperson, U.S. Sec. & Exch. Comm’n, Keynote Address at the SEC-Rock Center on Corporate Governance Silicon Valley Initiative (Mar. 31, 2016), <https://www.sec.gov/news/speech/chair-white-silicon-valley-initiative-3-31-16.html> [https://perma.cc/865C-L4NG] (“Nearly all venture valuations are highly subjective.”).

160. See, e.g., FIDELITY MAGELLAN, PROSPECTUS, *supra* note 53, at 7.

161. See generally NAT’L VENTURE CAPITAL ASS’N, TEMPLATE: TERM SHEET FOR SERIES A PREFERRED STOCK FINANCING (2013) (providing for, among other things, governance rights, conversion rights, and preferred liquidation rights).

it is another to reevaluate how internal and external events, nationally and internationally, shape its prospects each day. It is not as if startups are producing daily audited financials and business retrospectives for NAV purposes; nor can fund managers scour the global press each day for pertinent developments.¹⁶² Given these limitations, fund valuations for young private companies are inherently rough.¹⁶³

Startups are even more difficult to value, both initially and over time, than other illiquid assets. Mature private firms have historical returns to survey. They are also likely to have public companies to which they can be readily compared. The whole idea of startups, in contrast, is that they lack close comparables.¹⁶⁴

Likewise, as noted above, much debt that is described as illiquid is at least thinly traded, which provides some market data.¹⁶⁵ In contrast, there is no market where startup shares are exchanged and prices are publicly disclosed.¹⁶⁶ The value of debt can also be more easily modeled. Valuing startups is a guessing game, whereas mutual funds can use “matrix pricing” for debt instruments, arriving at a price “derived from a range of different inputs, with varying weights attached to each input, such as pricing of new issues, yield curve information, spread information, and yields or prices of securities of comparable quality, coupon, maturity, and type.”¹⁶⁷ While this process does not assure accuracy, there is more to go on in the analysis than there is when trying to figure out what Uber is worth. Moreover, at least fund managers investing in and later valuing debt instruments

162. See Lizette Chapman & Drew Singer, *Why Mutual Funds Can't Agree on What Unicorns Are Worth*, BLOOMBERG: BUSINESSWEEK (May 19, 2016, 1:44 PM), <http://www.bloomberg.com/news/articles/2016-03-31/what-s-this-startup-worth-mutual-funds-can-t-get-their-stories-straight> [<https://perma.cc/QBG9-MQDH>] (“People that aren’t experts at valuing private companies are trying to act like experts. . . . Even when they have less information than the VCs.” (quoting CEO of Domo, Josh James)).

163. Some funds may be turning to third-party pricing services to assist in valuations. See Sarah Krouse & Kirsten Grind, *Wall Street Cop Asks Money Managers to Reveal Silicon Valley Valuations*, WALL ST. J. (Dec. 9, 2016, 5:57 PM), <http://www.wsj.com/articles/wall-street-cop-asks-money-managers-to-reveal-silicon-valley-valuations-1481305082>. If these services are experts in the area, then outsourcing valuations to them relieves competence concerns, although the inherent difficulty of the task means such valuations would still be guesstimates.

164. This is not always the case. Dropbox, for example, has a great public comparable—Box. See Box, <https://www.box.com/home> [<https://perma.cc/6N4F-GQW6>]; see also Michal Lev-Ram, *How to Tell the Difference Between Box and Dropbox*, FORTUNE (Feb. 24, 2014), <http://fortune.com/2014/02/24/how-to-tell-the-difference-between-box-and-dropbox/> [<http://perma.cc/KF2H-YDX8>] (comparing Box and Dropbox).

165. See *supra* note 136 and accompanying text.

166. See *supra* note 135 and accompanying text.

167. Money Market Fund Reform, *supra* note 15, at 47,813.

for bond funds or money market funds (which are required to invest in short-term debt)¹⁶⁸ are ostensibly experts in debt. Unlike Magellan and its ilk, they are not dabbling in something for which the fund lacks historical expertise.

3. Fund Manager Candor Concerns

Mutual funds managers' ability to accurately estimate the value of startups at purchase or each day thereafter is one concern. Worse still, there is a significant incentive for funds to massage the reported valuations.

The most obvious abuse would be to exaggerate the value of the startups in the fund's portfolio.¹⁶⁹ As previously noted, managers are paid based on their assets under management.¹⁷⁰ By inflating the value of their investments, the asset managers make more. Inflating valuations also increases returns, which attracts new investors and increases the likelihood that existing ones stay.¹⁷¹ In addition, the higher returns allow funds to outpace their peers and the benchmarks to which they are compared.¹⁷²

168. See 17 CFR § 270.2a-7(d)(1) (2016).

169. Hedge funds have recently drawn scrutiny for potentially overvaluing their illiquid assets. See Jenny Strasburg, *SEC Probes 'Side Pocket' Arrangements*, WALL ST. J. (Apr. 28, 2010, 12:01 AM), <http://www.wsj.com/articles/SB10001424052748703832204575210671819894474>. The incentive to inflate startup valuations may manifest as intentional misconduct or may take the form of an implicit, even subconscious, bias toward higher values. Even a small bias can have a large effect, however, because minor changes to assumptions can lead to major changes to valuations. See LERNER ET AL., *supra* note 158, at 181.

170. See Schwartz, *supra* note 46, at 560 & n.221.

171. See *id.* at 546 & n.149.

172. It could be argued that fund managers would not have an incentive to overvalue startups because the firms eventually go public and the price transparency associated therewith would necessitate a valuation reckoning. There are several reasons, however, why the incentive to inflate would overpower the countervailing force of this contingency. First, many firms may never go public. As discussed above, IPOs are becoming less and less common. See *supra* notes 30–31 and accompanying text. If there is no IPO, there is never a public-market price. Second, even if a firm goes public, the prospect of short-term gains may very well trump the long-term risk. This was one of the many lessons from the financial crisis and is seen repeatedly in managerial behavior. See generally Lynne L. Dallas, *Short-Termism, The Financial Crisis, and Corporate Governance*, 37 J. CORP. L. 265 (2012) (providing a comprehensive exploration of why financial and nonfinancial firms engage in short-termism and how to mitigate it). Moreover, fund managers compensated based on the inflated values would not have to give the money back, so even if they need to lower values at the IPO, they still would come out ahead. Indeed, a fund manager who cheats may be long gone by the time of the IPO, particularly given that the time from founding to IPO continues to lengthen. See Begum Erdogan et al., *Grow Fast or Die Slow: Why Unicorns Are Staying Private*, MCKINSEY & CO. (May 2016), <http://www.mckinsey.com/industries/high-tech/our-insights/grow-fast-or-die-slow-why-unicorns-are-staying-private> [https://perma.cc/NM4S-V6GB]. Third, the valuations might become a self-fulfilling prophecy (or managers might harbor this hope). If this were to happen, no

Managers could also use their discretion over valuation to smooth returns. Rather than consistently report inflated valuations, funds could time shift changes so that they appear when most advantageous or least harmful.¹⁷³ Along these lines, funds could report negative valuations when the remainder of the portfolio is doing well and vice versa. This type of smoothing would reduce volatility, which would make the fund appear less risky and therefore more attractive. Funds could also smooth against their benchmark—reporting gains when they need them to keep pace and reporting losses when the fund can absorb them without falling behind.

While there is a similar opportunity for misconduct with other illiquid assets, the concern is more salient with startups. The slipperiness of venture valuations means there is a wide range of plausible estimates, making biased ones difficult to differentiate from mistaken ones. The more latitude for abuse, the more tempting it is for funds to take advantage.

4. Fund Manager Competence Regulation

The securities laws do little to address the concern that mutual fund managers are likely reaching beyond their expertise. Investment advisers, like Fidelity, and their representatives are subject to a great deal of regulatory oversight.¹⁷⁴ While the rules set minimum standards of professionalism,¹⁷⁵ nothing assures investors that advisers are acting in accordance with their core competencies. The primary protection comes from disclosure rules, but these provide only limited insight into the fund manager's expertise. The rules require that funds report in their prospectus the business experience of their top portfolio managers for the last five years.¹⁷⁶

Magellan's responsive disclosure shows the limitations of this rule and bolsters competency concerns. In a recent prospectus, Magellan says that the fund's portfolio manager, Jeffrey Feingold, has managed the fund since 2011, and that he has been with Fidelity since

downward adjustment would be necessary. All of these considerations give managers reason to inflate values even if IPOs are possible.

173. See RIAHI-BELKAOU, *supra* note 13, at 56.

174. See generally DIV. OF INV. MGMT., U.S. SEC. & EXCH. COMM'N, REGULATION OF INVESTMENT ADVISERS (2013), https://www.sec.gov/about/offices/oia/oia_investman/rplaze-042012.pdf [<https://perma.cc/9TJR-KZG8>] (delineating the regulatory requirements for investment advisers and discussing SEC oversight). Investment adviser representatives are largely regulated at the state level. See U.S. SEC. & EXCH. COMM'N, *supra* note 74, at 15, 86–87.

175. See DIV. OF INV. MGMT., *supra* note 174, at 27–28.

176. See FORM N-1A, *supra* note 91, at Items 5(b), 10(a)(2).

1997 as a research analyst and portfolio manager.¹⁷⁷ These sparse disclosures do little to help fund investors evaluate Mr. Feingold; worse yet, the limited information provided suggests that he lacks experience in venture-style investing. Outside sources confirm this impression. According to the *Wall Street Journal*, prior to working for Fidelity, Mr. Feingold was “an equity analyst following the footwear, apparel and textile industries.”¹⁷⁸ Whatever venture capital experience Magellan has does not seem to come from Mr. Feingold. While it is possible that the fund has made special hires to address this area, investors would never know, as there is no basis on which to assess the fund’s overarching expertise as it relates to this specialized area.¹⁷⁹

Even though regulation does not directly address competency concerns—and what we know about Magellan’s portfolio manager reinforces them—the nature of the fund’s investment practices provides some comfort. As shown in Table 1, Magellan tends to invest in later-stage startups, choosing to usually take part in Series D rounds and later.¹⁸⁰ These companies are less risky than brand new ones¹⁸¹ and more similar to the public firms in which the fund typically invests.

Moreover, Magellan often invests alongside venture capital and other private equity funds.¹⁸² While these investors are fallible as well, that experts in the area are investing on ostensibly the same terms gives some legitimacy to the decision to invest. Surprisingly, however, Fidelity has served as the lead investor for several of Magellan’s investments,¹⁸³ meaning that it has been the first to sign on and, in

177. FIDELITY MAGELLAN FUND, PROSPECTUS, *supra* note 53, at 18–19.

178. Mary Pilon, *Fidelity Magellan Gets New Helmsman*, WALL ST. J. (Sept. 14, 2011), <http://www.wsj.com/articles/SB10001424053111904265504576568793213103996>.

179. There were no media reports of venture experts moving to Magellan; it also seems like an unlikely career move for already successful venture capital fund managers.

180. See *supra* Table 1.

181. See John H. Cochrane, *The Risk and Return of Venture Capital*, 75 J. FIN. ECON., Jan. 2005, at 3, 5.

182. See, e.g., *Uber: Funding Rounds*, CRUNCHBASE, <https://www.crunchbase.com/funding-round/7a617d3521e9a71816c8d5cbcd4c49b0> [<https://perma.cc/FFF3-VTLL> (staff-uploaded archive)] (showing funds that participated in Uber’s Series D round).

183. See *Fidelity Investments*, CRUNCHBASE, <https://www.crunchbase.com/organization/fidelity-investments#/entity> [<https://perma.cc/NS3E-N5XS> (staff-uploaded archive)] (showing Fidelity leading the rounds for Uber’s Series D, Roku’s Series G and F, and Cloudflare’s Series D).

those cases, has worked with the entrepreneur to structure the terms of the funding round.¹⁸⁴

Magellan's practice of investing mostly in late-stage startups and doing so alongside experienced venture capital investors generally lessens competence concerns. But it does not eliminate them. Late-stage startups are still startups, and even venture experts make mistakes. Magellan also makes investments where these mitigating factors are dulled. For example, Fidelity funds, including Magellan, were the only ones to invest in the Malwarebytes \$50 million Series B round—and Magellan's \$35 million stake in the round made up about twenty-one percent of the fund's portfolio in private venture-stage firms as of March 2016.¹⁸⁵ Finally, the safety of being flanked by venture-capital firms only lends confidence to the initial investment; the fund's subsequent valuations, regardless of who participated in the funding round, remain suspect.¹⁸⁶

5. Valuation Regulations

Because mutual funds have been investing in assets without a readily determinable market value for years, the risk of incompetent

184. See Yong Li, *Venture Capital Staging: Domestic Versus Foreign VC-Led Investments*, in THE OXFORD HANDBOOK OF VENTURE CAPITAL 354, 360 (Douglas Cumming ed., 2012).

185. See Press Release, Malwarebytes, Malwarebytes Raises \$50 Million Investment from Fidelity (Jan. 21, 2016), <https://press.malwarebytes.com/2016/01/21/malwarebytes-raises-50-million-investment-from-fidelity/> [<https://perma.cc/XUS4-XL69>]; see also Fidelity Magellan Fund, Certified Shareholder Report (Form N-CSR) (Mar. 31, 2016) (showing \$35 million investment). Though \$50 million is quite large for a Series B round, which suggests that the company may have raised money prior to its Series A under a different naming convention (e.g., Seed-1, Seed-2, etc.) without reporting it, this was not the case. See William Alden, *Malwarebytes, an Antivirus Start-Up, Raises \$30 Million*, N.Y. TIMES: DEALBOOK (July 10, 2014, 7:32 AM), <https://dealbook.nytimes.com/2014/07/10/malwarebytes-an-antivirus-start-up-raises-30-million/?src=twr&r=0> [<https://perma.cc/7XUX-2FUG>] (explaining how Malwarebytes raised its initial capital). Arguably, however, the round's size itself makes this investment look more like Magellan's typical late-stage entries. Even so, no venture capital firms participated in the round. See *Malwarebytes Raises \$50M in Series B Funding*, FINSMES (Jan. 21, 2016), <http://www.finsmes.com/2016/01/malwarebytes-raises-50m-in-series-b-funding.html> [<https://perma.cc/WV77-VV5T>].

186. A potential check on these later valuations is that, from time to time, Fidelity invests with other mutual funds in the startup rounds, which also must publicly report their valuations each quarter. See Scott Austin et al., *supra* note 42. When this is the case, Fidelity, in addition to the other funds, may fear reporting outlier figures. This may lead to increased caution. Less optimistically, however, the group dynamics may lead to herding or outright copying of the first to report. One could also picture a feedback loop, where a bubble forms among these funds as valuations ratchet skyward.

or biased valuations has long been a concern for regulators.¹⁸⁷ As such, there is a regulatory regime in place to police pricing practices, which consists of both securities laws and accounting rules. The disclosures that Magellan produces in response to these requirements—while they do not fully illuminate the efficacy of these rules—provide grounds for concern.

a. Securities Laws Regarding Mutual Fund Valuation Practices

The central valuation rule from the securities laws is that “[p]ortfolio securities with respect to which market quotations are readily available shall be valued at current market value, and other securities and assets shall be valued at *fair value* as determined in *good faith* by the board of directors of the registered company.”¹⁸⁸ Since startup shares do not have a market price, this means that the board needs to posit a “fair value” in “good faith.”

The SEC has provided guidance on the meaning of both terms. According to the agency, “the fair value of a portfolio security is the price which the fund might reasonably expect to receive upon its current sale.”¹⁸⁹ The “current sale” part of this definition means that companies must calculate the price that the mutual fund would have to accept today if it were to sell, which necessarily includes a discount for the stock’s illiquidity.¹⁹⁰

The fair value inquiry is meant to be comprehensive. Board members are “to satisfy themselves that all appropriate factors . . . have been considered.”¹⁹¹ Such an analysis is to include consideration of both firm-level information and information about external events.¹⁹²

187. See Money Market Fund Reform, *supra* note 15, at 47,741 (discussing valuation of thinly traded debt). See generally Restricted Securities, Accounting Series Release No. 113, Investment Company Act Release No. 5847, 35 Fed. Reg. 19,989 (Oct. 21, 1969) (discussing valuation of private firms).

188. 17 C.F.R. § 270.2a-4(a)(1) (2016) (emphasis added); see also 15 U.S.C. § 80a-2(a)(41) (2012).

189. Letter from Douglas Scheidt, Assoc. Dir. & Chief Counsel, Div. Inv. Mgmt., U.S. Sec. & Exch. Comm’n, to Craig S. Tyle, Gen. Counsel, Inv. Co. Inst. (Dec. 8, 1999), <https://www.sec.gov/divisions/investment/guidance/tyle120899.htm#> [<https://perma.cc/3JK4-SWBP>].

190. See Restricted Securities, Accounting Series Release No. 113, Investment Company Act Release No. 5847, 35 Fed. Reg. 19,989, 19,990 (Oct. 21, 1969); Letter from Douglas Scheidt, *supra* note 189.

191. Accounting for Investment Securities by Registered Investment Companies, Securities Act Release No. 5120, Exchange Act Release No. 9049, Investment Company Act Release No. 6295, 35 Fed. Reg. 19,986, 19,988 (Dec. 23, 1970).

192. See *id.*

To comply with its duty to conduct the portfolio valuation in good faith, the board members must act in accordance with “the duties of care and loyalty that they owe to the fund.”¹⁹³ More specifically, the SEC has instructed as follows:

a fund board generally would not be acting in good faith if, for example, the board knows or has reason to believe that its fair value determination does not reflect the amount that the fund might reasonably expect to receive for the security upon its current sale. In addition, a fund board generally would not be acting in good faith if it acts with reckless disregard for whether its fair value determination reflects the amount that the fund might reasonably expect to receive for the security upon its current sale.¹⁹⁴

Even though the rules allocate responsibility for valuation to the board and provide it with good-faith guidance, in practice the board is not expected to value securities daily. Rather, it must set up¹⁹⁵ and “continuously review”¹⁹⁶ policies and procedures for management to follow in conducting the valuations. According to the SEC, “these policies and procedures should encompass all appropriate factors relevant to the valuation of investments for which market quotations are not readily available.”¹⁹⁷

Disclosure requirements buttress the internal controls rules. A mutual fund must explain its valuation methodology both in its prospectus and SAI.¹⁹⁸ Also, when a fund discloses its financial statements, which occurs biannually, the fund must include a discussion of its valuation procedures in the accompanying notes.¹⁹⁹

193. Letter from Douglas Scheidt, Assoc. Dir. & Chief Counsel, Div. Inv. Mgmt., U.S. Sec. & Exch. Comm’n, to Craig S. Tyle, Gen. Counsel, Inv. Co. Inst. (Apr. 30, 2001), <https://www.sec.gov/divisions/investment/guidance/tyle043001.htm> [<https://perma.cc/8AJG-RYMS>].

194. *Id.*

195. See Letter from Scheidt, *supra* note 189.

196. See Letter from Scheidt, *supra* note 193.

197. Inv. Co. Registrants, SEC No-Action Letter, Fed. Sec. L. Rep. (CCH) ¶ 76,956 (Nov. 1, 1994). The board’s responsibility to set up internal controls to satisfy its valuation obligations has also been read into Rule 38a-1 of the Investment Company Act, which requires funds to “[a]dopt and implement written policies and procedures reasonably designed to prevent violation of the Federal Securities Laws.” 17 C.F.R. § 270.38a-1 (2016); Compliance Programs of Investment Companies and Investment Advisers, Investment Company Act Release No. 26,299, 68 Fed. Reg. 74,714, 74,415 (Dec. 17, 2003) (codified at 17 C.F.R. pts. 270, 275, and 279). Mutual funds also have an internal controls requirement with respect to financial reporting, which also could be read to implicate fair valuation procedures. See § 270.30a-3.

198. See FORM N-1A, *supra* note 91, at Items 11, 23.

199. See § 210.6-03.

Finally, the values themselves need to be disclosed. Funds must independently report the value of each holding every quarter.²⁰⁰ The securities law regime thus boils down to a requirement that fund boards enact, review, and update policies and procedures to value illiquid investments and that funds disclose these protocols and the resulting valuations.

b. Generally Accepted Accounting Principles

Mutual fund financial statements must adhere to General Accepted Accounting Principles (“GAAP”), which include extensive rules on fair valuation in Accounting Standards Codification (“ASC”) 820.²⁰¹ ASC 820 is somewhat more prescriptive than the securities rules. It specifies general valuation methodologies (either based on discounted income flows or comparisons with similar financial assets)²⁰² and a hierarchy of inputs in applying those methodologies.²⁰³ The key to the hierarchy is the distinction ASC 820 makes between observable inputs, which are preferred, and unobservable inputs, which are disfavored. Observable inputs are based on market data, whereas unobservable inputs are based on the reporting company’s assessment of “the assumptions that market participants would use when pricing the asset.”²⁰⁴ In addition to the observable/unobservable dichotomy, the ASC also groups inputs into three “Levels.”²⁰⁵ The disfavored unobservable inputs are categorized as Level 3.²⁰⁶ Because there is no market for startup shares, their valuation is based on these inputs of last resort.

As with the securities laws, disclosure rules supplement the procedural rules. The ASC requires a description of the fund’s valuation methodology²⁰⁷ and a breakdown of total assets into categories corresponding to how they were valued (i.e., through Level 1, Level 2, or Level 3 inputs).²⁰⁸

200. See FORM N-CSR, *supra* note 80; FORM N-Q, *supra* note 80; see also § 210.12-12.

201. See generally FIN. ACCOUNTING STANDARDS BD., ACCOUNTING STANDARDS UPDATE: FAIR VALUE MEASUREMENT (TOPIC 820) (2011), <https://asc.fasb.org/imageRoot/00/7534500.pdf> [<https://perma.cc/Y4AB-WWXL>] (describing “common requirements for measuring fair value and for disclosing information about fair value measurements”).

202. See *id.* at 27.

203. See *id.* at 40.

204. *Id.* at 50.

205. See *id.* at 42–51.

206. See *id.* at 50; see also Money Market Fund Reform, *supra* note 15, at 47,858 n.1466 (providing an overview of the three-level structure).

207. See FIN. ACCOUNTING STANDARDS BD., *supra* note 201, at 59.

208. See *id.* at 61.

Finally, auditors lend their assessment. Mutual funds must include audited financial statements²⁰⁹ and an audited schedule of investments in their annual reports.²¹⁰ For the audits, rather than confirm final valuation figures for difficult-to-value assets, the auditors review whether “the fund’s valuation method was appropriate in the circumstances and applied consistently.”²¹¹

In requiring that companies use certain valuation techniques, describe their inputs, and subject their analyses to auditing, the accounting rules require a degree of specificity beyond that which is called for by the more flexible and general securities law rules. Even so, Magellan’s compliance illustrates that these rules do not add meaningful transparency and that manipulation concerns remain.

c. Magellan’s Compliance with the Valuation Rules

Magellan’s disclosures shed little light on how it values its venture investments. A recent prospectus contains several paragraphs on valuation, but the only relevant disclosure is that “[i]f market quotations, official closing prices, or information furnished by a pricing service are not readily available or, in the Adviser’s opinion, are deemed unreliable for a security, then that security will be fair valued in good faith by the Adviser in accordance with applicable fair value pricing policies.”²¹² An expanded discussion in the SAI provides no further insight into startup valuations.²¹³

The disclosures accompanying the fund’s financial statements provide more detail, but are still too general to be useful. For example, in an annual report for the fiscal year ending on March 31, 2016, the relevant disclosures are found in two paragraphs in Note 3 to its financial statements titled “Significant Accounting Policies.”²¹⁴ The first paragraph is broadly responsive to the securities laws requirements:

209. See 17 C.F.R. § 210.3-18 (2016); FORM N-1A, *supra* note 91, at Item 27(b)(1).

210. See FORM N-CSR, *supra* note 80, Item 6.

211. INV. CO. INST., INDEP. DIRS. COUNCIL & ICI MUT. INS. CO., FAIR VALUATION SERIES: AN INTRODUCTION TO FAIR VALUE 19 (2005), https://www.ici.org/pdf/05_fair_valuation_intro.pdf [<https://perma.cc/4HNM-P4V4>]. For other assets, the auditors will independently verify valuations. *Id.* Fair value audits are recognized within the accounting industry as among the most complex and problematic. See Emily E. Griffith, Jacqueline S. Hammersley & Kathryn Kadous, *Audits of Complex Estimates as Verification of Management Numbers: How Institutional Pressures Shape Practice*, 32 CONTEMP. ACCT. RES. 833, 833 (2015).

212. FIDELITY MAGELLAN FUND, PROSPECTUS, *supra* note 53, at 9.

213. See FIDELITY MAGELLAN FUND, STATEMENT OF ADDITIONAL INFORMATION 25–26 (2016).

214. FIDELITY MAGELLAN FUND, ANNUAL REPORT, *supra* note 81, at 21–22.

The Board of Trustees (the Board) has delegated the day to day responsibility for the valuation of the Fund's investments to the Fidelity Management & Research Company (FMR) Fair Value Committee (the Committee). In accordance with valuation policies and procedures approved by the Board, the Fund attempts to obtain prices from one or more third party pricing vendors or brokers to value its investments. When current market prices, quotations or currency exchange rates are not readily available or reliable, investments will be fair valued in good faith by the Committee, in accordance with procedures adopted by the Board. Factors used in determining fair value vary by investment type and may include market or investment specific events. The frequency with which these procedures are used cannot be predicted and they may be utilized to a significant extent. The Committee oversees the Fund's valuation policies and procedures and reports to the Board on the Committee's activities and fair value determinations. The Board monitors the appropriateness of the procedures used in valuing the Fund's investments and ratifies the fair value determinations of the Committee.²¹⁵

These boilerplate disclosures stop short of providing substantive information about the valuation process. They note that the board has put policies and procedures in place, but do not describe their content. They also note that the board has delegated valuation to a committee of "Fidelity Management & Research Company," which is the fund's manager,²¹⁶ but do not describe what the committee does with any specificity. The second paragraph, which responds to the accounting rules, adds little additional value:

Equity securities, including restricted securities, for which observable inputs are not available are valued using alternate valuation approaches, including the market approach and the income approach and are categorized as Level 3 in the hierarchy. The market approach generally consists of using comparable market transactions while the income approach generally consists of using the net present value of estimated future cash flows, adjusted as appropriate for liquidity, credit, market and/or other risk factors.²¹⁷

Like the first paragraph quoted, this disclosure essentially confirms to the public that Magellan is following the applicable rules, but

215. *Id.*

216. FIDELITY MAGELLAN FUND, PROSPECTUS, *supra* note 53, at 5.

217. FIDELITY MAGELLAN FUND, ANNUAL REPORT, *supra* note 81, at 22–23.

provides no real transparency. The disclosure suggests that startups are valued using Level 3 inputs, but does not describe the inputs or the valuation technique the fund uses. Magellan's disclosures appear to follow the letter of the rule, yet sophisticated investors—let alone average investors—are left with little insight into the actual valuation process.

6. Magellan's Valuations²¹⁸

The final way to assess the risk to investors that remains despite the relevant securities and accounting rules is to consider Magellan's ongoing valuations themselves, which might suggest incompetence, exaggeration, or returns smoothing. To gain insight into whether Magellan's startup valuations may be suspect, this Section first presents summary data on the fund's quarterly valuations. It then describes the returns and risk profile of the fund's startup portfolio (which are both functions of the underlying firm valuations) and compares these attributes to the remainder of Magellan's portfolio, the public market, and the venture capital industry. Where Magellan-held startups went public, this Section also compares the fund's valuations to the market values of the same firms on the day of their public offerings. While this collection of data, and the associated comparisons, does not show that Magellan was dishonest or inept, putting the fund's venture investments in context does not extinguish such concerns, and in fact, reinforces them.²¹⁹

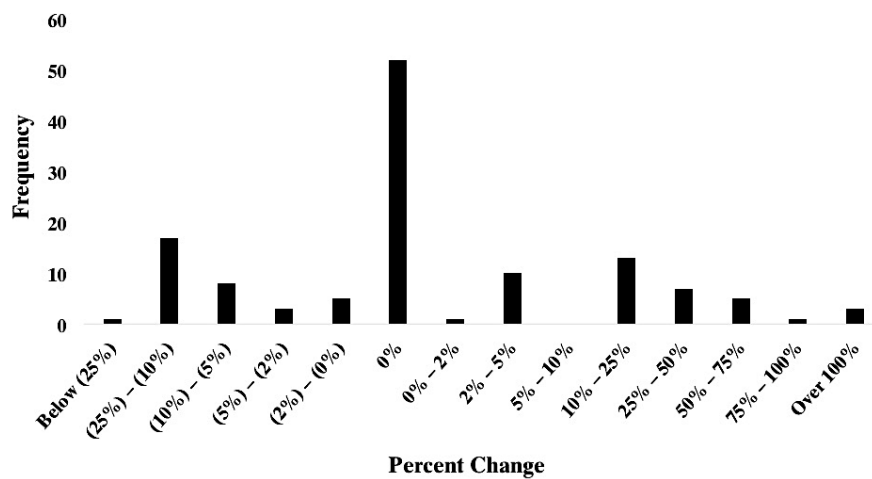
218. Unless a source is otherwise indicated, the calculations underlying the data presented in this Section are on file with the *North Carolina Law Review*. See Schwartz, *supra* note 118; EDGAR Search Results: *Fidelity Magellan Fund* CIK#: 0000061397, *supra* note 60; see also *supra* note 60 and accompanying text.

219. It is beyond the scope of this Article to more formally test the hypothesis that Magellan is manipulating its valuations. The data presented herein, though, suggests that the additional data collection and statistical analysis necessary for doing so might be worthwhile.

a. Magellan's Valuations and Valuation Practices

Between the second quarter of 2012 and the first quarter of 2016, Magellan conducted 126 valuations of its venture investments. This is one valuation each quarter for each of its holdings in emerging firms. In 41% of the valuations, the fund chose to leave the estimated value unchanged from the previous quarter. It increased valuations 32% of the time and decreased them 27% of the time. Changes came in all sizes. The fund made nineteen changes of less than 5% in either direction. Its smallest change to a single holding was -0.9% and its largest was $+141\%$. While the number of positive as compared to negative adjustments was reasonably similar, the scale of the positive adjustments was much greater than the negative ones. For example, Magellan shows one loss of over 25%, but sixteen quarterly gains surpassing that figure. The histogram in Figure 2 below illustrates these practices.

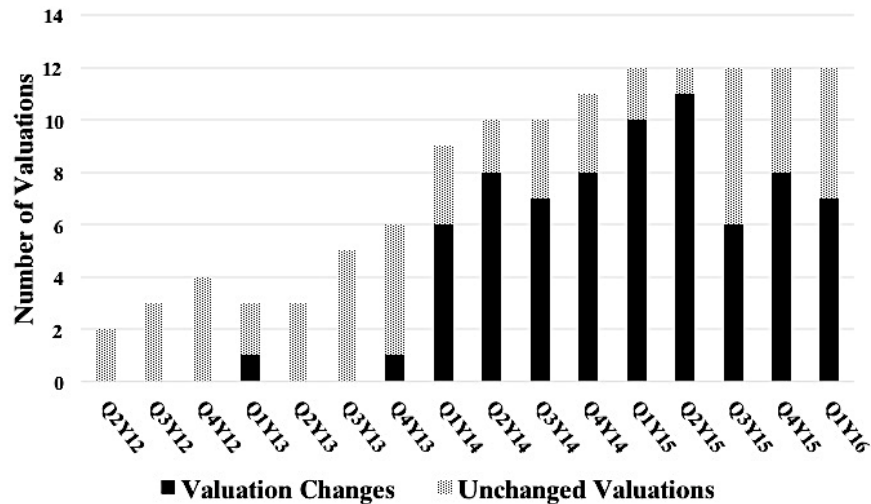
Figure 2: Magellan Percent Change in Valuation Each Quarter



Magellan's approach to valuation evolved over time. As the bar chart in Figure 3 suggests, the fund was much less likely to change valuations when it first began investing in venture-stage firms. From June 2012 to June 2013, Magellan changed the value of only one holding (out of fifteen opportunities). In contrast, from the first quarter of 2015 until the first quarter of 2016, it changed forty-three

valuations (leaving only seventeen unchanged). The chart below also shows how Magellan's holdings increased over time.

Figure 3: Magellan Valuation Changes



b. Risk and Return Data for Magellan's Portfolio of Venture-Stage Firms

Magellan's filings indicate that its venture portfolio has been tremendously successful. Table 2 shows its initial investment in such firms, its final valuation during the period I reviewed, and the associated annual return. What stands out is just how well Magellan reports to have done: the fund shows an average annual return of 42%.²²⁰

220. This is a weighted geometric average—a measure that takes into account how much Magellan invests in each security and the timing of returns. See ROGER D. IBBOTSON ET AL., DUFF & PHELPS, 2016 SBBI YEARBOOK: STOCKS, BONDS, BILLS AND INFLATION 6-2 (2016) (presenting an explanation of geometric means).

Table 2: Fidelity Magellan Fund Startup Returns

Company	Initial Investment (\$)	Final Quarterly Valuation (\$)	Yearly Return (%)
bluebird bio, Inc. ^(a)	1,711,000 (July 23, 2012)	13,489,000 (Sept. 30, 2015)	116
Cloudflare, Inc.	3,502,000 (Nov. 5, 2014)	2,681,000 (Mar. 31, 2016)	-17
DocuSign, Inc. ^(b)	90,000 (Oct. 21, 2013)	241,000 (Mar. 31, 2016)	50
	99,000 (Mar. 3, 2014)	112,000 (Mar. 31, 2016)	6
	30,000 (Mar. 3, 2014)	34,000 (Mar. 31, 2016)	6
	11,000,000 (June 29, 2012)	35,456,000 (Mar. 31, 2016)	36
	71,000 (Mar. 3, 2014)		
	1,831,000 (Mar. 3, 2014)	2,080,000 (Mar. 31, 2016)	6
HubSpot, Inc. ^(c)	15,000,000 (Oct. 25, 2012)	35,707,000 (Dec. 31, 2015)	44
KaloBios Pharmaceuticals, Inc. ^(d)	8,000,000 (May 2, 2012)	4,991,000 (Dec. 31, 2013)	-44
Malwarebytes Inc.	35,000,000 (Dec. 21, 2015)	35,000,000 (Mar. 31, 2016)	0
Meituan Corp.	10,000,000 (Jan. 26, 2015)	12,214,000 (Mar. 31, 2016)	19
Mobileye N.V. ^(e)	8,878,000 (Aug. 15, 2013)	46,431,000 (Dec. 31, 2014)	135
Nutanix, Inc.	6,193,000 (Aug. 26, 2014)	6,093,000 (Mar. 31, 2016)	-1
Pure Storage Inc.	2,121,000 (Aug. 22, 2013)	4,148,000 (Mar. 31, 2016)	29

Company	Initial Investment (\$)	Final Quarterly Valuation (\$)	Yearly Return (%)
Roku, Inc.	11,000,000 (May 7, 2013)	18,570,000 (Mar. 31, 2016)	20
	5,000,000 (Oct. 1, 2014)	5,882,000 (Mar. 31, 2016)	11
Uber Technologies, Inc.	15,000,000 (June 6, 2014)	47,159,000 (Mar. 31, 2016)	88
Average Yearly Portfolio Return			42 ²²¹
Standard Deviation			53 ²²²

(a) bluebird bio, Inc.'s final valuation does not include the almost \$6 million worth of shares Magellan sold in the third and fourth quarters of 2015; the returns calculation, however, accounts for the sales.

(b) Magellan's June 29, 2012 investment of \$11,000,000 and March 3, 2014 investment of \$71,000 in DocuSign, Inc. were combined in Magellan's reporting.

(c) HubSpot, Inc.'s final valuation does not include Magellan's sale of about \$8 million worth of shares in the first quarter 2015 and about \$2 million worth of shares in the third quarter of that year. Sales proceeds, however, are included in the returns calculation.

(d) Magellan purchased an additional \$3 million worth of shares in KaloBios Pharmaceuticals, Inc. in the first quarter of 2013. The returns calculation takes the additional purchase into account.

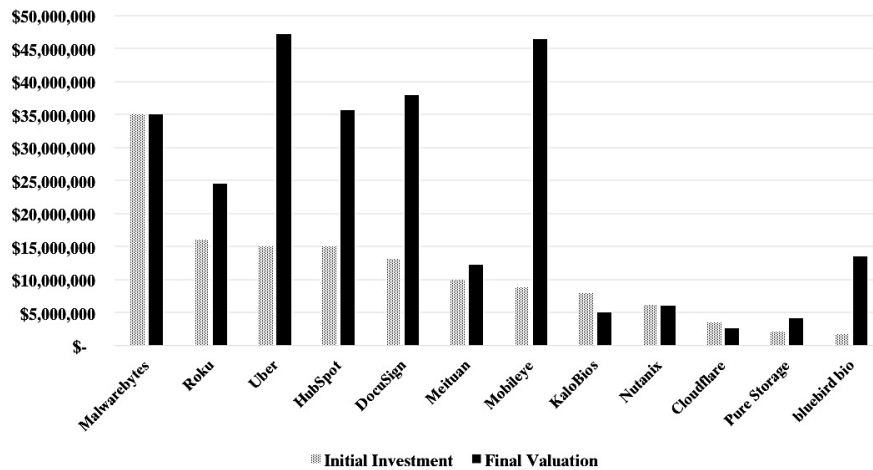
(e) Mobileye N.V.'s valuation does not include \$1000 worth of shares that Magellan held until the first quarter 2015. The returns figure, however, takes this holding into account.

221. This is the average referenced above, *see supra* text accompanying note 220, rather than a mean of the above annual returns.

222. This is the standard deviation of the startup portfolio's annual returns.

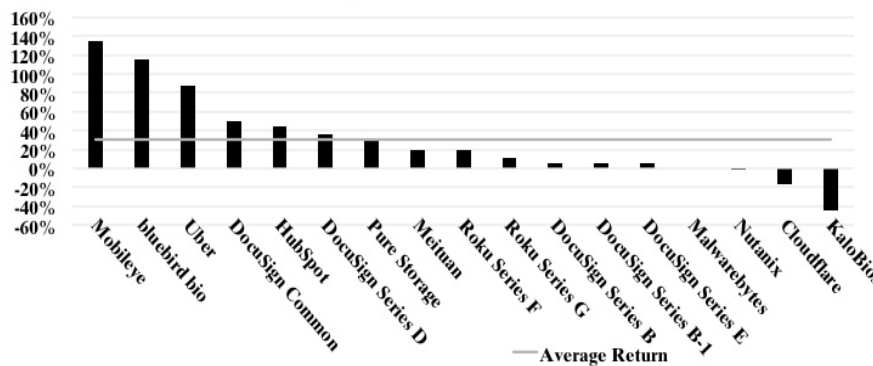
The bar chart in Figure 4 shows why Magellan has performed so well. Most of its largest wagers yielded impressive returns. The few investments resulting in losses involved relatively small stakes.

Figure 4: Magellan Startup Investments and Final Valuations²²³



The following Figure shows the returns associated with Magellan's valuations.

Figure 5: Magellan Startup Returns



223. Figure 4 combines multiple rounds of investments in Roku, Inc. and DocuSign, Inc. Otherwise, it reflects the dollar figures in Table 2.

Any discussion of portfolio performance must also account for risk. Standard deviation is the typical measure, which is based on the principle that the wider the dispersion of outcomes (in this case, returns), the greater the risk.²²⁴ A higher standard deviation indicates a wider dispersion.²²⁵ In Magellan's case, the standard deviation of yearly returns was fifty-three percent. This figure is based on a small number of observations, but like annual returns data, it nevertheless provides a numerical basis for comparison across different asset classes over the same time period.

c. Comparative Analysis of Magellan's Returns and Risks from Its Startup Portfolio

Magellan's venture investments significantly outperformed the venture capital industry, the public market, and the remainder of its portfolio. Table 3 shows how Magellan's performance stacks up against these comparables for the three years where there is complete venture capital data.

Table 3: Yearly Return Comparisons²²⁶

	Magellan Startup Portfolio (%)	Venture Capital Industry (%)	Magellan Total Returns (%)	S&P 500 Returns (%)
June 30, 2012– June 30, 2013	–6	6.5	20 (–.06)	21

224. See IBBOTSON ET AL., *supra* note 220, at 6-3.

225. See *id.*

226. The venture capital returns in Table 3 are internal rates of return ("IRRs") based on data from Preqin. See PREQIN, 2015 PREQIN GLOBAL PRIVATE EQUITY & VENTURE CAPITAL REPORT: SAMPLE PAGES 7 (2015), <https://www.preqin.com/docs/samples/2015-Preqin-Global-Private-Equity-and-Venture-Capital-Report-Sample-Pages.pdf> [<https://perma.cc/JQV9-PFJR>]; PREQIN, PREQIN PRIVATE EQUITY BENCHMARKS: VENTURE CAPITAL BENCHMARK REPORT 19 (2013), https://www.preqin.com/docs/reports/Q2_2013_Venture_Capital_Benchmark.pdf [<https://perma.cc/9G76-US86>]; PREQIN, THE Q1 2016 PREQIN QUARTERLY UPDATE: PRIVATE EQUITY 11 (2016), <https://www.preqin.com/docs/quarterly/pe/Preqin-Quarterly-Private-Equity-Update-Q1-2016.pdf> [<http://perma.cc/XY4Q-D45C>]; PREQIN, THE Q3 2016 PREQIN QUARTERLY UPDATE: PRIVATE EQUITY 11 (2016) [hereinafter PREQIN, Q3 PRIVATE EQUITY UPDATE], <https://www.preqin.com/docs/quarterly/pe/Preqin-Quarterly-Private-Equity-Update-Q3-2016.pdf> [<https://perma.cc/J8L4-DHX4>].

	Magellan Startup Portfolio (%)	Venture Capital Industry (%)	Magellan Total Returns (%)	S&P 500 Returns (%)
June 30, 2013– June 30, 2014	65	25.9	29 (+.15)	25
June 30, 2014– June 30, 2015	101	20.5	11 (+.56)	7
Over Three- Year Period	59	18	20 (+.22)	17

As Table 3 shows, from June 2012 to June 2015, Magellan far outpaced the venture capital industry, earning a 59% return compared to the industry's 18%. Such performance is even more remarkable because, as shown in Table 1, Magellan has usually invested in later rounds, which should generate lower returns (and lower risks).²²⁷ Also, venture capital returns follow a power-law distribution: a few funds earn outsized returns while the remainder falter.²²⁸ That Magellan finds itself on the right side of this equation is surprising,²²⁹ given that newcomers and non-venture funds that dabble in private equity tend to do poorly.²³⁰

IRR calculations in the venture capital industry typically include interim valuations and are not solely based on limited partner cash flows. *See* JOE STEER & COLIN ELLIS, BVCA, ARE UK VENTURE CAPITAL AND PRIVATE EQUITY VALUATIONS OVER-OPTIMISTIC? 4 (2011). The numbers contained in parentheses in the Magellan total returns column are estimates of the startup portfolio's contribution to the total return each period. Total returns and S&P 500 returns are based on data from Morningstar. *See Fidelity Magellan*, MORNINGSTAR, <http://beta.morningstar.com/funds/XNAS/FMAGX/quote.html> [https://perma.cc/84VT-PPJE (staff-uploaded archive)].

227. *See* Cochrane, *supra* note 181, at 5.

228. *See* DIANE MULCAHY, BILL WEEKS & HAROLD S. BRADLEY, EWING MARION KAUFFMAN FOUND., WE HAVE MET THE ENEMY . . . AND HE IS US 21 (2012), http://www.kauffman.org/~media/kauffman_org/research%20reports%20and%20covers/2012/05/we_have_met_the_enemy_and_he_is_us.pdf [https://perma.cc/6EWK-ML49].

229. *See supra* Table 3. Based on Cambridge Associates' historical data, Magellan's returns would likely place it in the top quartile of venture capital funds. In the period from 1981–2014 (thirty-four years), this group had annual returns of over 30% in only eight instances and over 40% in only five instances. *See* CAMBRIDGE ASSOCS., U.S. VENTURE CAPITAL INDEX AND SELECTED BENCHMARK STATISTICS 8 (2016), <http://40926u2govf9kuqen1ndit0l8su-wpengine.netdna-ssl.com/wp-content/uploads/2016/08/Public-2016-Q1-USVC-Benchmark-Book.pdf> [https://perma.cc/9D83-F7H6].

230. *See* JOSH LERNER, PRIVATE EQUITY RETURNS: MYTH AND REALITY 21–24, 28, <http://www.law.harvard.edu/programs/lwp/Session%20III%20-%20Lerner%20FINAL.pdf> [http://perma.cc/4DBJ-UHZS]. University endowments are the exception. *See id.* at 21–28.

Also notable is that the strong venture capital returns depicted in Table 3 belie a long history of lackluster performance in the industry. While funds that began in 2010 have a median return of 14.5%, those that began in 2005 show returns of only 3%.²³¹ A Kauffman Foundation study from 2012 concluded, based on returns data, that venture funds “haven’t beaten the public market for most of the past decade.”²³² Magellan is thus a standout in the industry at a time when the industry is doing particularly well.

Magellan’s venture returns also far exceed the stock market as a whole and Magellan’s public investments. As shown in Table 3, Magellan’s 59% return in the three years from June 2012 through June 2015 dwarfs the 17% return on the S&P 500 index and 20% return on the rest of the fund’s portfolio. Moreover, as noted above, from June 2012 until March 2016, Magellan earned 42%.²³³ The S&P 500 returned about 14%, and the remainder of Magellan’s portfolio returned about 14.6% over the same period.

The returns on Magellan’s startup investments have played a small but noticeable role in the fund’s overall performance. As Table 3 indicates, the venture portfolio caused the overall return to fall six basis points from June 2012 to June 2013 and to rise fifteen basis points and fifty-six basis points in the following two years, respectively.²³⁴ Table 3 does not show how the venture investments impacted quarterly returns. As with annual returns, the change was usually a matter of basis points, but one quarter—the first quarter in 2014—the fund had a 614% return on its startup portfolio, and that quarter the venture portfolio increased the aggregate return by more than 3% (from 7.8% to 11%).²³⁵

Magellan’s high venture returns have been accompanied by the aforementioned 53% standard deviation,²³⁶ which implies a high level of risk. The S&P 500 had a standard deviation of only 9% over the three years included in Table 3. Historically, the standard deviation is 20% for large-cap stocks and 32% for small caps.²³⁷ Perhaps more

231. See William Alden, *Venture Capital Outpaces Buyouts in Investment Returns*, N.Y. TIMES: DEALBOOK (Jan. 21, 2015, 12:59 PM), <https://dealbook.nytimes.com/2015/01/21/venture-capital-outpaces-buyouts-in-investment-returns> [<https://perma.cc/XLX8-8ZQ8>].

232. MULCAHY ET AL., *supra* note 228, at 6.

233. See *supra* Table 2.

234. The small overall effect despite the large venture returns owes to the relatively small portion of the portfolio allocated to startups. See *infra* Section II.A.1.b.

235. The 614% figure is an annualized return. For the underlying calculations, see Schwartz, *supra* note 118.

236. See *supra* Table 2.

237. See IBBOTSON ET AL., *supra* note 220, at 2-6 Exhibit 2.3.

surprising, the standard deviation of Magellan's returns also exceed those of venture capital funds, even though it focuses primarily on later-stage startups, which should be more stable.²³⁸ For the three years included in the chart above, the annual standard deviation in venture capital returns is 10%, close to the venture capital average of 11.7%.²³⁹

These numerical comparisons, however, overstate the riskiness of Magellan's investments. Though less tidy, a better way to look at risk in this context is to focus on the frequency and depth of losses. This perspective causes Magellan's risk to all but disappear. Only three of the fund's investments have failed to generate a positive return, and only one—KaloBios Pharmaceuticals, Inc. ("KaloBios")—is severely underwater.²⁴⁰

This is in contrast to venture capital as a whole, where three out of four investments fail to return investor capital.²⁴¹ Magellan's focus on more mature firms likely explains part of its success in avoiding steep losses, but the increased stability of such firms should be accompanied by decreased returns—which has not been the case for Magellan.²⁴² The fund appears to have done something that has long eluded industry veterans. In its first foray into venture capital, it has invested almost exclusively in winners. While not all of its investments have been home runs, they have overwhelmingly yielded positive returns. The spread of returns implies riskiness, but the risk that matters is largely absent.

When further refined, the data continues to present this picture of success. The above analysis of Magellan's total returns from its venture-type portfolio includes returns derived from after startups have gone public. While a complete picture of Magellan's returns from its startup portfolio is a useful yardstick, since the valuations for publicly traded firms and the post-IPO returns that stem therefrom are based on market prices, excluding this portion of the fund's

238. See Cochrane, *supra* note 181, at 5.

239. This is based on the variation in annual venture-capital returns reported by Cambridge Associates. See CAMBRIDGE ASSOCS., *supra* note 229, at 6.

240. See *supra* Table 2.

241. Deborah Gage, *The Venture Capital Secret: 3 Out of 4 Start-Ups Fail*, WALL ST. J. (Sept. 20, 2012, 12:01 AM), <http://www.wsj.com/articles/SB10000872396390443720204578004980476429190>.

242. See Cochrane, *supra* note 181, at 5.

venture returns from the data presents a more precise picture of Magellan's pre-IPO valuation practices.²⁴³

When the public valuations are excluded, the average annual return drops from 42% to 30%.²⁴⁴ The new figure, while somewhat less impressive, still compares very favorably to the venture capital industry (18.2%),²⁴⁵ to the S&P 500 (14%), and to the remainder of Magellan's portfolio (14.6%). Reduced risk accompanies the reduced returns. The standard deviation drops to 31% and the fund's biggest loss disappears. Its investment in KaloBios only showed signs of trouble after it went public. The reason for the overall reduced returns and risk in the pre-IPO data despite KaloBios's struggles post-IPO is that Magellan's investments in bluebird bio, Inc. (which it held for more than two years after its IPO) and Mobileye N.V. (which it held for a couple of quarters) skyrocketed after going public.²⁴⁶

d. Comparative Analysis of Firm-Level Valuations—Before and After the IPO

Comparing the performance and risk of Magellan's venture-stage portfolio to those of alternative investments is one way to assess the fund's valuations. Another approach is to compare the fund's private valuations for firms that went public to the IPO prices for those firms or, better yet, to the prices for those firms after the first day of trading. The latter would be more telling because it reflects market prices rather than the price paid by the IPO syndicate, which typically reflects a discount.²⁴⁷ A good match between Magellan's price and the trading price would seem to indicate that Magellan is appropriately

243. Bluebird bio, Inc., HubSpot, Inc., KaloBios Pharmaceuticals, Inc., Mobileye N.V., and Pure Storage Inc. have gone public since Magellan's initial investments in these companies. See *supra* Table 1.

244. See Schwartz, *supra* note 118.

245. This 18.2% figure is the return for the venture-capital industry for the three years ending December 2015. PREQIN, Q3 PRIVATE EQUITY UPDATE, *supra* note 226, at 11. Its performance would place Magellan in the top quartile of venture-capital funds in about 70% of years. See *supra* note 229.

246. See Callum Borchers, *Cambridge Biotech Raises \$101M in IPO*, BOS. GLOBE (June 20, 2013), <https://www.bostonglobe.com/business/2013/06/19/bluebird-bio-ipo-soars-first-day-trading/HxDvtzuKMIf1CL4bAPm0L/story.html> [https://perma.cc/8TEA-TMQC]; Gabriella Coppola & Leslie Picker, *Mobileye Raises \$890 Million as Largest Israeli IPO in the U.S.*, BLOOMBERG (July 31, 2014, 7:53 PM), <https://www.bloomberg.com/news/articles/2014-07-31/mobileye-raises-890-million-as-largest-israeli-ipo-in-the-u-s-> [https://perma.cc/WYH3-PJHJ].

247. See Steven Davidoff Solomon, *Why I.P.O.'s Get Underpriced*, N.Y. TIMES: DEALBOOK (May 27, 2011, 10:48AM), http://dealbook.nytimes.com/2011/05/27/why-i-p-o-s-get-underpriced/?_r=0 [https://perma.cc/E6ED-2R67].

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tracking the value of its investments.²⁴⁸ Table 4 shows this information.

Table 4: Initial Public Offerings Data²⁴⁹

Company	Highest Internal Valuation (\$)	Final Internal Valuation (\$)	IPO Price (\$)	End of First Day of Trading
bluebird bio, Inc.	.78 (March 31, 2013)	.78 (14.80) (March 31, 2013 / May 28, 2013)	17 (June 18, 2013)	26.91 (June 19, 2013)
HubSpot, Inc.	10.17 (Mar. 31, 2014)	7.50 (22.50) (Sept. 30, 2014 / Nov. 20, 2014)	25 (Oct. 9, 2014)	30.10 (Oct. 9, 2014)
KaloBios Pharmaceuticals, Inc.	3.40 (June 30, 2012–Dec. 31, 2012)	3.40 (12.11) (Dec. 31, 2012 / Feb. 28, 2012)	8 (Jan. 31, 2013)	7.95 (Jan 31, 2013)
Mobileye N.V.	34.90 (Sept. 30, 2013–June 30, 2014)	34.90 (6.98) (June 30, 2014 / Aug. 29, 2014)	25 (July 31, 2014)	37 (Aug. 1, 2014)
Pure Storage Inc.	18.67 (June 30, 2015)	15.30 (Sept. 30, 2015 / Nov. 30, 2015)	17 (Oct. 6, 2015)	16.01 (Oct. 7, 2015)

248. Venture capitalists typically price their preferred shares as if they were common stock, ignoring the value of the downside protection. Robert P. Bartlett III, *A Founders' Guide to Unicorn Creation: How Liquidation Preferences in M&A Transactions Affect Start-Up Valuation*, in RESEARCH HANDBOOK ON MERGERS AND ACQUISITIONS 123, 125 (Steven Davidoff Solomon & Claire A. Hill eds., 2016). When it is clear that a company is going public, however, the distinction evaporates because protection from downside risk is irrelevant. Private and public valuations should, therefore, largely align (although a liquidity discount to reflect any lockup period would be defensible).

249. The “Highest Internal Valuation (\$)” and “Final Internal Valuation (\$)” columns are derived from Magellan’s quarterly reports. To access these reports, see *EDGAR Search Results: Fidelity Magellan Fund CIK#: 0000061397*, *supra* note 60. The first dates listed in the “Final Internal Valuation (\$)” column are the quarter-end dates for the quarterly reports reflecting the noted valuation. The second dates listed are the actual filing dates for those reports. The prices in parentheses in that column represent what the fund’s reported price equates to accounting for stock splits at or around the time of the IPO and for the rate at which the fund’s holdings convert into common stock. For

What stands out is how far off Magellan's valuations were from the market values of the same firms at the end of the first day of trading. Magellan overvalued KaloBios by 34%. The fund's valuation was low, but reasonably close for Pure Storage Inc. (5% off), and far too low for HubSpot, Inc. (34% off), Mobileye N.V. (430% off) and bluebird bio, Inc. (82% off).

These discrepancies are difficult to explain. SEC rules provide funds with sixty days from the quarter-end or more to file their quarterly reports²⁵⁰—and Magellan takes full advantage. As Table 4 shows, in four out of five cases, this meant that Magellan filed its report listing its valuation estimate for the firm *after* its IPO. In the other case, bluebird bio, Inc., Magellan filed about three weeks prior. Thus, with the exception of bluebird bio, Inc., Magellan had actual price data to inform its valuations. So informed, the fund's valuations for the quarter ending prior to the IPO should closely align with the subsequent, but closely timed, market prices.

Looking more closely at the data, in two cases, Mobileye N.V. and KaloBios, Magellan never changed its quarterly valuations prior to the IPOs. HubSpot, Inc.'s and Pure Storage Inc.'s valuations were lowered in the months prior to the public offering (which might suggest an adjustment in anticipation of the event and the value clarity it brings). As for bluebird bio, Inc., Magellan only held the firm for three quarters prior to its IPO and marked up the stock by fifty-six percent in the quarter prior to the offering.

A valuation process that, as law requires, takes into account all available information should, it would seem, hew closely to proximate market data. Because Magellan's valuations for these five firms prior to their IPOs show no discernable pattern that would help to explain why that was not the case, the discrepancies remain a puzzle.

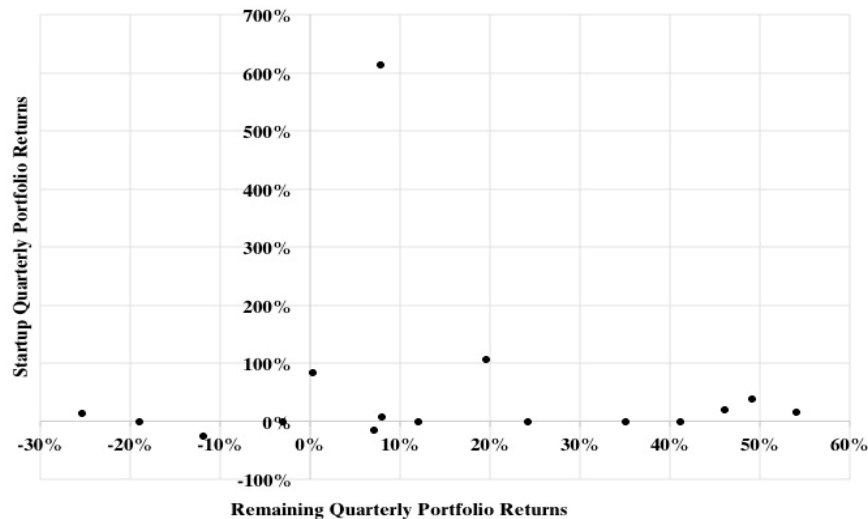
example, Magellan's valuation for bluebird bio, Inc. for the first quarter of 2013, which ended March 31, 2013, was \$.78. Magellan filed the quarterly report listing this valuation on May 28, 2013. *See* Fidelity Magellan Fund, Certified Shareholder Report (Form N-CSR) (Mar. 31, 2013). bluebird bio, Inc. conducted a one-for-18.967 reverse stock split shortly before its IPO, and Magellan's shares were eligible to convert on a one-to-one basis. *See* BLUEBIRD BIO, INC., PROSPECTUS 10 (June 18, 2013). Taking this into account, the \$.78 per share valuation, as of March 2013, equates to a \$14.80 valuation at the time of the IPO.

250. The first and third quarter reports are filed on Form N-Q, which have a sixty-day deadline. *See* FORM N-Q, *supra* note 80, General Instructions, Section A. Form N-CSRs are filed for the alternate quarters. These must be filed in seventy days. *See* 17 C.F.R. § 270.30e-1 (2016) (requiring semi-annual reports within sixty days of each half-year period); FORM N-CSR, *supra* note 80, General Instructions, Section A (requiring filing not later than ten days after delivery of a semiannual report).

e. Returns Smoothing

As noted above, rather than inflate valuations so as to exaggerate returns, funds could smooth returns by shifting the timing of when they reflect gains and losses.²⁵¹ If a fund is smoothing within its portfolio, it would show up as an inverse correlation between the fund's return on its startup portfolio and the return on its remaining investments. If a fund is smoothing against a benchmark (the S&P 500 in Magellan's case), this would show up as an inverse correlation between the performance of Magellan's startup investments and the remaining portion of the fund's performance relative to its benchmark. As illustrated in the scatterplots below, however, the relevant figures showed little correlation.²⁵²

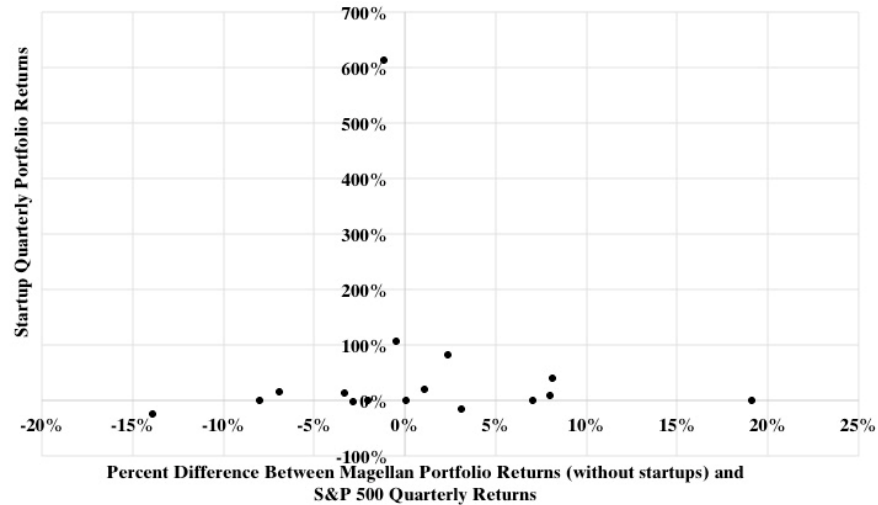
Figure 6: Startup Quarterly Portfolio Returns Compared to Remaining Quarterly Portfolio Returns



251. See *supra* Section II.C.3.

252. The correlation coefficient for Figure 6 is -0.05 .

Figure 7: Startup Quarterly Portfolio Returns Compared to Relative Benchmark Performance²⁵³



One reason smoothing might not appear is that, when Fidelity invests in a startup, it frequently spreads its holdings across more than one fund.²⁵⁴ Thus, while Fidelity might not be smoothing with respect to Magellan, it might be doing so with respect to the fund family as a whole—timing the valuation of gains and losses to the benefit of whichever fund in the family is most in need of support—and such behavior would not reveal itself in the above analysis.

f. Interpretation of Magellan's Valuations

The data above does not provide a clear answer as to whether Magellan is inappropriately valuing its startups. There is no evidence of smoothing and no pattern of overvaluation in the pricing of firms that went public. The comparison of private valuations to IPO prices does, however, call the rigor of the valuation process into doubt, and the comparison of venture-stage portfolio returns to other investments supports concerns about misconduct.

Upwardly skewed valuations are one of only a few explanations for the fund's success in the venture capital arena. And the alternative explanations, while plausible, are not overly compelling. It would be tempting to dismiss Magellan's success as the byproduct of a startup bubble, but this would be too easy. While many have voiced concerns

253. The correlation coefficient for Figure 7 is $-.03$.

254. See REICHART, *supra* note 152, at 3.

that startups are overvalued,²⁵⁵ to attribute Magellan's performance to a bubble requires an explanation for why Magellan is benefiting more from it than others in the venture capital industry.²⁵⁶ No convincing explanations present themselves. It is possible that Magellan is more skillful, but this seems improbable given the fund's inexperience. This leaves luck. While anything is possible over a relatively short period of time, ascribing Magellan's performance to good fortune is not a particularly satisfactory explanation either.

Surprisingly strong relative performance does not prove manipulation or disprove other explanations, but it is notable nonetheless. The valuation data could have shown that the venture investments were an unrelenting drag on returns. While this would not have disproven manipulation, it would have run counter to the theory that mutual funds are using such investments and their discretion over valuations to boost their returns in an absolute sense and in comparison to index funds. Such a finding would also have eased regulatory concerns. Even if funds are manipulating valuations to show results that are less bad than they really are, doing so would be part of a self-defeating investment strategy and therefore probably a short-term problem. Instead, the finding of superior performance lends credence to overvaluation concerns.

III. POLICY IMPLICATIONS

This Article proves, as much as a case study can, that mutual fund holdings in venture-stage firms and the processes funds employ to value these investments are not disclosed in a useful manner. It also makes the theoretical case for skepticism regarding the valuations mutual funds announce for their startup holdings each quarter. To assess the theoretical case, this Article reviews Magellan's valuations and measures them against several benchmarks. While Magellan's valuations and the associated returns are comparatively and surprisingly high, there is insufficient evidence to pin such success on misconduct. Nevertheless, the above combination of theory and

255. See, e.g., Andy Kessler, *A Dearth of Tech IPOs May Mask Bubble Trouble*, WALL ST. J. (July 9, 2015, 6:49 PM), <https://www.wsj.com/articles/a-dearth-of-tech-ipos-may-mask-bubble-trouble-1436482198>; Steven Davidoff Solomon, *Expect Some Unicorns to Lose Their Horns, and It Won't Be Pretty*, N.Y. TIMES: DEALBOOK (Jan. 19, 2016), http://www.nytimes.com/2016/01/20/business/dealbook/expect-some-unicorns-to-lose-their-horns-and-it-wont-be-pretty.html?_r=0 [<https://perma.cc/MS25-RYC7>].

256. If there is a bubble, mutual funds might be part of the reason for why it exists. Their presence may exert upward pressure on prices because they have vast resources and their inexperience and discretion over subsequent valuations may lead to price insensitivity.

evidence—along with the mutual fund industry’s already sizeable footprint in the venture capital space and its expanding taste for venture-type investments²⁵⁷—provides enough reason for concern to begin a conversation about reform.²⁵⁸

While disclosure is almost always the recommended cure for securities concerns, that alone would likely be insufficient in this instance. Many, even most, investors likely pay scant attention to mandated fund disclosures or even the content of fund websites.²⁵⁹ While this does not mean the pursuit of improved disclosure is in vain, it does suggest that substantive reforms to how mutual funds are permitted to do business should be the centerpiece and that any new disclosure recommendations should be calibrated to the reality of low investor engagement.

A. *Reforms to the Valuation Process and Related Disclosures*

Currently, securities rules require funds to value their portfolios daily, and the accounting requirements as to methodology allow funds to do so through any reasonable means.²⁶⁰ Because funds are required to constantly value their securities, this is a pure “mark-to-market” accounting structure, and because the process of marking to market is what creates the opportunity for manipulation, a modified cost-based accounting structure would mitigate such concerns.

Funds could be required to hold these investments at their acquisition cost, unless the fund believes a valuation change is warranted based on publicly available information. For instance, startups often announce their implicit valuation based on new rounds of financing.²⁶¹ When this occurs, funds could be required to update their valuations accordingly. Management shakeups, acquisitions, and even industry news could warrant changes.

257. See *supra* text accompanying note 43.

258. There is a regulatory tradeoff with respect to empirical evidence of misconduct: the more evidence one collects, the better the case for regulation, but the more harm that has already been done. While the case here is mostly theoretical, since the startup investing trend remains nascent, this could present an opportunity for regulators to get ahead of the industry.

259. See ABT SRBI, *supra* note 26, at 56, 78.

260. See 17 C.F.R. § 270.22c-1 (2016).

261. See, e.g., Press Release, Genesys, Genesys Announces Investment from Hellman & Friedman at \$3.8 Billion Valuation (July 21, 2016), <http://www.genesys.com/about/newsroom/news/genesys-announces-investment-from-hellman-friedman-at-38-billion-valuation> [<https://perma.cc/FQ34-VM2R>]; Press Release, Shazam, Shazam Announces \$30 Million Investment at \$1 Billion Valuation (Jan. 20, 2015, 8:59 PM), <http://news.shazam.com/pressreleases/shazam-announces-30-million-investment-at-1-billion-valuation-1107744> [<https://perma.cc/8BK7-FBC4>].

As a complement to the new valuation rules, funds could be required to disclose each quarter what public information caused the change. This is a rather mild form of intervention because it leaves pricing in the discretion of the fund and anticipates market-based revisions.²⁶² But the rationale for revised valuations would be subject to public scrutiny, which would incentivize funds to provide more conservative (and more careful) estimates—ones they could publicly defend if called upon. Most mutual fund investors would be unlikely to notice these disclosures, but the audience in this case would be the SEC, class-action lawyers, and the media. Indeed, the SEC and major newspapers have already begun to take note of mutual fund valuation practices.²⁶³

Funds would likely argue that such disclosures pose competitive concerns. As the opaque nature of their disclosures suggest, funds like to leave the public in the dark as to their practices. Similarly, when reporters have asked funds about valuation techniques, they are often met with silence or platitudes.²⁶⁴ The disclosures proposed here, however, would not compromise fund valuation models; only the publicly available information on which changes are based would be open for review. Such complaints are, therefore, unconvincing.

This proposal is the least intrusive from an array of options. The most extreme alternative would be to prohibit mutual funds from making venture-style investments, and instead allow only exchange-traded funds (“ETFs”) and closed-end funds to do so. While similar to mutual funds, the shares for these pooled investments are publicly

262. Rules could also require disclosure of whether the fund is using a third-party pricing service. The value of these services can be questioned: they might struggle to price venture-stage investments, and they might be pressured to value such investments in conformity with management’s wishes. Nevertheless, they have been shown to reduce smoothing in the hedge fund context. See Gavin Cassar & Joseph Gerakos, *Hedge Funds: Pricing Controls and the Smoothing of Self-Reported Returns*, 24 REV. FIN. STUD. 1698, 1700 (2011). While not necessarily probative of what would happen in the mutual fund arena, evidence from Sarbanes-Oxley shows that disclosure of whether a publicly traded firm adopts a shareholder-friendly practice leads to an increased adoption of that practice. See James S. Linck, Jeffry M. Netter & Tina Yang, *The Effects and Unintended Consequences of the Sarbanes-Oxley Act on the Supply and Demand for Directors*, 22 REV. FIN. STUDIES 3287, 3292, 3310–11 (2009) (showing an increase in the number of financial experts on corporate boards after Sarbanes-Oxley required disclosure of whether companies had such individuals on their audit committees).

263. See Kirsten Grind, *Regulators Look into Mutual Funds’ Procedures for Valuing Startups*, WALL ST. J. (Nov. 17, 2015, 7:17 PM), <http://www.wsj.com/amp/articles/regulators-look-into-mutual-funds-procedures-for-valuing-startups-1447796553>; see also, e.g., McLaughlin & Somerville, *supra* note 6; Sorkin, *supra* note 1.

264. See, e.g., Chapman & Singer, *supra* note 162; Grind, *supra* note 263; Sorkin, *supra* note 1.

traded, which means any disconnect between fund valuations and market value would be accounted for in the price of the shares.²⁶⁵ Like in the public markets, unsophisticated shareholders would be protected by the market price.²⁶⁶ The problem is that this would cut many ordinary investors out from startup investing. ETFs and closed-end funds do not have the same footprint as mutual funds, and they are not as common in 401(k) plans.²⁶⁷ Without clear evidence of misconduct, it is better to mitigate the risk of abuse than deprive people of the opportunity to indirectly invest in young companies.

One could allow mutual fund participation, but remove the risk of misconduct, by taking valuation discretion away from the funds. Instead, they could be required to hold the investments at cost. In contrast to the modified cost-based proposal presented above, with this option, the market value would only enter the NAV calculation if there is a liquidity event, such as the sale of shares in an emerging firm. The problem, and the reason I propose milder intervention, is that this change would open an arbitrage opportunity for sophisticated investors. Suppose a company enters a later funding round at an increased valuation. After the round, the fund's recorded NAV would be artificially low. Arbitrageurs could purchase shares in the fund in anticipation of when the value would actually be realized. The same is true on the flip side. A requirement to hold the firms at cost would mean that funds would carry inflated valuations for firms in cases where there has been bad news. Arbitrageurs could sell fund shares only to repurchase them if the firm eventually goes bankrupt.²⁶⁸

The underlying problem is that a purely cost-based system creates a predictable divergence between announced values and market values. In a typical public market, the actions of sophisticated traders help retail investors as their conduct brings prices in line with market values. But in the mutual fund context, the NAV stays the same. The profits of the arbitrageurs come at the expense of long-

265. See *How to Invest in a Closed-End Fund*, WALL ST. J., <http://guides.wsj.com/personal-finance/investing/how-to-invest-in-a-closed-end-fund/> [<https://perma.cc/U2XB-PWTC>].

266. See Jeff Schwartz, *The Law and Economics of Scaled Equity Market Regulation*, 39 J. CORP. L. 347, 362 (2014).

267. See *How to Invest in a Closed-End Fund*, *supra* note 265.

268. Even with small allocations to emerging firms, large valuation discrepancies could develop, which would render such strategies profitable. For a discussion of the economics of arbitrage, see Schwartz, *supra* note 266, at 376.

term, presumably retail, investors.²⁶⁹ Under the modified cost-based approach I propose, however, while a difference between market price and reported price difference might exist in theory, it would be impossible to exploit because the information on which to do so would not be publicly available.²⁷⁰

A similar alternative would be to require updating, when and only when, there are certain outside events (e.g., a new funding round, an acquisition, bankruptcy). The ability to alter valuations subject to these constraints would allow greater flexibility than the purely cost-based alternative. While this approach would reduce the arbitrage problem, it would not eliminate it. Sophisticated investors could buy or sell based on whatever events are not included on the list.

Additional research might indicate that more restrictive measures are appropriate, but at this point, when research is still thin, incremental change seems most prudent. The suggested alteration to the valuation process, and the accompanying disclosure rule, would provide a great deal more investor protection than today's regime without significant upheaval.²⁷¹

B. *Startup Portfolio Disclosure*

A limitation to the changes discussed thus far is that they would not address the investor notice problem. The SEC and sophisticated investors would be more aware of fund valuation practices, but the

269. This would be a form of stale-price arbitrage. For a discussion of the topic and the harm to shareholders it causes, see generally Eric Zitzewitz, *Who Cares About Shareholders? Arbitrage-Proofing Mutual Funds*, 19 J.L. ECON. & ORG. 245 (2003).

270. Corporate insiders would be in position to profit based on price inaccuracy, but trading based on material nonpublic information would constitute insider trading. See, e.g., U.S. Sec. & Exch. Comm'n, Litigation Release No. 21,383 (Jan. 20, 2010), https://www.sec.gov/litigation/litreleases/2010/lr21383.htm?_ga=1.93175768.479061596.1482959610 [<https://perma.cc/X79S-GHCC>] (describing SEC action for insider trading against mutual fund manager for trading based on inside information about the mispricing of certain fund assets).

271. Hedge funds face a similar valuation concern in connection with the illiquid aspects of their portfolios. To address the risk that some investors may cash out at inappropriate valuations, some funds have adopted so-called "side pockets." See Strasburg, *supra* note 169. Illiquid securities are kept in the side pocket and proceeds from such securities are only distributed to shareholders after a liquidity event. See *id.* The practice is controversial. See Gregory Zuckerman & Scott Patterson, 'Side-Pocket' Accounts of Hedge Funds Studied, WALL ST. J. (Aug. 4, 2006, 12:01 AM), <http://www.wsj.com/articles/SB115465505123626547>. While such an arrangement might be feasible for mutual funds, it would run afoul of the bedrock idea that mutual fund shares are quickly and fully redeemable, and it introduces a degree of complexity that might elude shareholders.

presence of venture-stage firms in fund portfolios, and the risks they pose, would still be unknown to most investors. As noted above, this problem is difficult to fix because investors are notoriously uninterested in fund disclosures.²⁷² With this in mind, rules should mandate disclosures across an array of platforms, including both fund advertisements and SEC forms, so as to reach as many investors as possible, and require that such disclosures be simple and clear enough so that those investors that come across them understand that the fund is investing in startups and the risks involved. This practice would provide actual notice to some investors and constructive notice to all.²⁷³

Such an approach starts with a rule that instructs funds with venture investments to include something like the following disclaimer whenever they present their fund strategy, including in its website and prospectus: “This fund contains investments in startup companies. Such investments pose unique risks, which are discussed in further detail in the ‘Startup Portfolio’ section of our Statement of Additional Information.”

This section would then describe such risks. It would explain that such firms are illiquid and that this may make it difficult for funds to redeem mutual fund shares on demand. Funds could appropriately tailor this discussion according to the portion of the fund’s portfolio so invested. Funds would also be required to explain the valuation challenges with startups. In particular, funds should indicate that valuing startups is inherently subjective and that exaggerated valuations lead to excess compensation for management, which means that the interests of the fund’s managers do not necessarily align with those of its shareholders.

The fund would then explain the process it uses to value startups and address concerns regarding its discretion and potential bias. In this part, the fund would describe what it *does* rather than what it *may* do. For example, at least one fund tries to use market behavior of similar public companies to estimate emerging firm values.²⁷⁴ When this is the case, then firms should acknowledge it. One problem with today’s disclosures is that fund’s provide a broad discussion of their process for valuing assets without a readily identifiable market value. Because they apply this process to a range of assets, the discussion is

272. See *supra* note 26 and accompanying text.

273. Constructive notice, while less than ideal, would be an improvement on the status quo where disclosures provide little notice and investors are exposed to amplified risks because of the flexible valuation rules. See discussion *supra* Sections II.A.1.b, II.C.

274. See, e.g., Chapman & Singer, *supra* note 162.

so general as to be meaningless. This proposal would require that firms specifically discuss what they do to fair value startups. To accommodate competitive concerns, funds would not be required to disclose the details of their valuation models. In the example above, for instance, a fund using public valuations to inform private ones would not be required to list which public company or companies it is using as a match for which startup.

The SAI would also inform investors that the current list of holdings, including valuations, can be found in the fund's quarterly reports. In addition, it would explain that the fund, as required by law, updates valuations when, and only when, publicly available information warrants doing so, and that it reports the basis of such changes each quarter. In the quarterly reports, startups should be specially marked as such with a footnote indicating that investors can learn more about such investments and their risks in the fund's SAI. This specific and clear disclosure regime would offer far more insight than the generalized and superficial information found in Magellan's reports today.

Even though the SEC has expressed concern about the length and complexity of fund disclosures, venture investing warrants special treatment. As discussed throughout this Article, such investments are uniquely illiquid and difficult to value and are quite different than the typical equity mutual fund holdings or even holdings in debt and other illiquid securities. Though the substantive reforms discussed above would mitigate concerns in connection with the startup valuation process, they would not eliminate them or the need for transparency with respect to funds' venture portfolios.

CONCLUSION

A case study of Fidelity Magellan Fund's compliance effort and investing practices suggests that the current regulatory structure does not adequately address the investor-protection concerns raised by mutual fund investments in startups. The study suggests that most fund investors are unaware that they have indirectly invested in these companies, which is particularly worrisome because fund valuations for these firms might be biased and inaccurate. A review of Magellan's valuations, and the performance related thereto, lend preliminary support to these concerns.

To respond to the investor-protection gaps, I propose greater limitations on how funds may value their investments in startups and enhanced disclosure requirements with respect to the valuation process, the presence of such firms in fund portfolios, and the risks

that investing in startups entails. While mutual funds have only recently begun imitating venture capital firms, they already own billions of dollars worth of equity in early-stage companies,²⁷⁵ and their exposure to this asset class is rising sharply.²⁷⁶ Rather than wait until the concerns outlined in this Article lead to clear investor harm, regulators can respond to the endemic problems with such investments in the mutual fund context and enact preventive regulations to mitigate the risks.

275. *See supra* text accompanying notes 41, 43.

276. *See supra* text accompanying notes 42–44.