

**Master's Thesis**

**Utrecht University School of Economics**

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# **The Billion Dollar Wonderland:**

## **A Case Study in Struggles and Lackluster Regulation of Unicorn Firms**

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### ***Abstract***

Unicorns have been disrupting the startup landscape in the last few years and investors are on the lookout for them. These startups that reach a minimum, yet massive \$1 billion valuations are attracting much deserved attention because they are able to collect large amounts of investment at early stages of their development, all this while staying private. Unicorns also are not like any other normal ventures; they have defining characteristics that make them unique. Located in innovation clusters, high growth rates, disruptive innovation and highly experienced founders are just a few of the defining features of these once very rare ventures; today unicorns are appearing at higher rates. As unicorns seek more funding they look towards IPOs. However, this way of going public has not been so friendly to unicorns as some have failed due to reasons such as overvaluation, lack of transparency and weak corporate governance. This endangers investors, employees, and economies alike; unicorns are not as regulated and do not need to release financial information as do public firms. This paper calls for unicorns to be more heavily regulated and supports this by completing a literature review on the struggles unicorns have recently faced and evaluating three particular unicorn case studies that have failed in one way or another: Theranos, Uber and WeWork. Finally, alternatives such as direct listings and SPACs are presented to show that there might be a bright future or a terrible crisis for unicorns which might help usher new regulation.

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## ***1. Introduction***

More than ever startup companies have been garnering a large amount of popularity between entrepreneurs, investors, and the media. Most of the exuberance can be attributed to the “unicorn” phenomenon, a term firstly used by venture capitalist Aileen Lee in her highly cited 2013 Tech Crunch article. Unicorns are startup companies that have been valued at least at \$1 billion by both public and private investors ever since 2003 (Lee, 2013). The mythical term unicorn is coined due to the (then) rarity of these highly valued startups, in 2013 Lee only identified 39, however in 2020 CB Insights (a firm specialized in collecting and analyzing financial data) identified around 464 including many more who were at or close to achieving this status (Brown and Wiles, 2020). It is clear that these highly valued companies have started to appear at higher rates in the last few years; in 2020 we find 11 times the number of unicorns that were found in 2013. This phenomenon is not something completely new however, ever since the 1960’s a large, unicorn-like companies have appeared at least once every decade: Microsoft, Apple, Amazon, Google, recently Facebook, and most recently, Uber, Twitter, Airbnb. The earlier ones are the (former) “super unicorns” (companies valued at more than \$100 billion) that have appeared in the past and now are the most valued listed companies in the world (Lee, 2013). Three of them, Apple, Amazon, and Microsoft have reached market values topping \$ 2 trillion.

More cases are appearing in the competitive landscape as awareness has also increased worldwide by researchers, entrepreneurs, investors, and authors alike. Unicorns tend to be connected to technology bubbles, which are normally connected to more radical and game-changing innovations, such as YouTube.com (Oliveira et.al., 2018). Not even during the Dotcom<sup>1</sup> era did tech startups achieve the value that we see them today at (Zörgiebel, 2016). The current economic landscape and investing philosophies have helped them flourish; more is specifically covered in this paper. With this in mind, any money hungry investor would love to invest in a startup that could potentially reach a \$1 billion valuation, with some investors only injecting capital into a startup if it has the potential to reach unicorn status (Jinzhi and Carrick, 2019), and can be quickly publicly listed; especially at a very early stage as it can bring in more returns (Batterson and Freeman, 2017). Recent unicorns Uber and Airbnb reached \$66 and \$30 billion valuations respectively, their early investors won big money

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<sup>1</sup> The Dotcom era was defined by the hype behind the growth of the internet in the late 1990’s, many tech startups got huge investments and went public despite not having proper business plans, profits and finished promising products. A financial bubble was created and burst into a crisis in the early 2,000’s.

returns, but their late-round investors risked vulnerability to substantial losses and without the huge return multiples possible with early-stage deals (Batterson and Freeman, 2017). Unicorns especially are money hungry companies, more specifically for private capital coming from either angel investors, venture capital and corporate venture capital (Bock and Hackober, 2020). Investors more than ever feel incentivized to search in the wild for a unicorn, but this becomes a difficult task when there are tens of millions of startup companies and very few unicorns out there.<sup>2</sup> Investors, more specifically angel investors, devote their private capital into these new startups with the challenge of not knowing if it is worth it or not. They invest without having enough information to assess the quality of the new venture or any proof for the feasibility of the targeted product and market, they must rely on pure speculation and predictions (Dellermann et. al., 2017).

Therefore, it is without a doubt that with all the risks and scarceness of information that unicorns have, it is very possible that these private giants bring on a sack full of troubles. This is in fact true as seen with the likes of unicorns such as Theranos, Uber and WeWork. These three are one of the most famous cases where unicorns have crumbled big time because of failed IPOs, wrong valuations, opaque disclosures or even fraud. Analysts say that unicorns fail because of unrealistic evaluations, excessive spending or even a failure to further innovate (Govindarajan et.al., 2016). Economic theory would suggest that asymmetric information along with agency theory is a key market failure at play. Overvaluation does seem to be a major problem; a recent survey by the United States National Bureau of Economic Research found that, "...on average, about half of unicorns appear to be overvalued" (Ai, 2020). This is why calls for unicorns to be more closely regulated have been made. Currently, unicorns are equally regulated as smaller private companies; in countries such as the US they do not have to report much financial information. The big issue is that the size and influence of unicorns still "renders their effect in the marketplace much more like that of a publicly held corporation" (Fan, 2016). In order to protect investors, employees and even the economy these \$1 billion private companies need some oversight; there are major fears that the economic bubble created by the investment frenzy of unicorns will soon burst (Stavinoha, 2020). However, there is light at the end of the tunnel; unicorns such as Spotify have gone with the direct listing route in order to overcome IPO struggles and reach proper public transparency. This paper's objective is then to answer the following research question: *With recent cases of unicorn failures and foul-ups*

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<sup>2</sup> Earlier in the game, the vast majority of Unicorns were US firms, highly dominated by 'app' type businesses. Today, it appears that China has taken the lead – as the larger US ones went public – and quite a number of these are now 'Fin-techs'.

*due to potential fraud, information asymmetry, excessive investment methods or poor corporate governance, are these billion-dollar private companies in need of major surveillance and stricter regulation?* What are unicorns doing that practically begs for such oversight and what or who are the victims of such consequences of unicorn failures; why is the current market and regulations not capable enough of dealing with this phenomenon and what possible solutions may exist? To answer the aforementioned questions, this paper will formulate a literature review and case study that presents the troubles and risks that the unicorn phenomenon carries by illustrating the cases of Theranos, Uber and WeWork, which will provide evidence as to why unicorns must be regulated further to prevent possible economic crises. This research will first define the characteristics of a unicorn firm and evaluate which characteristics and variables are responsible for pushing startups to unicorn status. However, as it is with any new phenomena, the academic research done on unicorns has been quite limited. The scarceness of data on venture capital does not do any favors to researchers either (Bock and Hackober, 2020). Nevertheless, this paper gathers precious insight from the selected amount of academic research found on this topic and sources data from well cited financial websites. There will be a deep dive into the different elements that influence a unicorn's birth such as quality of investor, geography/location, type of industry, business model/growth and even the influence of media reports (Zörgiebel, 2016). The first section will build a literature review on what we academically know about unicorns and briefly dive into unicorn regulation and the cases of the three troubled unicorns, with a final remark on how unicorns are overcoming their struggles. The following section will focus on the design of the research process that will aim to complete the case study.

## ***2. Literature Review***

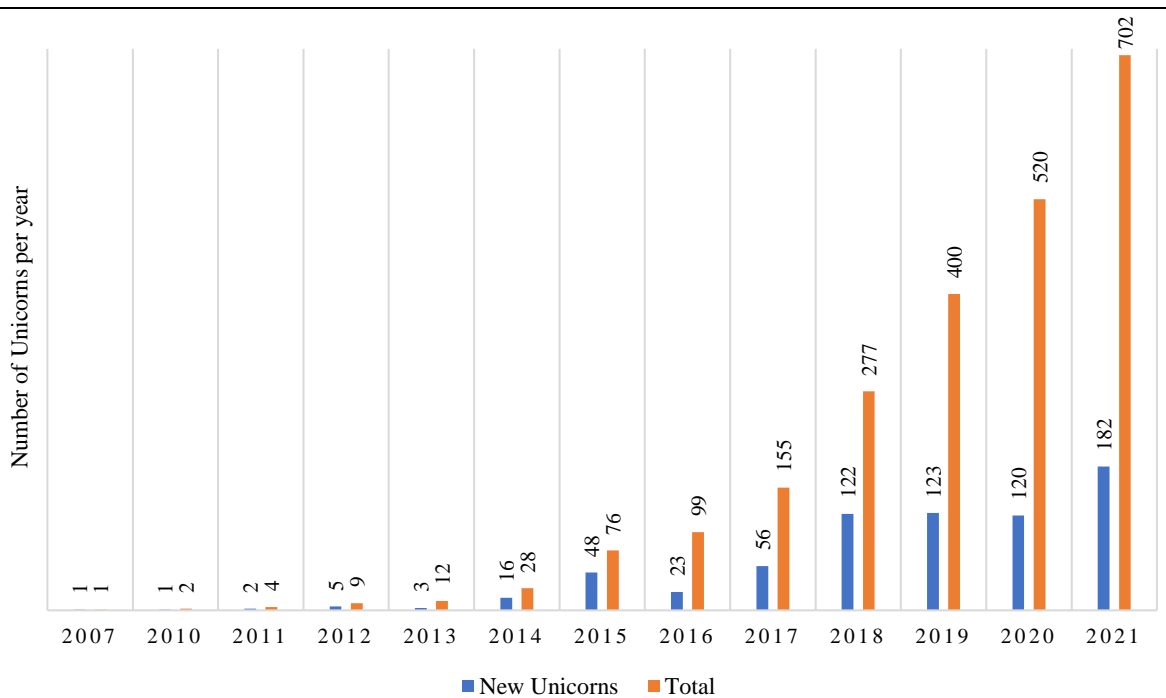
It is important to begin by formerly defining a unicorn company. What are their most common characteristics? A unicorn is a firm that has always been private and has received at least one round of institutional capital. They also are not divisional buyouts of a larger public company and finally their most appealing characteristic, they have a market valuation of \$1 billion or more (Brown and Wiles, 2015). In the sample gathered by their analysis, Brown and Wiles (2015) found more than 30 unicorns that had an exactly \$1 billion valuation, these clearly were the so called "soonicorn" that had around a <\$500 million valuation. Firms clearly want this tag for numerous reasons, it brings funding from numerous sources with longer periods,

and it of course gathers much attention from the media. The unicorn tag makes new ventures the “torchbearers of entrepreneurship ecosystem of emerging countries” (Kerai, 2017). Unicorns are grounded in network effects and demand-side economies of scale and scope; they tend to flourish in favorable business environments with emerging economies at high growth rates. They are initially very dependent on private venture capital and compete with other ventures to get it, therefore these immense valuations start to appear. Unicorns tend to satisfy the demand that larger companies do not by producing innovative and affordable services and products (Simon, 2016). Regards to industry, these unicorns are usually IT based companies that offer disruptive and new technologies associated with the World Wide Web (Oliveira et.al., 2018). Being the money hungry companies they are, unicorns grow at rates never before seen for a startup. This growth is due to three main pillars proposed by Oliveira et. al. (2018): an innovation engine where innovation and platform are involved in generating ideas, platform development which evaluates what assets to use to create value, and finally scaling, once the product idea is widely accepted by the public then the team of the company will make it grow exponentially.

Unicorns also tend to be located in certain specific regions around the world, three quarter of them are located in the United States and China with the rest scattered around the world. The same can be said about their investors who initially tend to be American and then foreigners come in (Bock and Hackober, 2020). An important characteristic of the unicorn company is that they are privately held; quite obvious since all startups are private but there is actually an explanation as to why unicorns stay private on the road of reaching a billion-dollar valuation. Indeed, when a unicorn becomes listed, such as through an IPO, it is no longer kept on the ‘unicorn list’. In recent years it has been observed that the number of private firms has risen, with IPO startup exits lowering (Bock and Hackober, 2020). This can be attributed to the fact that both unicorns and investors end up in a win-win situation, at least in the short term. Investors gain higher returns when investing in private startups than in publicly traded firms, unicorns on the other hand by remaining private it allows them to gather larger amounts of funding to establish more investments and gain a higher valuation (Brown and Wiles, 2015). The large availability of private capital initially keeps unicorns away from IPOs and their disclosure needs, after initial rounds of funding they would rather keep getting private VC money (Kerai, 2017). Lee and Nam (2020) proved that investment duration positively affected the exit valuation of these unicorns. Unicorns as well as investors benefit from longer investment duration because more time is taken to add value to both investor portfolios and the

final exit valuation of the startup. Unicorn startups do not find the need to use short duration investment in order to attract investors since they signal their quality by just being coined a unicorn already (Lee and Nam, 2020). Eventually, an IPO is pursued as founders and initial investors seek to monetize their paper gains.

**Figure 1.** Unicorn Growth Throughout the Years



Source: CB Insights

Not all investors and market analysts are fans of unicorns though, and they still get their fair share of criticism. Its most prominent criticism is that of their high valuations which are said to be driven to excessive levels due to institutional money chasing after too few significant, ‘quick-hit’ growth opportunities and investors just wanting to have ownership over these unicorns for bragging rights. FOMO (fear of missing out) also plays into the inflation of unicorn valuations since investors rush to pour money into these firms in fear of losing this opportunity of high returns (Batterson and Freeman, 2017). Not all valuations are objective and are purely based on expectations and euphoria (Oliveira et.al., 2018). Another criticism is their cash-burning tactics such as high employee salaries and customer acquisition activities that do not necessarily add to their valuation and misdirect efficient use of good capital (Kerai, 2017). Some unicorns, due to lack of regulation of their innovative activities also face federal trouble, for example Airbnb’s lack of compliance with regards to lodging laws and regulations, and Uber’s continuous battles of what constitutes an employee. Batterson and Freeman (2017) say

that there is no need to invest in a company already valued at \$1 billion or more since return multiples will be very low and not worth at all.

Basic economic theory violations would suggest that the problems that arise from the unicorn phenomenon originate as market failures. Asymmetric information is behind this as one party has more or better information than the other which generally cause a financial crisis (Mishkin, 1990). In the case of unicorns, the venture (unicorn) has more information about their market experiments than the investors who finance them (Cowden et.al., 2020). This leads to agency problems, agency theory states that problems will arise due to the interests of the owner and agent not aligning, with the agent usually not acting in the interest of the owner/principal (Jensen & Meckling, 1976). Private investors and venture capitalists (owners/principals) give their money to unicorns (agent), and these end up with moral hazard and adverse selection, with the former they take higher risks than they normally would with the investments of venture capitalists, the latter refers to a misrepresentation of the agent's abilities (Cowden et.al., 2020). Moral hazard and adverse selection emerge with the presence of high information asymmetry and managerial freedom, traits of the unicorn environment. According to Cowden et.al. (2020), unicorns engage in moral hazard because they are looking to disrupt the markets they are targeting while moving quickly and making multiple decisions. Because of their private nature, their investors are not able to monitor how the unicorn uses and allocates the funds under moral hazard. Therefore, Cowden et.al. (2020) proposes the concept of "agreeable moral hazard" where the investors accept the moral hazard of unicorns because they see it as a way of market disruption success and as a requirement to make those unicorn level innovations that will eventually give the investors high returns. This creates a cycle of information asymmetry and moral hazard that may be thought of as the root of all evil of unicorn problems.

These issues do not only damage the "unwise" investors but also creates macroeconomic shocks that cause financial crises due to the inefficient investment that ends up vaporizing. However, unicorns are still an exciting phenomenon that is worthy of investment and further study. The following subsections will explain in more detail and evaluate the different elements that contribute to the creation of a unicorn as their quite different than those of other ventures, as well the current struggles and regulations that unicorns currently face.



## *2.1 Unicorn Characteristics*

A venture is not going anywhere without investment, investors play a huge role on the road of becoming a unicorn. The existing literature has shown that the investor related factors such as experience and skills influence the probability of success of a venture (Bock and Hackober, 2020). Skillful and experienced investors are able to give themselves higher visibility due to their good reputation. Ventures who have high quality activities are then able to select investors of a higher reputation which in turn will increase the probability of unicorn status. These reputable ventures are helped by the fact that they operate in larger networks within their industry which gives them access to more information on higher quality investors (Bock and Hackober, 2020). It is essential for ventures to find high quality investors at early stages for achievement of unicorn status because this can attract more high-quality investors at later stages and creates a better monitoring environment. Reputable venture capitalists give legitimacy to these startups as well, especially those in emerging industries (Kerai, 2017). Corporate venture capital (CVC)<sup>3</sup> investment is another essential element for the creation of unicorns, CVC backs unicorns more often than non-unicorn startups. According to Bock and Hackober (2020), CVC backing has had a positive influence on unicorn creation for multiple reasons. CVC combines strategic and financial operations to guide startups, their objective is to gain access to new technologies, markets, and skillful employees that unicorns commonly have. Corporate investors create an entrepreneurial and innovative environment for these startups by granting expertise and infrastructure for product development, distribution, and legal assistance. CVCs reduce the uncertainty of new technologies developed by startups which certifies the use of these technologies to the market. Patience for returns and exits is a characteristic of CVC, this permits the ventures to spend more time developing products and services of higher quality. CVCs do not promote IPOs or pressure ventures unlike other desperate angel investors would, this allows the startups to grow organically with no timing or return constraints. These unicorn aspiring ventures send strategic signals to attract these investors, for example constructing a business plan and create a story behind the venture. Forming ties and affiliating to third parties such as venture development organizations which certify new ventures and reduce the noise from their signals by assessing them and their products. Certificates and endorsements from third parties help signal the potential of the venture to high quality investors. To sum up, high investor reputation and CVC backing

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<sup>3</sup> Corporate venture capital is the investment of corporate funds into startup companies not related to the firm. Large firms invest in small startups and acquire an equity stake in order to gain a competitive advantage as they acquire innovative technology or practices that cannot be produced as efficiently in the company itself.

increases the probability of a venture becoming a unicorn, while signals to attract these investors show the willingness of these ventures to become unicorns.

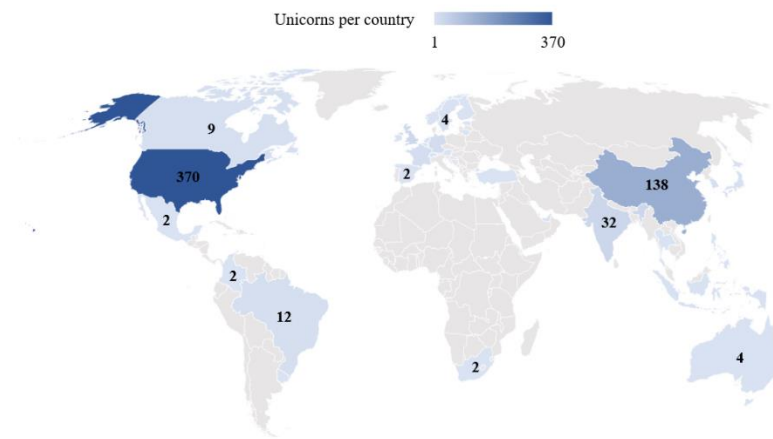
Time is an ally of unicorn aspiring ventures, more specifically when it comes to investments. A positive relationship exists between investment duration and startup valuations, longer investment durations benefit them with more certificate effects (Lee and Nam, 2020). Browns and Wiles (2015) present the idea of private IPOs (PIPOs) where startups are able to gain millions in investments while remaining private. PIPOs started to appear with the unicorn phenomenon and in some cases, they have become more frequent and of higher value than IPOs. According to CB Insights, there are more technology related PIPOs than IPOs, showing that unicorns possess this preference. PIPOs not only raise capital but also allows ventures to dodge the bullet when it comes to public regulations and the costs of public operation. However, their main purpose is to allow unicorns to stay private for longer periods by postponing IPOs or buyouts, PIPOs are an integral mechanism to the unicorn creation process. Startups are keeping themselves privately for longer periods unlike the past where they usually went for IPOs after three to five years. Startups nowadays go public after more than five years and even ten such as the case with Uber, it was founded in 2009 and had an IPO in 2019. IPOs do not always prove beneficial, staying with the Uber case, once the IPO trading closed its shares plummeted in value and the public shareholders simply did not capture the same value that private investors got at early private funding rounds. Startups and investors both gain from staying private for longer times, therefore ventures who have been private for more than five years tend to aim for unicorn status.

A venture is only as good as the people driving it; unicorns rely heavily on human capital in order to have a competitive advantage. The founder's/manager's scientific and management capabilities proved vital to the early growth of the startups (Jinzhi and Carrick, 2019). A high-quality management team plays a role in the success of unicorn creation, more specifically highly educated individuals are essential for the establishment of these innovative startups (Bock and Hackober, 2020). Oliveira et. al. (2018) analysis showed that there was little diversity among the group of unicorns they studied with regards to the founders/managers education, the vast majority had graduated from selective universities with just a few outliers that had been college dropout such as Facebook's founder. Another similarity was the founder's experience on founding previous companies, in Simon's (2016) sample 23 out of 63 had founded companies before and the majority were experienced businessmen. In the sample of Oliveira et. al. (2018) three quarters had previous and extensive startup experience. Unicorn

success depends on the managers capacity to respond and recognize external opportunities from adjacencies (Oliveira et.al., 2018). Another defining feature of Unicorns is the way that they grow. Ventures who are on the way of becoming unicorns are growing at very high rates, mostly due to the fact that they and their investors want to have a dominating position in the market. Unicorns target to become category kings through inorganic growth by acquiring other firms, this allows them access to new technologies and more market shares. By inorganically growing, these ventures manage to overcome any liabilities that small firms have and gain easier access to capital (Bock and Hackober, 2020). However, Bock and Hackober in their study managed to find no significant effect of inorganic growth affecting unicorn probability, only post money valuation. The key takeaway is that unicorns grow at high rates, whether it be as organic or inorganic growth.

Unicorns are quite unique in the sense of where they are located, environmental factors seem to affect if a venture has a higher chance of becoming a unicorn. Bock and Hackober (2020) propose that ventures that are founded within technological innovation clusters have a higher chance of becoming unicorns. Innovation clusters are an amalgamation of companies, universities, research, and government institutions that form a network within a geographical region. These clusters benefit small ventures because of the abundance of VC investors who provide constant private capital and the push of competitiveness that they are given. Startups within clusters can develop and offer superior products due to faster adaptability of consumer needs and constant flow of innovative practices and information (Bock and Hackober, 2020). More than three-quarter of the current unicorns are based in the US and China, Silicon Valley and New York are where most are born in the US. Shanghai and Beijing are where most Chinese unicorns are located, this is the region that has had the highest unicorn growth lately. These regions contain huge sources of financing and vast knowledge and innovation of technologies. It has not been proven that unicorns may be absent in countries that do not have large VC availability such as Italy and Spain, but it could certainly be hypothesized that it could be having an impact (Simon, 2016). Lee and Nam (2020) also found a relationship with ventures having foreign investors whose countries have high level institutions and their probability of unicorn success.

**Figure 2.** Amount of Unicorns Around the World



Source: CB Insights

Government policy has an effect on the likelihood of achieving unicorn status. Startups who have a better institutional background are able to stay private for longer and gather more resources. Government policies that support startups cause a reduction of anxiety for investors that allows them to keep investing in startups which then are given a boost of confidence and competitiveness. The higher the level of these policies, the more exit valuations of startups increase (Lee and Nam, 2020). Even indirect government support can help startups; tax shelters, support of SMEs and infrastructure, and access to public research institutions (Simon, 2016). Lately the Chinese government has given a lot of support to startups and unicorns, hence their growth in that region (Jinzhi and Carrick, 2019). Politicians have been in love with unicorns lately due to the economic growth and media attention that these high growth companies bring, this has been especially seen in China recently. Jinzhi and Carrick (2019) state that alliances are essential for startups to become unicorns, as it was seen in their study of Chinese unicorns. Alliances with bigger companies or the government grant resources crucial for success such as better skills at management, product development, sales, and patenting. Endorsement and legitimacy can also be gained from alliances with important bodies. In conclusion, it is very beneficial for startup founders and managers to develop alliances or personal connections with larger companies or the government if they want to drive their venture to unicorn status.

Theoretically, without at least some innovation there is no unicorn; it is one of the defining features that characterizes a unicorn. Innovation is what drives the strategic path of these ventures, their main focus is developing innovation within their industry (Jinzhi and Carrick, 2019). Even though it is a factor that is really hard to measure, it has a positive influence on

the potential success of a startup to reach a \$1 billion valuation. With innovation in mind, unicorns have specific industries where they tend to prominently appear. The data from CB Insight shows that the industries with substantial unicorns are mainly e-commerce, marketplace, internet software & services, social, and on-demand industries. New industries are also starting to produce unicorns in 2020: Artificial intelligence, educational technology, fintech and healthcare (Brown and Wiles, 2020). The industry common denominator for unicorns is technology (Oliveira et.al., 2018). Media exposure also has an effect on unicorn creation, the rise in communication technology and social media has propelled the growth of startups (Kerai, 2017). Technology advancements increase makes the media increase its coverage of startups which provides information to a large number of stakeholders and reduces information asymmetry for investors to collect the proper data (Zörgiebel, 2016). The media acts as the intermediary between startup and the public/investors, it allocates all the necessary information about the startup and provides legitimacy and credibility to the new venture. The “buzz and hype” of the startup that is generated by the media may cause an effect on the behavior of market participants such as investors, it could drive their interest on the venture and therefore approach them for investment. For example, VCs incorporate media coverage in their due diligence process, they follow the investment decisions of other participants in the market and simply ignore private information (Zörgiebel, 2016).

## *2.2 Struggles and Overvaluation*

One in three unicorns have gone through an initial public offering, between 2014 and 2018; two in five went public (EY, 2019). Despite being able to raise an amalgamation of private capital, unicorns eventually have to keep growing and provide return on investment to their investors as some will eventually want to cash out. A successful startup will not stay entrepreneurial for long, the US economy is not as startup friendly as it may seem because the economic power of big corporations keeps growing and obliges these small companies to deal with the complexities and demands of size as they grow (Hamel and Zanini, 2017). Staying private limits this growth and the next step is to go through an IPO and get listed in a stock market. Founders of unicorns tend to avoid going public because they want to dodge the costs and release of information to the public, as well as keeping their entrepreneurial spirit. But the IPO does tend to provide more capital that cannot be found elsewhere, and it also certifies the company as a legitimate force in the market, according to financial firm EY (2019). The median age for unicorns going public is between 8 and 10 years. A great deal of preparation is required to have a successful IPO, something that many unicorns are struggling with because when

approaching an IPO unicorns tend to exhibit a combination of negative signs such as ongoing losses, unrealistic valuations, and poor corporate governance (Curwen, 2019).<sup>4</sup> By the end of 2019 half of the companies that went public were trading below their original offer price, making it a terrible year for unicorns (Sornborger, 2021).

An IPO flops when the public market values the shares less than the company does, through its previous announcement. Kao et.al. (2020) theorizes that the profitless prosperity model is to blame for this. This business model is very much used by unicorns, less focus on profits and more the future expectations on rapidly gaining market share. Many investment fundamentals are ignored, such PE ratios and risk assessment. Long periods spent as private companies, market sensitivity towards negative news (an article creating a scandal) and overrepresentation of these tech unicorns on news and IPOs are also reasons why unicorn IPOs tend to fail (Kao et.al., 2020). Unicorns also face the issue of not being able to innovate past their initial breakthrough and face competition from other large enterprises (Govindarajan et.al., 2016). An example of this is Dropbox which innovated the cloud storage solution and then gained massive competition from all tech giants (Apple, Microsoft, Google, and Amazon) which are now offering superior cloud-based storage services. Unicorns may respond to this competition by diversifying as in the case with Evernote's note taking app which was quickly outranked by the introduction of Google's Google Docs and Apple's Apple Notes. Evernote responded by diversifying its business with Evernote Market which sells physical goods, this effort however, was unfocused and risky as the company deviated from its core business. This may lead unicorns to struggle and eventually even be acquired by their large competitors. Another effect is felt when large VC investors start dictating winners and losers; they will purse the 1<sup>st</sup> to market and/or largest player, in essence dooming all others, while causing a bidding war for the lone winner.

All of these factors contribute towards the overvaluation of unicorns which ends up being shown when the market undervalues the shares of unicorn IPOs, often significantly. The US National Bureau of Economic Research states that on average about half of unicorns are overvalued (Ai, 2020). Proper unicorn valuation remains difficult because of the lack of disclosure on relevant information and financial data due to their private status, Sornborger (2021) states that valuations for private companies can be summarized as the "present worth of

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<sup>4</sup> In the US, the Securities Exchange Commission requires a fairly detailed S-1 filing that includes vital financial information, as well as growth expectations. Even firms that have done quite well after listing have had early IPO issues (Facebook). Others had a successful IPO but have largely failed to meet investor expectations (Twitter, Snap). And some have failed and keep dropping the ball: WeWork.

future benefits” which is based purely on projections and speculations that may lead to overvaluation. According to Ai (2020), unicorn overvaluation occurs because investors are optimistic on the prospects of unicorns and believe that the business model and uniqueness of the business can give unicorns higher valuations than those of similar and comparable public companies. These comparable companies already have been influenced by the public market and have disclosed all information to the public, giving them a real market valuation. It is then believed that when pre-IPO valuations of unicorns exceed those of comparable enterprises, the unicorn is overvalued. Ai (2020) shows the case of poorly performing Chinese unicorns that have been listed in the Hong Kong stock exchange, they have excessive valuations and their fundamentals do not justify the high share prices they had set. The institutional investors in these stock exchanges are more rational than private investors and do not buy into poorly performing unicorns. Unicorn valuations are not backed by sufficient historical data and instead by the more heavily weighted projected future profits, it therefore could be said that the average unicorn is only worth half of its “headline price tag” (Sornberger, 2021).

### *2.3 Current Regulation*

The size and influence of unicorns carry the same effect on the market as those of large public corporations yet are legally regulated the same way a small private company is (Fan, 2016). This is a huge problem. Unicorns such as Uber and Airbnb (now public) revolutionized the taxi and hotel industries respectively, by impacting local economies and generating numbers equally or higher than their public counterparts. Such important information from these unicorns remains secret for years until they finally go public. Fan (2016) fears that the current bubble created by excessive unicorn investment will burst. The US economy is at risk when \$1 billion companies are unregulated and when the American economy is hit with crisis, the rest of the world economies feel the shocks (Stavinoha, 2020). Not only do investors and the economy fall under the risk of unicorns, employees of these billion-dollar firms are commonly also blind to the information and state of unicorns. Certain European countries such as UK and Germany do regulate private companies and have them release public financial statements, but the current regulatory framework in the US and Asian nations such as Japan and China are quite different.

Focusing on the United States, in the early 2000's the US Securities and Exchange Commission (SEC)<sup>5</sup> enacted major regulations on corporations. The Sarbanes-Oxley Act (SOX) was enacted after the 2002 Enron and subsequent WorldCom accounting fraud scandals and the Dodd-Frank Wall Street Reform and Consumer Protection Act in 2010 after the financial collapse in 2008.<sup>6</sup> These acts aimed at regulating the public market more harshly by making public corporations follow stricter accounting guidelines and constant release of financial information, poor corporate governance would be more closely scrutinized (Stavinoha, 2020). These regulations targeted only public companies, the SEC however does regulate private companies by imposing criminal liability on fraudulent acts, white-collar crimes, and retaliation against whistleblowers. Notably, those parties digging off on filed financial documents (e.g., corporate executive and auditors) could be held legally accountable for any questionable information contained therein.

However, an equal release of financial information to the public is not required by private firms, no matter the size (A large enterprise is considered one when they have more than 1,000 employees or over \$1 billion in revenue; by default, a unicorn is considered to be a large private enterprise). In fact, the only public documents that can be found for private companies are the certificate of incorporation, the stock purchase agreement, the investors' rights agreement, the right of first refusal and co-sale agreement, and the voting agreement. Only major investors get frequent financial statements and business plans as required by the National Venture Capital Association's Model Investors' Rights Agreement. US congress did introduce in 2012 the Jumpstart our Business Startups (JOBS) which regulated the way small private companies could be financed with less red tape by allowing private investors to buy their shares through a SEC certified middleman. This act however still did not require private companies to disclose information and it essentially allowed private companies to grow bigger and keep getting private funds with few restrictions. It could even be said that this act pushed the unicorn phenomenon further (Fan, 2016). Private companies also rely on Regulation D of the SEC as a safe harbor, which implies that accredited investors are financially sophisticated

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<sup>5</sup> The U.S. Securities and Exchange Commission (SEC) is the governmental agency in charge of enforcing the law against market manipulation, it was founded in 1934. Its mission is to protect investors and promote a trustworthy market environment by maintaining fair and efficient markets that facilitate capital formation. Source: sec.gov

<sup>6</sup> Energy-trading company Enron had one of the biggest accounting frauds in history. The executives employed accounting practices that falsely inflated the company's revenues which made it one of the richest companies in the United States. The SEC caught them in 2001 and arrested the executives with Enron ceasing to exist years later. Enron would have been a very large unicorn, had the list been compiled a decade earlier!



enough and do not require protection, hence not requiring these private companies to disclose financial information to their investors.

The current regulatory framework is just not sufficiently capable of regulating unicorns; they have become too big that the impact they have on investors, employees and the market calls for new regulation on disclosure requirements. Unicorns gave birth to a new technological and asset-light business model which is easy to structure and initiate operation, this is breaking the logic of competition and demonstrates that regulations need to be reshaped to these new economic activities (Casnici, 2021). Thousands of employees, billions of dollars and economies are at stake. Investors deserve to know that their investments are being held by accountable companies and irresponsible managers need more accountability as current regulations lack this. Unicorn regulation is necessary in order to avoid another financial collapse and establish a stable corporate governance system for large private firms. While some argue that the current regulations on public companies are burdensome, both Fan (2016) and Stavinoha (2020) call for new drastic regulation based on disclosure requirements being attached to company size and market, a threshold valuation should exist that forces unicorns to comply under the same financial disclosure regulations that public companies have. All private companies with a value over \$1 billion should be obliged to release audited financial statements to the public and unicorn stakeholders such as minor investors and employees (Stavinoha, 2020). Providing this should not really pose as an additional task since private firms already provide financial information to their major investors (Fan, 2016). Enforcing acts such as easier attainability of their restated certificate of incorporation and the revision of their Form D with more specific information (board composition, original share price, voting arrangement, etc.) should be done and posted publicly on the SEC and unicorn website. Fan (2016) concludes: “In light of their enormous influence and impact, enhanced disclosure becomes necessary when private companies reach the size equivalent to or greater than public companies”.

### ***3. Research Design and Methodology***

#### *3.1 Case Selection*

Case studies are the usual method chosen in exploratory research, this method is useful to generate new ideas and illustrate theories that can be tested with other methods in further studies. Case studies take advantage of triangulation which increases the credibility of its

findings. In order to give validation to the proposed research question on this paper, three unicorn companies were selected for this exploratory research. The selection was based on the characteristics (unicorn specific characteristics) and the magnitude of the failure that these companies had with regards to their business. The selected unicorns are all based on the United States, this is in order to keep consistency with regards to regulations and markets. For the sake of diversity, the three different cases differ regarding the behaviors and decisions that led to their eventual failures. The main objective is to investigate and contrast the variance in behaviors that potentially lead to unicorn failure. An additional case study on Direct Listings and SPACs is also included in order to further demonstrate how unicorns and the market are responding to such failures. Figure 3 summarizes the selected unicorn companies by presenting the peak valuation they had during their lifetime and the industry in which they operate.

**Figure 3.** Case Study Selection

<i>Unicorn Company</i>	<i>Peak Valuation (USD Billions)</i>	<i>Industry</i>
Theranos	\$9	Consumer Healthcare Technology
Uber	\$120	Ride-hailing and Transportation
WeWork	\$47	Commercial Real Estate

Source: Author's creation

### *3.2 Data Sourcing*

This study was backed by primary and secondary sources. Academic articles from renowned financial journals and publishers were used to present theoretical concepts with regards to how unicorns come to exist and how they behave. Academic articles were also used to theoretically explain why the selected unicorns failed as such have been used as research cases in academic studies. Articles from reliable financial newspapers and websites such as *The Financial Times*, *Business Insider*, *Harvard Business Review*, *The New York Times*, *Bloomberg*, and *The Wall Street Journal* were used to illustrate and describe the events and business models of the different cases. Due to the nature of unicorns, information technology magazines/blogs such as *TechCrunch* and database companies such *CB Insights* were used to provide valuations and numbers that back the research.

#### ***4. Findings: Case Studies***

The following subsections describe the three different case studies used to demonstrate why further unicorn regulation is necessary as well as presenting an additional subsection on what some unicorns are doing to overcome struggles and push new regulations.

##### *4.1 Theranos*

Theranos is the embodiment of the effects of the lack of unicorn regulation and resulting fraud. Founded in 2003 by Stanford University dropout Elizabeth Holmes at just 19 years of age, Real-Time Cures, later renamed Theranos, was based on creating health technology and license it to pharmaceutical firms. The company's main focus was on developing prototype machines that could extract a small blood sample and determine a number of conditions, making the process more convenient and less costly than using traditional needles (Straker et.al., 2021). Holmes as a young CEO managed to get millions in funds early on from family related investors, by 2004 she had gathered \$6 million in investment (Pflanzer, 2019). The first prototype "Theranos 1.0" was developed and soon created the first doubts towards the company as the CFO at that time questioned the reliability of the technology and honesty of the company. He was fired in 2006. In 2007 the "Edison" prototype was developed using a machine from another company and engineered by former Apple designers that Holmes had hired, the machine would be capable of running multiple tests from a few droplets of blood. Ex-employees later confessed that this machine failed quality control multiple times and put patients at risk by missing results or misdiagnosis, in fact Theranos was actually using other company standard equipment for running most blood tests (Casnici, 2021). Holmes along with the president of Theranos, Ramesh Balwani who joined in 2009, managed to secure partnerships with Walgreens and Safeway to distribute their technology. These new key partnerships prompted the company to create the "miniLab" in 2011 which was able to perform more than one class of blood test, but as with the past devices, this one also raised concerns as the chief medical officer of Safeway found discrepancies in the blood test results. Theranos also missed multiple deadlines for the launching of their machines in Walgreens stores. Holmes even proposed the device to the military which rose more concerns and prompted a surprise inspection from The Centers for Medicare & Medicaid Services (CMS)<sup>7</sup> where the Balwani stated that the machine was still under development. In 2013 they released the innovative blood

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<sup>7</sup> The Centers for Medicare and Medicaid Services is a government agency within the US Department of Health, which administers the Medicare program, health insurance standards and quality standards for clinical laboratories. Source: cms.gov

testing machine dubbed “4S Model” despite multiple company scientists stating that it was not ready. Theranos finally got their first FDA approval in 2015. By that time Theranos gained a whopping valuation of \$9 billion, with Holmes gathering a net worth of \$5 billion, she had 50% stake in the company. At the downfall’s onset, a series of investigative articles released by The Wall Street Journal journalist John Carreyrou shed light on the apparent improper management of the company and the use of unfinished technology applied to their machines (Pflanzer, 2019). The partnerships with Safeway and Walgreens were broken in the months after and soon regulators chimed in, including the CMS and the SEC. The CMS found that one of the company’s labs had safety risks towards patients. In 2016 Balwani left Theranos, and company shifted its focus back on its sample processor miniLab, followed by layoffs. Lawsuits from investors, patients and even Walgreens were received, and the company had to pay all the settlements and refunds; it left the company in a disastrous state with need of funding. The company tried to keep itself on its footing by making a deal with Fortress Investment Group for \$100 million in debt financing, with the deal requiring the company to hit development milestones but it continued to struggle and ended up laying off almost all employees. The final hit was in 2018 when the SEC charged both Holmes and Balwani as well as Theranos of massive fraud, more specifically wire fraud. Holmes stepped down as CEO and settled her charges, while receiving a ban from being a director of a public company for ten years. Later in 2018 Theranos was completely shut down.

According to Straker et.al. (2021), Theranos should have used a multidisciplinary design innovation approach where decisions are evaluated based on user needs, business requirements and technological viability. Best practice for rapid growth unicorns involves setting realistic expectations and making sure that the company can expand without financial restraint as well as creating a healthy work culture and having a good understanding of customer expectations. In the case of Theranos as a medical start up, best practice also involves consulting medical experts and compliance authorities; creating a complex medical device has a high risk of failure and harm towards patients. A design innovation approach could have mitigated the motivations that Holmes had towards acting fraudulently (Straker et.al., 2021). Holmes was driven by wealth, image, and fame, which caused her to purposely ignore the warnings and criticisms towards the company’s technology as she was focused on the economic value of the company rather than its development. The proposed technology being developed in Theranos was poised to give her the money she requested and it in fact did, the company was only focused on building the machine not on the actual science of blood testing which is

why the devices never worked as they were promised. The articles published by Carreyrou described a toxic work environment where no constructive criticism or collaboration was made, failures were not accepted. As is usual with unicorns, Theranos used storytelling but in a “perversive way” to exaggerate the importance of their product which would lead to stakeholders and investors being misled (Straker et.al., 2021). Theranos was a reflection of the personality of its CEO Holmes, she was an expert on creating a brand image and persuasion based on purely false hopes and with this she managed to obtain funding from high-profile investors at early and later years of the company. Straker et.al. (2021) opined that Theranos took the wrong approach on their product development, it should have been more human centered where engagement with their users (doctors, patients, scientists) would have made their proposed solution devices legitimate. Theranos would have been able to survive long enough to create reliable, tested, and approved hardware that when deployed would have had an existing clientele using a network of providers. Holmes instead took an approach based on bad faith using delaying and obscure tactics, she took advantage of the regulatory loopholes of private companies and focused on rushing underdeveloped products over the safety of patients (Straker et.al., 2021).

#### *4.2 Uber*

The infamous ride-hailing (and former 1<sup>st</sup> place unicorn) Uber is one of the most well-known unicorn IPO flops. Founded and based in San Francisco in 2009, it took a full long 10 years for them to decide to go public in 2019 (in line with the median age of unicorn IPOs). Uber innovated the ride-hailing industry by introducing a more streamlined approach, developing an easy-to-use app with an ecommerce payment system and dynamic pricing model depending on supply and demand. Much simpler and cheaper than a traditional taxi. The now public unicorn also has business branches from food delivery to courier and operates in over 63 countries and 700 cities around the world. The Uber app would be used by customers to request rides or food, while drivers use it as independent contractors in order to coordinate food deliveries or rides using their own “Uber certified” personal vehicles. Uber became a behemoth in its early years as it had major effects on local economies such as the example of Chicago in 2013, where it had 25 thousand rides and created over one thousand new jobs impacting the city’s economy with over \$46 million. Also, below-median income consumers started to prefer the services of Uber rather than buying and owning a car due to how efficient the service was (Fan, 2016). This revolution of the taxi industry could only be done privately, Uber as a private startup chose what the world could know about them.

While it was private and under founder and former CEO Travis Kalanick, the company had many allegations attached to it such as ignoring of local regulations, the mistreatment of its independent contractors and accusations of discrimination and sexual harassment (Harrison et.al., 2020). The work culture was based on working hard over long hours and hiring decisions were based on instincts, this led to some employees behaving aggressively and displaying sexism and abuse as many female employees reported sexual harassment. It became a classic case of poor corporate governance, where the CEO set the stage for all activities and corporate culture, with little if any board oversight.

Public outrage also ensued when CEO Kalanick was selected for a seat on the technology council in former president Donald Trump's administration. It was thought Kalanick supported Trump's Muslim travel ban in 2017 due to some controversial decisions taken with regards to Uber's operations near airport zones in New York, people started the #deleteUber campaign which led thousands of Uber users to delete their accounts. Uber drivers are regarded as independent contractors, this benefits the employer more than the employee because it allows the company to avoid many obligatory employee costs such as social security and payment of minimum and overtime wages. Becoming an Uber driver is an easy and fast process which can be done by anyone in a few hours. Many drivers are developing country immigrants who are used to and willing to work many hours for low pay, Uber was accused of taking advantage of this. Therefore, California took action and the Labor Commissioner's Office ruled that an Uber driver was an employee and not an independent contractor when they limited the scope of the designation of an independent contractor (Fan, 2016). Drivers have also been accused of inappropriate behaviors and crimes, prompting criticism towards the poor background check done on them. Uber has also had to deal with taxi companies that lobby against the permits towards ridesharing drivers and their "illegal services". Governments who support or that were lobbied successfully by cab companies end up banning Uber from operating or make them comply with regulations such as a cap over the number of drivers and predetermined fares. According to Harrison et.al. (2020), Uber often acts against these actions as it interferes with their dynamic market model. With all these issues, in 2017 Kalanick stepped down as CEO and Dara Khosrowshahi was brought in as the new chief executive officer. Despite its troubles, over the years Uber managed to grow and gain billions in funding from venture capital firms and mutual funds as well as Japanese conglomerate SoftBank which would allow it to operate worldwide and in 2019 start to prepare its very anticipated IPO.

One of the reasons Uber hired now CEO Khosrowshahi was to lead the company to a successful IPO, his experience as former CEO of Expedia presented him as the ideal candidate for this. Uber had a pre-IPO valuation of \$76 billion, Morgan Stanley was hired as the lead underwriter along with Goldman Sachs who then valued Uber at an astonishing \$120 billion post-IPO. This valuation made it (potentially) the biggest American company to ever list on the New York Stock Exchange (NYSE), larger than Facebook in 2012 with a then \$104 billion valuation (Isaac et.al., 2019). Within a few weeks, the given \$120 billion valuation was leaked and immediately caused excitement and skepticism from investors. Many roadblocks started to appear such as the competition ramping up, existing investors wanting lower share prices and fears of IPO failure due to struggles from other companies in the same industry. Uber lowered its expected value to \$100 billion and decided to price its shares around the range of \$44 to \$50 per share. With 180 million shares valued at \$45 each, Uber went public May 2019. As soon as trading started however, its shares dropped by around 8% and traded for \$42, never reaching the \$45 value during the first days. The IPO managed to only raise around \$8 billion and gave Uber a diluted valuation of \$82 billion (Bond and Bullock, 2019). As Isaac et.al. (2019) put it, “it was the stock market debut that lost more in dollar terms than any other American initial public offering since 1975”. According to Bond and Bullock (2019), the diluted valuation of \$82 billion was due to a lack of retail investor demand for these ride-hailing companies and an overvaluation from the underwriters. Owners of Uber shares such as mutual funds and private equity investors were not happy towards the idea of buying more stock at that hefty price when they had previously bought it at a much lower price, these types of investors are normally the ones who buy most in an IPO. The company’s growth also slowed down as it had covered many areas around the world and was struggling to enter the Latin American market, competitors were gaining strength. Softbank<sup>8</sup>, one of Uber’s main investors, was also granting funds to its ride-hailing competitors such as Chinese startup Didi Chuxing and 99 from Latin America. These companies along with Softbank poured capital into Latin America which greatly halted Uber’s expansion into that promising region. The Uber Eats division also faced competition with Softbank also financing DoorDash in the US and Rappi in Latin America, this caused Uber to burn a lot of cash in order to stay competitive. With the slow growth of the company, investor demand was lowered, and the high valuation was nonsense at that point (Isaac et.al., 2019). However, one of the biggest hits towards the Uber

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<sup>8</sup> Softbank is a Japanese multinational conglomerate holding company which primarily invests in companies that operate in technology, energy, and financial sectors. In 2020 it had a revenue of \$56.83 billion (Source: global.softbank). It experienced significant problems in the subsequent IPO attempt for WeWork.

IPO was the just previous failed Lyft IPO. Lyft is Uber's main ride-hailing competitor in the US and had gone public months before with its shares going below offering price. Lyft had also reported \$1.14 billion in losses in its first quarter, weeks before the Uber IPO. Along with losses also reported by Uber, investors might have been hesitant to invest in these unprofitable and money hungry ride-hailing companies (Bond and Bullock, 2019).

#### 4.3 *WeWork*

The final case is that of WeWork, a unicorn that planned to go public but failed to do so because of poor corporate governance and an unrealistic valuation. Founded by its now former CEO Adam Neumann in 2010, WeWork attempted an IPO in 2019 (9 years to go public, in line with unicorn numbers) but never went through with it. The main focus and innovation of this unicorn is to take leases on buildings around the world, renovating them and then rent out spaces within these building to freelancers and small businesses. WeWork took advantage of the aftermath that the 2008 financial crisis left, a lot of empty office space and laid off workers who relaunched themselves as freelancers (Edgecliffe-Johnson and Platt, 2020). Operating in 120 cities around the world with more than 800 locations, WeWork became the largest commercial tenant in New York City and only the UK government owned more square feet than WeWork in London. Being a new business model, the risks were there since the beginning such as the expensive renovations that were done and the fact that the leases the company signed over exceeded the monthly memberships that their customers signed. Despite the risks, Neumann (similar to Therano's CEO Holmes) still brought in investors due to his persuasive entrepreneur skills gained from previously failed startups. WeWork's biggest investor was Masayoshi Son, the CEO of Softbank, who as mentioned in the previous case, was a big investor for Uber. Son used money from Softbank and its \$100 billion venture capital fund Vision Fund<sup>9</sup> to inject billions into promising startups and make them spend millions in order to dominate their market, WeWork followed suit using this strategy (Campbell, 2019). The unicorn would burn through this money by buying up more office spaces and engaging in extensive M&A activity by acquiring multiple startups. Son, along with the concerned Softbank board, agreed to a \$47 billion valuation for WeWork when they poured \$2 billion into the unicorn in January 2019 and WeWork announced planning to go public. As usual with unicorns this huge valuation drove up interest and created hype in the market, Wallstreet's

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<sup>9</sup> Softbank's Vision Fund is the world's largest venture capital fund that is focused on technology, it has over \$100 billion in capital that is provided by sovereign wealth funds in the Middle East.



biggest names wanted to lead the IPO with Morgan Stanley even proposing a valuation of \$104 billion.

The IPO was planned with JP Morgan and Goldman Sachs as the main underwriters, the S-1 filing<sup>10</sup> to go public was released and immediately created major concerns about the company. The prospectus started by shining a bright light into WeWork, claiming: "We are a community company committed to maximum global impact. Our mission is to elevate the world's consciousness.". It committed the company's CEO to donate \$1 billion to charity as well as saving 20 million of acres of rain forest, but later found that this was money he had not earned yet (Campbell, 2019). The document contained a list of potential conflicts the CEO Neumann could have with the company, an overly complicated corporate structure, and major losses; "for every dollar the company made, it spent two" (Campbell, 2019). The company was spending billions, in 2018 it had a loss of \$1.9 billion. There was a 30-page section dedicated to only investor risks and how the company was going to reach profitability was never specified. WeWork themselves stated that they have a history of losses and would very likely not be able to achieve profitability for the foreseeable future. It was also revealed that Neumann bought the trademark to the "We" name through a holding company and WeWork paid him around \$6 million to license it, the company made it clear that it was engaging in activities that could make stakeholders rich. The CEO had almost total control as shares allowed him to have multiple voting rights, there was also a clause that would allow his wife to choose a new CEO without the approval of the board in case of his death. Articles also started to surface on the inappropriate behavior of Neumann and his partying habits. Investors did not like this at all and the \$47 billion valuation plummeted. With all this, investors made it clear that its \$47 billion valuation was deemed too high and would only accept around a \$15 billion valuation (Edgecliffe-Johnson and Platt, 2020). The IPO would constantly be postponed as the company's advisors tried to convince investors for an IPO that would raise at least \$3 billion according to Campbell (2019). Members of Softbank argued against injecting more capital into the company as they already held a 29% stake, but Son was not willing to accept a valuation of only one third of the one he proposed after he had invested more than \$10 billion into the company. The bankers in charge of the IPO told Neumann that the IPO would be "dead" if no major corporate restructuring took place. WeWork announced that due to market feedback it

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<sup>10</sup> An S-1 Form is a registration file required by the SEC for those companies who want to go public and be registered on a national stock exchange, it is a burdensome file as it requires a lot of information with regards to the company's business, management and financial statements that must be certified. Source: [sec.report/Form/S-1](https://www.sec.gov/report/Form/S-1)

was again postponing its IPO and major changes would come. He returned the \$5.9 billion WeWork paid him for the "We" trademark and the clause allowing Neumann's wife to choose a new CEO was scrapped as no other family member could sit on the board, the board now had the ability to remove the CEO. Neumann was voted out, he even voted against himself, now he would become a nonexecutive chairman with minority voting power. Softbank took major control of a WeWork valued at only \$8 billion when they bought \$3 billion in stocks as a bailout package. Even after being forced out, Neuman got a severance package of \$1.9 billion, plus a \$185 million consulting fee from WeWork, paid for by Softbank. Another great example of the egregious corporate governance practices at some unicorns.

The company now looked towards a valuation of \$10 to \$12 billion and planned to slow the growth, major layoffs and eliminating side businesses in order to reduce costs. In early 2020 it hired Sandeep Mathrani as the new CEO in order to restore stability to the company as it still had \$50 billion of lease obligations and the failed IPO plan that scared off both new investors and customers (Edgecliffe-Johnson and Platt, 2020). Not to mention the COVID-19 pandemic<sup>11</sup> that soon followed which shocked the real-estate market demand due to workers moving from offices to work from home, this caused the company to lose 26% of its membership and have \$3.2 billion in losses in 2020.

However, WeWork has not surrendered its dream to go public, in early 2021 it agreed to go public via a special-purpose acquisition company (SPAC) merger. A SPAC is a company that is created with the sole purpose of merging or acquiring a company in order to make it public in a less complex process, more details on SPACs in the next section. The company will merge with BowX Acquisition Corp. (a SPAC) in a deal valued at \$9 billion, less than a quarter of its 2019 \$47 billion valuation (Dean and Mohamed, 2021). This deal will be funded by \$483 million of cash from BowX and \$800 million from private investments group such as Insight Partners, Starwood Capital Group, etc. The unicorn will gain around \$1.3 billion in cash in order to fund its growth plans. The new direction that the company is taking is a cost-conscious mindset and a path towards profitability, WeWork can benefit from the post-pandemic flexible working scenario that has been created as many workers are eager to return to office spaces (Bryant, 2021). The new published prospectus did demonstrate to be more promising but also highlighted once again the terrible mismanagement the company had under former CEO

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<sup>11</sup> The COVID-19 pandemic that started in late 2019 caused many companies to require the majority of their workers to work from home due to the high level of infection of the virus. This caused major economic shutdown which led to major layoffs and supply chains being cut off.

Neumann which caused the 2019 IPO to never materialize. The company's valuation had dropped by around 80% due to concerns over the business model, the lack of corporate governance and Neumann's controversial behavior (Dean and Mohamed, 2021). The prospectus revealed that \$15 billion that were invested since the birth of the company all went to waste towards big payouts to executives and acquiring of startups. The company grew a lot too quickly under no proper guidance and since 2019 it laid off 70% of its workforce with current employee count being around six thousand. In 2020 it booked a total of \$1.4 billion in impairments which included write-downs on assets and business the company had acquired under Neumann. This offloading of assets had to be done in order to recuperate money despite being in a pandemic crisis (not the best time to sell) which lost a lot of money, for example the 2019 acquisition of startup Managed by Q Inc. costed \$190 million and was sold a year later for just \$28 million. Many other startups like the former one were sold for big losses demonstrating that a lot of them were part of Neumann's impulse buys. Even assets such as Neumann's private jet that were bought under the company were sold. The documents also revealed that at the end of the day, the former top executives ended up winning as Neumann's exit was worth under \$300 million which was paid by Softbank, the latter also bought \$580 million worth of Neuman's stock (Bryant, 2021). The other resigned executives also earned more than \$8 million in severance packages, and some were even forgiven loans they had with WeWork. Employee compensation was very inconsistent and tailored towards specific individuals when Neumann was the chief executive. The biggest loser out of this situation ended up being Softbank which invested billions into this once promising unicorn and now lay in this dire situation. Hence the appointment of CEO Mathrani who has a long road ahead, WeWork currently holds a lot of debt and is under investigation by the SEC relating to its 2019 dealings and valuations but at least the company is currently cooperating to wipe its slate clean. The new SPAC merger IPO is being targeted for the third quarter of 2021.

#### *4.4 Direct Listings and SPACs: A New Hope or the Next Financial Crisis?*

While unicorns are struggling with IPOs and creating havoc among their investors and employees with no regulation, other unicorns have taken alternative routes in order to go public, prompting regulators to act and create new regulation, such routes are direct listings and SPACs. A direct listing is when a company lists its stock directly in a securities exchange by itself without the help of underwriters and not issuing new shares. No set number of shares are specifically sold to the public with an allocated public price, instead buyers set the price that they believe is suitable (Sornborger, 2021). There are no banks involved in order to

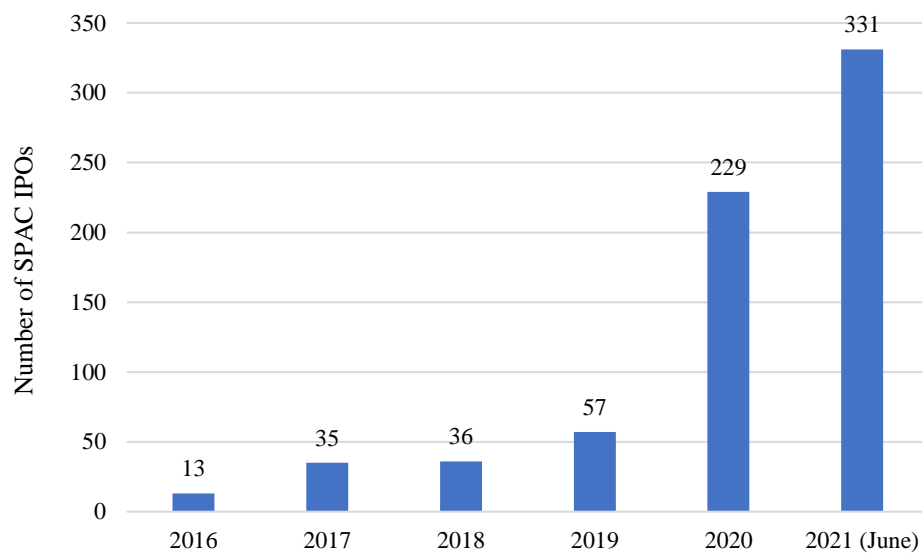
analyze, demand, and set the IPO price. However, because of this, stock prices can be very volatile in a direct listing because they are established by private transactions. Unicorns only pay a fraction of what they would pay to underwriters when undergoing a direct listing. The ones to benefit from immediate capital gain are shareholders because they sell their own shares rather than the issuer, there is no lock up period as in a traditional IPO so they can start trading their shares as soon as the direct listing occurs. As EY (2019) states, companies that already have brand name recognition and a high private market evaluation tend to reap the benefits of direct listings because the main objective is not to raise capital but to make the trading of shares easier and more liquid. IPO uncertainties are avoided and a safe pathway towards becoming public is granted, especially in volatile times. Sornborger (2021) says that unicorns may be the only type of company to survive a direct listing because they heavily rely on their brand recognition and support from private investors as well as their capital. Overvaluation is also avoided; IPOs have underwriter fees involved therefore both the unicorn and underwriter tend to establish higher prices to cover that fee. The public filing requirement for SPACs are also much more lenient than regular IPOs.

The pioneer of this unicorn direct listing revolution is the Swedish music streaming platform Spotify. In 2018, in a move that surprised the SEC, they filed an F-1 form (an S-1 for foreign firms) but not as an IPO, instead as a direct listing and used the file as a resale registration statement. The unicorn had to include numbers from recent private transactions in order to be as transparent as possible. Spotify knew they were making an unordinary move so in their prospectus they stated: “The listing of our ordinary shares on the New York Stock Exchange (NYSE) without underwriters is a novel method for commencing public trading in our ordinary shares, and consequently, the trading volume and price of our ordinary shares may be more volatile than if our ordinary shares were initially listed in connection with an underwritten initial public offering.” (Sornborger, 2021). This move made the SEC and NYSE move to create new regulation to allow for direct listing in the NYSE. NASDAQ was the only trade market that was supportive of direct listing and allowed them very frequently, the NYSE had to lighten their requirements in order to compete with the former. In 2018 the SEC approved the proposal for NYSE’s ability to be able to host direct listings by following certain steps such as filing a resale registration statement pursuant to the Securities Act. Unicorns were now able to use direct listings in the NYSE as long as they filed the necessary registration statements with the SEC. The new regulation also allowed for companies to sell newly issued shares on its own rather than only existing shareholders selling their existing shares. This move

led the SEC to become warmer to the idea of companies doing direct listings as in 2019 SEC Chairman Jay Clayton stated that the SEC did not mind if direct listing were used instead of IPOs as the SEC's objective is to have as many public companies as possible. A very different approach to when they acted cautionary in 2017 when Spotify announced the direct listing move (Sornborger, 2021). Spotify has set an example for unicorns' approach to go public, even smaller ones. Asana, a work management platform unicorn of smaller size, underwent a direct listing and it resulted in a \$5.5 billion result which greatly overcame the expected valuation. Direct listings may have proven themselves to be a new solution for unicorns to avoid a very probable IPO failure and motivate them to become public and undergo with the full public disclosure regulations. It has also pushed new regulations, something that benefits the economy as more unicorns can become public without fears and give some satisfaction to those who ask for more unicorn regulation.

As briefly mentioned in the WeWork case, many unicorns and private companies have gained the public company status by choosing the route of a special purpose acquisition company. As defined by Berger (2008), SPACs are publicly traded pools of capital with the sole purpose of merging with a private company to make them public. These shell companies have no business plans or operations, just the objective to acquire a company (Naumovska, 2021). They have existed since the 1990s and were created as an alternative to IPOs as under the rug operations but in recent times they have grown to massive sizes and become more common. SPAC mergers can give access to public markets by offering available funds and specialized management teams to those companies who are not suitable for a traditional IPO (Berger, 2008). The key here is that a SPAC requires some sort of M&A activity, and a merger follows a different set of new listing rules.

**Figure 4.** Number of SPAC IPOs in the United States per year



Source: Dealogic and Statista

Executives tend to prefer SPACs as they are a shortcut to public markets unlike IPOs which take longer to formulate (Broughton & Maurer, 2020). They are usually raised by specific industry experts with vast networks of contacts who want to acquire companies in their industry, their founders are expected to provide funds to most of the costs but nowadays are given more protection as they can redeem their investment in full. They legally operate under the blank check rules<sup>12</sup> of the SEC allowing them to not disclose information on their targets and raise the money for it, it must however state in its prospectus that it has no specific target and must raise money as in a traditional IPO. After this it has two years to hunt for a target, if not it liquidates, and investors get most of their money back. Once they find their target, they make it public by ways of a merger and they have to file as in an IPO by presenting information of their target to their public stockholders in order to approve the move (Broughton & Maurer, 2020). Once merged the target firm will take the place of the SPAC in the securities exchange market and investors will be able to buy their shares. An advantage of a SPAC is that it allows for promising financial projections that give the target company a good image, IPOs do not tend to allow this because banks and underwriters tend to maintain realistic valuations in order to avoid legal liabilities. SPACs are still regulated as in the past they have been found of fraudulent activities, so the SEC requires the SPAC to maintain the raised funds in a trust until

<sup>12</sup> The SEC's blank check rules are applied to companies that do not have a specific business plan or that have indicated that it plans a merger with a yet to be identified company. Rule 419 of the Securities Exchange Act of 1933 applies restrictions to those blank check companies that wish to undergo an IPO by putting the raised money and offered securities on escrow in order to block trading until the merger or acquisition occurs.

a merger target is found. SPACs tend to look for targets that are valued five times as large as themselves in order to give their founders big gains (Ramkumar & Farrell, 2021). Tech industries such as biotechnology and electric transportation have been recently popular with SPACs. In the United States alone, in 2020 SPACs raised \$83 billion compared to \$13.5 billion in 2019, while traditional IPOs raised \$51 billion according to data from Dealogic. In January of 2021 they raised around \$26 billion (Naumovska, 2021). The recent frenzy and demand for SPACs according to Ramkumar & Farrell (2021) is due to the 2020 COVID pandemic causing fears towards the crisis the IPO market would have, SPACs could serve as an alternative to raise money and avoid the volatility of IPOs in times of crisis.

This IPO alternative is not riskless however, some worry that the current euphoria might cause this bubble to burst. Investors risk themselves by buying stocks from a company with no history, they have no historical information when it comes to SPACs (Ramkumar & Farrell, 2021). Negotiations are private which makes the prices not be in line with real demand, as mentioned previously they can make bright financial forecasts publicly which keep the prices up. Naumovska (2021) claims that in the current market, SPACs can be compared with what happened to reverse mergers in the last decade. Reverse mergers are shell companies that are practically the same as SPACs except that the latter is actively looking for a target with a bag full of money. In the 2,000's the number of reverse mergers grew and so did the skepticism towards them, this was due to many firms of low reputation using the method which caused poor stock valuations and negative media coverage (Naumovska, 2021). Naumovska (2021) argues that these are the same trends that are being seen currently with SPACs, a rebirthed controversial financial practice being followed by regulatory concerns and bad publicity due to the various low-quality firms undertaking it. A clear example is electric truck startup Nikola, which was accused of fraud just three months after it went public in 2020 as a SPAC merger. The company had a sloppy business plan and no clear revenues, the multiple lawsuits it received caused the resignation of its founder and the price of its stock to deeply plummet. Recent studies have claimed that post SPAC mergers suffer from a fall in their share prices. The media is also mostly covering SPACs in a negative light as the Financial Times have released headlines such as "SPACs are oven-ready deals you should leave on the shelf". The SEC have their eyes set on SPACs in order to ensure that regulations are being followed (Naumovska, 2021). This is a bubble that could burst sooner or later and with deals such as the WeWork coming later in 2021 it will be interesting to see how this delicate situation proceeds.

## *5. Discussion*

The findings of the case study analysis support the hypothesis that unicorns need more regulation due to their failures and inappropriate behaviors. When looking into the three selected unicorn cases each presented distinctive behaviors that eventually led them to struggles and failures. Theranos underwent through the route of fraud and embodied the behavior and philosophies of the CEO. Chief executive Holmes acted in self-interest as she wanted to amass a huge wealth by attracting investors to a fake promise that eventually collapsed. Uber's early years were plagued by lack of proper corporate governance while they were revolutionizing and fighting the taxi industry. The excitement of a promising business model brought overvaluation to the industry which eventually caught up to them when they went public, and their stocks plunged. WeWork enjoyed the big-time investors that its CEO Neumann managed to attract while presenting a company that was meant to "change the world". The fact that they were not even able to go public just went to show that their overspending strategies and quick expansion was too much for its real estate industry business model, it did not help that the CEO indulged in unprofessional behaviors and huge compensations. Direct listings and SPACs have demonstrated that unicorns can find success despite their excessive spending but as more unicorns engage in these activities it could burst a bubble and cause major crisis.

The commonality found in these cases are the behaviors that these billion-dollar private companies indulge on. These behaviors, while different in some ways, can be seen as negative and eventually lead to a failure or struggle. These findings build on the existing evidence of unicorns described on the literature review. All of the three cases described the firms' characteristics which clearly define them as unicorns and the way they frequently behave in order to grow as fast and big as they regularly do. The selected cases embody the definition of a unicorn and show validity to the reasons that are hypothesized to cause these failures. Theranos died off because of fraud and fake storytelling, Uber struggled because of excessive overvaluation and past mismanagement, WeWork failed due to their excessive spending, no profitability and nonsensical corporate management. These struggles can be traced to the market failures that the asymmetric information surrounding these unicorns brings. The "agreeable moral hazard" that Cowden et.al. (2020) proposed is present in all these cases as these companies took major risks and overspent with the blessing of their investors which eventually left them agonizing. In the case of Theranos for example, this moral hazard demonstrated a limit as CEO Holmes took advantage of it by means of fraud (Cowden et.al.,



2020). These companies were able to behave like this because of the current regulatory framework but direct listings and SPACs may be gamechangers. Successful direct listings such as the mentioned case of Spotify managed to push new regulation, which validates the necessity posed by this paper, these unicorns are in need of a tighter grip from regulators. SPACs have helped companies avoid the hot waters that traditional IPOs bring, but as this trend keeps growing and more of these poorly managed misbehaved unicorns use them, it could soon spell doom for special purpose acquisition companies. As more failed SPACs emerge, regulators are holding a closer eye into them and might eventually regulate them more heavily.

The case study analysis had its limitations, however. While it managed to demonstrate and validate the characteristics and behaviors of unicorns through real life cases, it lacked the scientific rigor that an empirical quantitative analysis has. These three cases, despite closely following the existing theory of unicorns and their struggles, cannot be generalized to the wider unicorn population. The nature of a case study is too specific, not all unicorns grow and act equally, there may exist cases where these behaviors do not always lead to some sort of failure. The qualitative data that backs case studies is also subject to distortions as people's perceptions and memories may change, the opinions on articles may have been slightly altered to make the situation look worse than what it originally was. Finally, author bias is present as the opinions of the author influence how the data is analyzed and collected. Despite the limitations, this case study managed to gather rich data and provide insights that a quantitative analysis could have not provided such as taking into consideration the behaviors of unicorn executives. These three case studies backed the existing theory and can give leeway to produce new theories regarding unicorn struggles.

## ***6. Conclusion***

The main objective of this research paper was to demonstrate that the \$1 billion private companies known as unicorns need stricter regulation and major surveillance due to their recent failures that potentially are caused by market failures, excessive spending strategies and poor corporate governance. The three different unicorn case studies backed up the proposed research question and the existing theory with regards to the behaviors of unicorns and the struggles they face. Theranos engaged in fraud and faked promising technologies that led them to the total shutdown of the company despite having gathered billions in investments. Uber was heavily overvalued due to the excitement that their revolutionary ride hailing industry brought

despite having corporate governance issues and legal battles behind the scenes. WeWork enjoyed the lavish life of its CEO and went overboard with the spending, the resulting losses and unprofitability led to an embarrassing failure to go public. Despite struggles, unicorns use direct listings and SPACs to avoid further damage which have helped towards the creation of new regulation but may also end up being a double edge sword as their use might overflow and cause a crisis. This case study research holds significant relevance towards the cause of more regulations for unicorn companies. The presented cases show proof of just some of the massive failures that these billion-dollar private companies have and their inappropriate behaviors that lead to them. While these case studies are limited by not being able to be generalized to the entire unicorn population, it gives a push to its readers to understand what causes these worst-case scenarios that these firms can have.

The existing theory with regards to unicorns and their struggles is closely backed by the findings of the case study. This backing can help motivate further studies using quantitative data that uses larger populations of unicorns to scientifically back the fact that as more unicorn companies are being born and more of them fail, a large financial crisis may soon occur. Not only do the employees and investors of these companies are at risk, but entire economies as well. After the 2008 major financial crisis and its subprime loans, this may well be the next big crisis. This case study and further research might serve as enough proof for regulating entities such as the Securities Exchange Commission and governments to modify and further strengthen the regulations behind private unicorn companies. The effects unicorns have are equally as big as those of huge public firms, they must have stricter disclosure requirements despite their private status. The inappropriate and poor corporate governance in unicorn firms cannot be further exacerbated, it must be halted. Limitations and stricter requirements must be set to these firms with regard to their finances, these companies manage too much capital to not be properly regulated. That being said, the alternative option could be to let the free market act efficiently as it usually does and punish (with major losses) those unwise investors who put their money in unicorns after the initial backers and founders already took a first dive and have enjoyed their huge returns. The unicorns' asymmetric information and agency problems are the ones mainly causing the issue and the free market usually takes care of these market failures without the need of intervention. Unfortunately, these kinds of situations end up having spillover effects and after multiple crises in the last decades such as the Dotcom crash (tech companies full of empty promises and hype, similar to unicorns), it begs the question of whether regulators should preempt the negative effects seen in the horizon. How should the

SEC and other regulating bodies tackle the unicorn bubble? The scandals that unicorns are currently producing are no different than those of the companies in the early 2,000's, those fraudulent firms brought in new major regulation so why should misbehaved unicorns not?

This study does carry its limitations however, due to the nature of a case study review the findings cannot be generalized to the entire population of unicorn firms. There is no indication that all or most unicorns are questionable enterprises, but by looking at the three big ones that were analyzed in this case study one can suggest that the exuberance the larger ones bring can result in some irrational investor behavior and create unreasonable expectations that could drive future bubbles and even affect a macroeconomic crisis. Further research could identify whether smaller unicorns fall into the same trap or if there is some difference in the rates of success depending on the size of the unicorn. An investigation on the executive boards of unicorns might prove useful towards better understanding why unicorns fail, the profiles of the senior executives could be analyzed to see if there are certain common characteristics that might lead a unicorn to failure. After all its improper corporate management that often leads to failure as seen with the three studied cases. A firm recommendation, mentioned throughout this paper is that the unequal and more favorable treatment handed to unicorns vis-à-vis similar public firms needs to be drastically reduced, if not eliminated outright. It is this disparity which appears to encourage many of those directly involved to keep 'pushing the envelope'; sometimes this can have serious peripheral effects on the rest of the economy.

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