V. Financial Beasts: How Breeding Unicorns May Bring Big Consequences

A. Introduction

In 2013, venture capitalist Aileen Lee of Cowboy Ventures tracked, for the first time, a select group of 39 "U.S.-based software companies started since 2003" that were valued by public or private market investors at $1 billion or more.[1] Extremely rare and representing only ".07 percent of venture-backed consumer and enterprise software startups," these $1 billion valued companies were deemed "Unicorns" for their extraordinary future earning potential.[2]

While Unicorns remain particularly rare, since 2013 the "Unicorn Club" has grown exponentially, and today includes popular brands such as BuzzFeed, valued at $1.5 billion, Spotify, valued at $8.5 billion, and Pintrest, valued at $11 billion.[3] Yet not all are convinced that the recent rise in the number of Unicorns is healthy. Some argue that Unicorn valuations are unreliable and simply based on "fuzzy, insane math" as many startups have yet to generate a profit, or are based on unknown future expected returns.[4] Others emphasize that the price of potential common stock should be used,

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[1] Aileen Lee, *Welcome to the Unicorn Club: Learning from Billion-Dollar Startups*, TECHCRUNCH (Nov. 2, 2013), http://techcrunch.com/2013/11/02/welcome-to-the-unicorn-club/ [http://perma.cc/M8E9-CCED].

[2] *Id.*

[3] *CrunchBase Unicorn Leaderboards, Today's Unicorns*, TECHCRUNCH, http://techcrunch.com/unicorn-leaderboard/ [http://perma.cc/RGH8-2DB2] (last updated Oct. 27, 2015); *see also* Scott Austin et al., *The Billion Dollar Startup Club*, WALL ST. J., http://graphics.wsj.com/billion-dollar-club/ [http://perma.cc/UCD5-L45T] (last updated Oct. 2015); Daniel Roberts & Andrew Nusca, *The Unicorn List*, FORTUNE, http://fortune.com/unicorns/ [http://perma.cc/64D7-ANTZ] (last updated Aug. 25, 2015).

[4] Adam Lashinsky, *Playtime is Over, Unicorns*, FORTUNE (Aug. 25, 2015, 1:27 PM), http://fortune.com/2015/08/25/unicorn-startups-falling-market/ [http://perma.cc/69EC-9S9G]; *see also* Sarah Frier & Eric Newcomer, *The Fuzzy, Insane Math That's Creating So Many Billion-Dollar Tech Companies*, BLOOMBERG (Mar. 17, 2015), http://www.bloomberg.com/news/articles/2015-03-17/the-fuzzy-insane-math-that-s-creating-so-many-billion-dollar-tech-companies [http://perma.cc/672G-EMND].

and would provide a more accurate indicator of valuation.[5] Lastly, some point to underlying ulterior motives that are fueling the rise in $1 billion valuations.[6]

As Unicorns become more common and valuations continue to grow, many underscore one troublesome theme—over-valuation.[7] Despite $1 billion valuations, numerous Unicorns remain "paper unicorns," private companies that have not yet had a liquidity event.[8] In addition, providing millions in venture capital funding is no guarantee of return.[9] Moreover, because Unicorns are privately held

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[5] Frier & Newcomer, *supra* note 4.

[6] Nick Bilton, *Is Silicon Valley in Another Bubble . . . and What Could Burst It?,* VANITYFAIR (Sept. 1, 2015, 5:30 AM), http://www.vanityfair.com/news/2015/08/is-silicon-valley-in-another-bubble [http://perma.cc/PH8Y-2LG5] ("We need to be worth a billion dollars to be able to recruit new engineers.") (quoting a startup CEO who was seeking funding); *see, e.g.*, Kathleen Pender, *Are Unicorn Valuations Part Fantasy?*, S.F. CHRON. (May 13, 2015), http://www.sfchronicle.com/business/article/Are-unicorn-valuations-part-fantasy-6261937.php [http://perma.cc/4KLD-U7WH].

[7] John Rampton, *There Is No Silicon Valley Crash Coming—For a While*, TECHCRUNCH (Aug. 23, 2015), http://techcrunch.com/2015/08/23/there-is-no-silicon-valley-crash-coming-at-least-for-a-while/ [http://perma.cc/2KDC-9RCU]; *see, e.g.*, Mike Brown, *The New Tech Bubble: Jobs, Pensions, Innovation at Risk If 'Overvalued' Unicorns Like Uber, Airbnb, Palantir Falter*, INT'L BUS. TIMES (Aug. 20, 2015, 8:13 AM), http://www.ibtimes.com/new-tech-bubble-jobs-pensions-innovation-risk-if-overvalued-unicorns-uber-airbnb-2061613 [http://perma.cc/D52E-TAZV].

[8] Aileen Lee, *Welcome to the Unicorn Club, 2015: Learning from Billion-Dollar Companies*, TECHCRUNCH (July 18, 2015) http://techcrunch.com/2015/07/18/welcome-to-the-unicorn-club-2015-learning-from-billion-dollar-companies/#.qluha4:MZDI [http://perma.cc/GH5Y-ZBK5]. A liquidity event is "[a]n event that allows initial investors in a company to cash out some or all of their ownership shares and is considered an exit strategy for an illiquid investment . . . The most common liquidity events are initial public offerings (IPOs) and direct acquisitions by other corporations or private equity firms." *Liquidity Event Definition*, INVESTOPEDIA http://www.investopedia.com/terms/l/liquidity_event.asp#ixzz3o1AaAMJR [http://perma.cc/LD9X-ZT83].

[9] John Backus & Hemant Bhardwaj, *Update: Unicorns Vs. Dragons*, TECHCRUNCH (Dec. 14, 2014), http://techcrunch.com/2014/12/14/unicorns-vs-dragons/ [http://perma.cc/79TJ-LT55]; *see also* Andrew Dewson, *Is This the End of the Road for Billion-dollar Tech Unicorns?*, THE INDEPENDENT (Aug. 25, 2015), http://www.independent.co.uk/news/business/analysis-and-

companies, the SEC and the general public have not scrutinized the valuations as carefully, thus calling into question the accuracy of their assigned worth.[10] With valuations in the billions, and few exit strategies, critics argue that the growth of Unicorns may be a signal that we are again on the cusp of another tech bubble explosion.[11]

This article outlines the recent rapid growth of Unicorns, and potential consequences of their billion-dollar valuations. Part B provides an overview of the financing and valuation practices that create Unicorns. Next, Part C examines the accelerated growth of the Unicorn Club since 2013. Part D then discusses the issues surrounding potentially artificial valuations. Finally, Part E reveals the potential implications of breeding Unicorns for investors, consumers, and the market.

B. Financing and Valuation of Unicorns

Publicly held companies are "valued by multiplying their number of shares by their share price" under conditions in which "[s]hareholders have access to reams of data and typically base their decision on factors such as earnings . . . growth rate and 'beta'—or how volatile the stock is compared with the overall market."[12] But to save on legal and regulatory expenses associated with going public, today many tech startups are choosing to remain private.[13] Instead of

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features/is-this-the-end-of-the-road-for-billiondollar-tech-unicorns-10470261.html [http://perma.cc/7FQ6-PSZX].

[10] Kevin Kelleher, *Here's the Major Downside of So Many $1-Billion 'Unicorn' Startups*, TIME (April 7, 2015) http://time.com/3773591/unicorn-startups-downside/ [http://perma.cc/39PB-SWHE] ("Corporate insiders have greater control in setting valuations, while executives escape the scrutiny of quarterly disclosures."); Bilton, *supra* note 6 ("These are private companies, with private balance sheets, and the valuations they ascribe to themselves aren't vetted in the same way by the S.E.C. or public markets").

[11] Tallat Mahmood, *The Tech Industry Is in Denial, But the Bubble Is About to Burst*, TECHCRUNCH (June 26, 2015), http://techcrunch.com/2015/06/26/the-tech-industry-is-in-denial-but-the-bubble-is-about-to-burst/ [http://perma.cc/4JYF-HB46].

[12] Pender, *supra* note 6.

[13] J. Todd Hahn et al., *Client Alert: Private IPOs and Unicorns May Trigger More H-S-R Act Filings*, GOODWIN PROCTER LLP (July 28, 2015), http://www.goodwinprocter.com/Publications/Newsletters/Client-Alert/2015/07_28-Private-IPOs-and-Unicorns-May-Trigger-More-HSR-Act-Filings.aspx [http://perma.cc/LPZ7-GNN9].

"resorting to the public markets for financing and liquidity," startups are raising money "through large, late-stage growth equity rounds . . . now being referred to as private IPOs."[14]

While private IPOs are proving a lucrative way for startups to generate capital, private investors are also structuring the deal for their benefit.[15] In private IPOs, investors "generally receive preferred stock, rather than the common stock that is issued in IPOs and held by public company investors."[16] Furthermore, "[w]hen a company raises funding from a venture capital firm, the deal is usually structured so that the new investors get their money back before anyone else can cash out."[17] Thus, in addition to mitigating risk, this "ensures the founders won't get rich unless the investors at least get their money back."[18]

A direct consequence of startups generating large capital in private IPOs before contemplating a public offer is an obscuration of the way in which these companies would otherwise be valued.[19] Unlike publicly held company valuation practices, private company valuations are largely based on negotiations between management and investors.[20] Valuation conversations are driven by projections of future profits, and "what a small handful of investors . . . are willing to pay for a stake."[21] These investors come with "a different risk

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[14] *Id*.
[15] Frier & Newcomer, *supra* note 4.
[16] Barry J. Kramer et. al., *The Terms Behind the Unicorn Valuations*, FENWICK & WEST LLP (May 6, 2015), http://www.fenwick.com/publications/Pages/The-Terms-Behind-the-Unicorn-Valuations.aspx#?WT.mc_id=2015.Unicorn_MKTG?utm_source=Mondaq&utm_medium=syndication&utm_campaign=View-Original [http://perma.cc/5FWS-CMU5].
[17] Timothy B. Lee, *Why Today's Tech Boom Isn't Like the 1990s Bubble*, VOX (Sept. 11, 2015), http://www.vox.com/2015/9/11/9306533/silicon-valley-bubble-no [http://perma.cc/A63S-G6DD]; *see also* Kramer et. al., *supra* note 16.
[18] Lee, *supra* note 17.
[19] Kramer et. al., *supra* note 16.
[20] Pender, *supra* note 6.
[21] Andrew R. 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?_r=1 [http://perma.cc/CE6J-DZFQ] ("There is no meaningful stock market for these shares. Their values

appetite" than the average investor that is saving for retirement, and often take a "shoot-the-moon approach, willing to accept a long list of losers so long as their portfolios include some huge winners."[22] Thus, while there are "more than 100 companies that are worth more than $1 billion on paper," many may fall far short of achieving their supposed $1 billion value.[23]

C. Recent Rapid Increase in the Number of Private IPOs and Unicorns

Since Aileen Lee first tracked the Unicorn Club in 2013, the list of Unicorns has skyrocketed.[24] While Unicorns remain a rarity, as of October 27, 2015, ninety-six companies have joined the exclusive group in the United States.[25] Members of the Unicorn Club now include renowned tech brands BuzzFeed ($1.5 billion valuation), Spotify ($8.5 billion valuation), Pinterest ($11 billion valuation), Snapchat ($16 billion valuation), AirBnB ($25.5 billion valuation), and Uber ($51 billion valuation).[26] Combining this list with other companies abroad, the Unicorn Club currently contains 153 companies, and includes tech giants such as China's Xiaomi ($45 billion valuation), and India's Flipkart ($15 billion valuation).[27]

There are a number of reasons why private IPOs have grown in popularity, causing the recent rise in Unicorns. First, by providing venture investors with a variety of safeguards such as senior liquidation preferences and downside protection, startups have been able to secure generous investment capital outside of an IPO.[28] Second, the SEC regulatory approval process, which can potentially

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are based on what a small handful of investors—usually venture capital firms, private equity firms or other corporations—are willing to pay for a stake.").

[22] *Id*.

[23] Lee, *supra* note 17.

[24] *Unicorns Are Breeding Like Rabbits: Set to Double 2014's Record Pace*, CB INSIGHTS (May 21, 2015), https://www.cbinsights.com/blog/unicorn-update-2015/ [http://perma.cc/QX5G-6DG7]; *see generally CrunchBase Unicorn Leaderboards*, *supra* note 3; Mahmood, *supra* note 11.

[25] *CrunchBase Unicorn Leaderboards*, *supra* note 3.

[26] *Id.*

[27] *Id*.

[28] Frier & Newcomer, *supra* note 4; *see also* Pender, *supra* note 6.

take up to nine months, has further deterred public offerings.[29] Lastly, the regulatory process to go public can also be quite expensive.[30] For example, "[a] company looking to raise between $100 and $200 million might spend well over $10 million on legal costs."[31]

With abundant private investors and a viable option to avoid regulatory red tape, many startup owners see little incentive to go public and "would rather answer to no one."[32] If tech startups do choose to go public, they are taking on average an additional four years to do so, compared to technology companies in 2000, which allows them to attract even higher private valuations.[33] The result is that "[t]echnology companies' share of U.S. initial public offerings has fallen to a seven-year low,"[34] while Unicorns are multiplying like very expensive rabbits.[35]

D. The Valuation Issues of Breeding Unicorns

Underlying the Unicorn Club's steady growth is a private valuation system that many have cited as unreliable and inherently flawed for a number of reasons. First, increasingly large valuations may not be based in reality, but rather may simply be the result of "fuzzy-math" in which investors and startup owners share a common

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[29] Justin Spittler, *Two Markets That Are Drunk on Easy Money*, PROACTIVE INVESTORS (Sept. 10, 2015, 11:19 AM), http://www.proactiveinvestors.com/columns/casey-research/5752/two-markets-that-are-drunk-on-easy-money-5752.html [http://perma.cc/BDS2-TGVA]; *see also* Serena Saitto, *This Venture Capitalist Says We Have Entered a Tech Bubble*, BLOOMBERG (Mar. 5, 2015), http://www.bloomberg.com/news/articles/2015-03-05/this-venture-capitalist-is-willing-to-say-we-re-in-a-tech-bubble [http://perma.cc/CWW4-DBMR].

[30] Spittler, *supra* note 29.

[31] *Id*.

[32] *Id.*

[33] *Id*.

[34] Rolfe Winkler & Telis Demos, *Tech Firms Are Notably Scarce in IPO Market*, WALL ST. J. (Sept. 10, 2015), http://www.wsj.com/articles/ipo-parade-continues-without-many-tech-companies-1441929152 [http://perma.cc/QQ3M-5JJU].

[35] Erin Griffith, *Inside the Unicorn Economy*, FORBES (Sept. 15, 2015, 2:00 PM), http://fortune.com/2015/09/15/inside-the-unicorn-economy/ [http://perma.cc/EBM5-ENJV].

goal of stretching the truthfulness of a company's value.[36] Formulaically, private tech companies often lack sufficient historical data detailing earnings and revenues to inform projections that would otherwise be used for public valuations.[37] To compensate, a startup's potential for *future* profits is given greater weight.[38] This is troubling given the lack of empirical data suggesting earning potential, particularly as some Unicorns may have a high user base, but have yet to generate a significant revenue or profit.[39] Even more problematic is that after accounting for future potential profits, private valuations given by venture capital firms are often "made-up," simply "placeholder number[s], part of an equation fueled by other, more important factors . . . includ[ing] market share, growth projections, and a founder's ego."[40]

The value a private company receives thus becomes one aspect of the negotiation process between startups and investors. For startups, generating a high valuation is important because it helps generate publicity and the recruitment of both employees and customers.[41] As one Unicorn CEO stated, "We need to be worth a billion dollars to be able to recruit new engineers. So we decided that was our valuation."[42] Moreover, showing potential value may mean "founders don't have to give away as many of their shares to raise a lot of capital."[43]

Investors may similarly push valuations higher. Desperate to discover the next Facebook or Google and an accompanying "'hockey-stick' growth curve indicating massive user uptake," investor "fear [of] missing out" fuels startups' abilities to garner high valuations.[44] In addition, investors similarly pursue potential

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[36] Frier & Newcomer, *supra* note 4; *see also* Pender, *supra* note 6.
[37] *Id.*
[38] Lee, *supra* note 17.
[39] *Id*.
[40] Frier & Newcomer, *supra* note 4.
[41] Erin Griffith & Dan Primack, *The Age of Unicorns*, FORTUNE (Jan. 22, 2015), http://fortune.com/2015/01/22/the-age-of-unicorns/ [http://perma.cc/7QSZ-ZRLG]; *see also* Pender, *supra* note 6.
[42] Bilton, *supra* note 6.
[43] Frier & Newcomer, *supra* note 4.
[44] *Id*. ("[I]nvestors fear missing out on the next Google or Facebook. A severe case of FOMO can cause some to do crazy things to get into the hottest deals.").

unicorns as a means of attracting future entrepreneurial talent.[45] Startup founders also sweeten the deal for investors; in exchange for mega-valuations, startups "tuck away all sorts of provisions" that reward investors, which in turn raises the numbers even higher.[46]

Statistics seem to confirm that there are particular incentives to becoming a Unicorn, and that values assigned to this group of companies do not necessarily add up. Of the 153 currently listed Unicorns, nearly 30% are valued between $1 billion and $1.1 billion.[47] This suggests that "companies may have negotiated specifically to attain the unicorn level."[48]

The result of this Unicorn quest is that the valuation process is obscured. Despite other more reliable mechanisms, such as valuation generated by professional auditors based on employees' common stock, the private IPO valuation system remains dominant.[49] The most obvious examples of over-valuation appear to be the "decacorns," Unicorns worth $10 billion or more.[50] While it remains to be seen whether these companies can live up to their valuations, assigning value based on future expected returns and through negotiation may become particularly dangerous down the road if the valuation a Unicorn receives from venture capitalists fails to "align with its balance sheet."[51]

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[45] Stephanie Guo, *Unicorns and Other Mythological Creatures*, HARVARD POLITICAL REVIEW (Aug. 11, 2015), http://harvardpolitics.com/online/unicorns-mythological-creatures/ [http://perma.cc/S6ZB-NSHU].

[46] Frier & Newcomer, *supra* note 4.

[47] *CrunchBase Unicorn Leaderboards*, *supra* note 3.

[48] Kramer et. al., *supra* note 16 ("Attaining a unicorn valuation appears to be a goal of promising companies raising money, as 35% of the companies we analyzed had valuations in the $1-1.1 billion dollar range, indicating that the companies may have negotiated specifically to attain the unicorn level.").

[49] Frier & Newcomer, *supra* note 4 (discussing how valuation of common stock, "calculated by professional auditors" is a figure more "grounded in reality").

[50] *Id.*

[51] *Id.* ("By the time a company does go public, the valuation it got from VCs may not align with its balance sheet."); *see e.g.*, *The Dropbox Valuation Is Irrational,* *CB INSIGHTS BLOG* (Sept. 1, 2014), https://www.cbinsights.com/blog/dropbox-valuation-bubble/ [http://perma.cc/UC9F-ZSVE] (deeming the Box IPO, as compared with Dropbox's current private valuation of $10 billion, as unjustified because

E. The Consequences of Breeding Unicorns

While Unicorns present opportunities to potentially reap huge profits, there are growing concerns that breeding Unicorns under the current valuation system has created a new tech bubble, which will eventually lead to not-so-mythical consequences.[52] On average, Unicorns take about seven years to reach a "liquidity event," usually in the form of an acquisition or IPO.[53] In addition, Unicorns "don't just have a bigger war chest," but also a bigger burn, "which can make it hard to scale [expenditures and staffing] down in time."[54] Because many startups must raise additional capital every two to four years to sustain high burn-rate operations, failure to demonstrate "strategically justifiable metrics" could be detrimental to the company.[55] Thus many Unicorns are finding themselves in a unique situation in which they can "go public, which is inadvisable without a lot of revenue, or [they] can sell, which is difficult given the paucity of companies that can afford to make such an offer" based on their valuation.[56] As a result, Unicorns must continue to raise more and more capital, as failure to do so will likely trigger liquidation preferences for some investors, and the Unicorn becoming a "Unicorpse."[57]

The collapse of Unicorns becomes particularly worrisome when considering the lack of exit options for private investors. While some have argued that today's potential tech bubble is not as serious as the 2000 bubble because "the current crop of highfliers are privately held by expert investors like venture capitalists," in reality

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"Dropbox would need to grow its annual sales to ~$1.4B (or 226% growth from 2014 revenue of $400M) just to justify its private market valuation of $10B").

52 Mahmood, *supra* note 11.

53 Lee, *supra* note 8.

54 Scott Kirsner, *Unicorns Among Us: Bonus Material on Companies with $1 Billion-Plus Valuations*, THE BOSTON GLOBE: BETA BOSTON (Feb. 2, 2015), http://www.betaboston.com/news/2015/02/02/unicorns-among-us-bonus-material-on-companies-with-1-billion-plus-valuations/ [http://perma.cc/NE5B-EJSA].

55 Lee, *supra* note 8.

56 Bilton, *supra* note 6.

57 Lee, *supra* note 8.

the situation is quite different.[58] Today's investment climate has resulted in "unconventional investors" such as mutual and hedge funds,[59] public investors, and 401(k) contributors[60] providing investment capital to Unicorns with the hope of lifting returns from certain tech-focused mutual funds.[61] Moreover, critics also argue the climate of this tech bubble is even harsher than 2000 because Unicorn investments are based on even higher faulty valuations that lack liquidity.[62] Because many venture capitalists and investors are protected in some fashion from their investment's downturn, it ultimately may be the average investor, consumer, and employees of these startups that are most severely impacted.[63]

F. Conclusion

The rapid growth in the number of Unicorns presents huge potential for high returns. Nevertheless, the current valuation system used to breed Unicorns has created "a level of risk that we've never taken on before in the history of Silicon Valley startups."[64] It remains to be seen whether current Unicorn capital generation and valuation systems are stable, and what the ultimate impact will be on the consumer.

Gary Spencer[65]

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[58] Sorkin, *supra* note 21 (describing the notion that civilian "investors won't get hurt as they did after the dot-com collapse of 2000 because the current crop of highfliers are privately held by expert investors like venture capitalists" as "fiction").
[59] Mahmood, *supra* note 11.
[60] Sorkin, *supra* note 21.
[61] *Id.*
[62] Mahmood, *supra* note 11.
[63] Brown, *supra* note 7.
[64] Mahmood, *supra* note 11.
[65] Student, Boston University School of Law (J.D. 2017).