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**SPECIAL PURPOSE ACQUISITION COMPANIES:**  
How the SPAC Structure Misaligns Sponsors and Investors

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## INTRODUCTION

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The Dow Jones Industrial Average witnessed a 26% decline over four days in March of 2020 as the reality of COVID-19 rippled through the economy. While the stock market was grappling with volatility and an uncertain future, special purpose acquisition companies (SPACs) were coming on to the scene in full force. SPACs have existed in different forms for decades; however, when Richard Branson’s Virgin Galactic went public via SPAC in 2019, all eyes were on the alternative way to raise capital. SPACs are seen as alternatives to traditional initial public offerings (IPO) because both financial mechanisms offer companies the ability to go public. However, SPACs and IPOs have different use cases, features, and attract very different types of companies and investors. Nevertheless, the popularity of SPACs over the past several years demonstrates how valuable the market finds the alternative form of going public.

This paper addresses the underlying issues of the SPAC structure that have benefitted some and hurt others during the SPAC boom of 2020 and 2021. After exploring the history of SPACs, as well as setting context for the SPAC environment we find ourselves immersed in, this paper will analyze all the stakeholders involved, as well as several important features of SPACs that contribute to discrepancies in returns. Each issue presented will be accompanied by possible solutions to better serve all the stakeholders involved in the SPAC process. As it stands, SPACs are flawed structures; however, they have the potential to regain trust and credibility in the market with better regulation and an updated structure.

Special purpose acquisition companies, also known as “blank-check companies,” are pools of capital raised in the public markets by sponsors to acquire a target company. Sponsors are the individuals and groups – usually made up of private equity funds, hedge fund managers,

former Fortune 500 executives, and celebrities, just to name a few – that organize the special purpose acquisition company from inception (“SPAC Sponsorship”). The sponsors raise significant capital for the SPAC using an initial public offering (IPO), where institutions and everyday investors can buy units (shares with a warrant) of the special purpose acquisition company. The sponsors are typically awarded with 20% equity of the post-IPO SPAC, which is their stake “earned” for setting up the entity (Billotti). While the sponsors technically buy their shares, they buy each share for less than a penny, while public shareholders buy shares (almost always) priced at \$10.00 per share (further sections examine the exact breakdown). Therefore, sponsors do risk capital, although, it is minimal and inconsequential compared to the 20% equity they receive after the SPAC has its IPO. In a typical SPAC S-1, which is the formal document for registering securities with the SEC, there is a beginning section titled “founder shares,” which outlines the 20% equity stake that the sponsors will receive (Appendix 1). 20% equity for the sponsors is typical and is decided upon by the sponsors themselves; the percentage can be thought of as a general “fee” for setting up the SPAC and pursuing a target company to merge with. The sponsors of the SPAC generally have two years to find a target company to merge with, which again, is the industry standard timeline and is outlined in the S-1 (Appendix 2). Once the target company is announced, the SPAC goes through a “de-SPAC” transaction, which is the formal process by which SPAC shareholders approve or decline the proposed acquisition and the target company merges with the SPAC (Appendix 3). The target company is purchased by the SPAC’s IPO proceeds, along with additional capital raised at the time of the merger by other parties (discussed in later sections). In other words, SPACs are publicly traded companies with no operations or financial history until they merge with an operating company. Once the target company successfully merges with the SPAC, the target company replaces the SPAC’s stock

ticker and trades as a public company. For example, if the Tufts Special Purpose Acquisition Company (TSPAC) merged with Jumbo Technologies (JT), the SPAC would trade under TSPAC until it merged with Jumbo Technologies, where the entity would then trade as JT. Once the target is acquired and merged with the SPAC, the acquired company effectively becomes one with the SPAC – which is itself a public company – and so the combined entity is a public company with all the associated rights and responsibilities, without the acquired company ever completing the IPO process. To illustrate, the graphic below outlines the SPAC process at a high-level.



Greater detail on the SPAC process will be presented in future sections of the paper; however, this baseline knowledge is crucial in understanding the evolution of SPACs as a means of going public.

The rise in SPACs over the past several years has been profound. In 2019, 59 SPAC deals were completed, outpacing the 46 completed in 2018 (Atwood, 4). However, in 2020, 248 deals were completed, only to be followed up with 301 deals completed in the first quarter of 2021. In terms of dollar volume, in the first quarter of 2021, SPAC IPOs raised \$88 billion, compared to under \$40 billion for traditional IPOs (Potter). The second and third quarters of 2021 saw drastic declines in SPAC volume, as regulatory scrutiny and a lack of feasible targets dried up the market. While SPAC activity has increased dramatically in recent years, its performance benchmarked against traditional initial public offerings has been lackluster. According to Renaissance Capital’s SPAC cohort, “Since 2015, the 89 SPACs that have completed mergers

have an average loss of 18.8 percent (and a median loss of 36.1 percent), compared with the average aftermarket gain of 37.2 percent for other IPOs through July 24... Only 29 percent of the SPACs had positive returns” (Celarier). The SPAC route, while extremely popular, has its flaws – at least for some parties associated with the process.

In recent months, the Securities and Exchange Commission (SEC) has issued several statements regarding some controversial features of SPACs that inherently misalign sponsors and investors, two of the main parties involved throughout a SPAC’s life. Throughout this paper, the term “misalign” refers to when groups are steered by incentives that result in a worse-off outcome for one of the groups. Sponsors oversee organizing the SPAC, investment bankers help underwrite and take the SPAC public, and institutional and retail investors trade shares as soon as the SPAC is publicly listed. While all the parties involved are given the opportunity to “win” on a financial basis, the fundamental structure of SPACs completely favors the sponsors’ interests at the hands of retail investors. The SEC has stayed on the sidelines for much of the SPAC surge, witnessing sponsor returns averaging close to 400%, while retail investors have either lost money or have made sub-overall market returns (Klausner, 39). The figure below shows a cohort of SPACs and a market index return (CRSP) over the past decade (Gahng, 51).

Year	Number	One Year Returns			Three Year Returns		
		SPACs	CRSP	Diff.	SPACs	CRSP	Diff.
2010	0	-	-	-	-	-	-
2011	0	-	-	-	-	-	-
2012	1	-53.2%	20.4%	-73.6%	-98.1%	37.2%	-135.3%
2013	5	-30.1%	17.9%	-48.0%	-41.1%	28.0%	-69.1%
2014	4	-51.6%	5.7%	-57.3%	-89.6%	26.7%	-116.3%
2015	9	-19.5%	0.7%	-20.2%	87.7%	33.1%	54.6%
2016	9	-5.2%	19.0%	-24.2%	-35.1%	40.3%	-75.4%
2017	13	-11.0%	11.7%	-22.7%	-44.5%	30.3%	-74.8%
2018	23	-35.0%	8.8%	-43.8%	-19.4%	34.9%	-54.3%
2019	25	2.0%	8.8%	-6.8%	35.6%	28.4%	7.2%
2020	25	28.0%	26.7%	1.3%	28.0%	26.7%	1.3%
<b>Total</b>	<b>114</b>	<b>-7.3%</b>	<b>13.6%</b>	<b>-20.9%</b>	<b>3.3%</b>	<b>30.9%</b>	<b>-27.6%</b>

History has demonstrated that SPAC investors, overall, have witnessed declining or even returns one year and three years following the SPAC's merger. Luckily for sponsors, they still reap massive gains on their investment, even when the post-merger company's share price plummets. The structural features of special purpose acquisition companies misalign sponsors and investors, further enhanced by a lack of regulation and the rise of retail investing; as a result, sponsors realize substantial returns while retail investors suffer acute losses.

## **THE HISTORY OF SPECIAL PURPOSE ACQUISITION COMPANIES**

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The idea of raising cash in a blind pool dates back to 1881 with Henry Villard's acquisition of the Northern Pacific Railroad (Hiltzik). Villard was a German immigrant who moved to Illinois and was a journalist during the civil war. Following the war, he moved back to Germany to sell bonds for the Oregon and California Railroad Company. However, in 1873, the company filed for bankruptcy and "sent Villard to Portland to protect their interests" ("Henry Villard"). Villard successfully saved the company from bankruptcy and personally gained control of Oregon and California. To maximize the company's railroad presence in the region, Villard set out to acquire the Northern Pacific Railroad. Given his company's lack of capital following a close call with bankruptcy, he needed an alternative strategy to raise capital to acquire Northern Pacific. "Seeking to raise several millions of dollars in capital to take over a company but unwilling to reveal his target for fear of driving its price beyond his reach, Villard sent out a prospectus for a "blind pool," stating that he would reveal "the exact nature" of his plans 90 days hence" (Hiltzik). An LA Times article from 2021 argues that "Villard made the discovery that if you don't tell investors how you're going to spend their money, they get more

eager, not less.” Villard’s proposed “investment vehicle” generated excitement and his blind pool was sold out within 24 hours. Villard’s investment structure from 1881 was not often replicated over the next century; however, he set the foundation for the modern-day SPAC, which underwent several alterations from Villard’s form to what we know of today. The next form of blind pool investments takes the form of blank-check companies in the second half of the twentieth century.

Blank-check companies, the predecessor to the modern-day SPAC, were investment vehicles in the 1970s and 1980s that were traded on the Penny Stock Market (PSM). These blank-check companies, also known as “cash-shell companies,” were largely unregulated by the SEC (Securities and Exchange Commission), resulting in fraudulent activity. The entire penny stock market of the 1980s was ridden with fraud, both by cash-shell companies and regular operating companies. “At the IPO stage, the management of the blank-check companies did not sell their securities directly to retail investors, but to condescending brokerage firms. Subsequently, the brokers mislead the investors about a possible imminent acquisition or just circulate official statements, according to which the blank check company had merged with an important operating company with profitable turnovers. This exaggerated the price of the issued securities and attracted new retail investors, at which point the managers of the blank check company and the brokers sold their securities, leading to a market collapse in relation to the price of equity and to the value of the firm with high returns for their investment’s portfolio” (D’Alvia, 110).

After such fraudulent practices were identified, US Congress passed the Securities Enforcement Remedies and Penny Stock Reform Act in 1990 (PSRA). The PSRA stated that “a company would be entitled to issue equity securities (i.e. penny stocks) if—inter alia—they had



an authorized share capital value not exceeding \$5 million, and the company had no less than a three-year financial history with a minimum net income of \$750,000” (D’Alvia, 111). The Act served to better define penny stocks and the duties of cash-shell companies to disclose information on the penny stock exchange. The PSRA forbid companies without a financial history from listing on the Penny Stock Market, which led to a rapid decline of proposed blank-check companies. Additionally, the PSRA revised Section 7 of the Securities Act of 1933 by way of implementing Rule 419, which served as the jumpstart for the modern-day SPAC. Rule 419 imposed that cash-shell companies hold their initial public offering (IPO) proceeds in a trust account, that the acquisition process should be carried out in a defined (and short) timeline, and that investors have the right to vote on the proposed acquisition and redeem their investment. Moreover, Rule 419 defined penny stocks as having an authorized share capital less than \$5 million (D’Alvia, 111). The PSRA completely drained the blank-check company market for much of the 1990s, as the need for financial history to list on the penny stock exchange and the inability for investors to trade shares until the merger completely blocked cash-shell companies from listing; that is until David Nussbaum and David Miller’s modern-day SPAC gained traction.

In 1993, investment banker, Nussbaum, and lawyer, Miller, crafted an updated version of blank-check companies, called special purpose acquisition companies, that complied with the regulations set forth by Rule 419 (Rochester Business Journal). Nussbaum and Miller proposed that SPACs issue securities through an initial public offering, just like penny stocks; however, their SPAC followed the rules outlined in Rule 419. Additionally, their updated SPAC model had an authorized share value over \$5 million, therefore not classifying the SPAC as a penny stock (D’Alvia, 111). The updated SPAC model did not have to list on the Penny Stock Market, and

was free to list on more lenient over the counter (OTC) exchanges as well as the American Stock Exchange (D’Alvia, 111). Both exchanges did not have a minimum financial history requirement like the Penny Stock Market, and they carried more lenient listing regulations than that of the popular NYSE or NASDAQ (D’Alvia, 113). Nussbaum and Miller cleverly altered the blank-check company structure to comply with all new requirements, all while avoiding SPACs being classified as penny stocks. During the 2000s, SPACs were issued on occasion, but nowhere near the volume the markets have witnessed in recent years. It was not until 2008 that SPACs were seen as credible and trusted amongst the market, as the SEC finally approved for SPACs to list on the NASDAQ and NYSE (D’Alvia, 112).

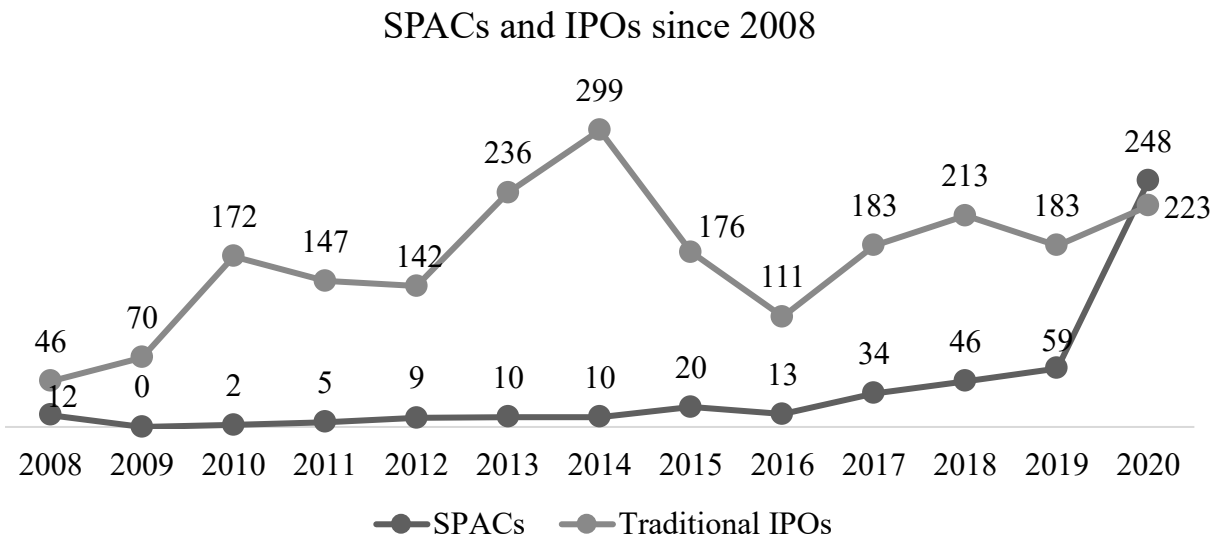
From Villard’s blind pool to the modern-day SPAC, investors, sponsors, and companies alike have used the financial mechanism in advantageous ways. In all its evolutionary forms, blank-check companies use their proceeds to finance acquisitions. Companies receive equity to pursue growth, and in all cases aside from Villard, companies are given access to the public markets. Sponsors earn returns – whether done legally or not – while investors are given the *opportunity* to earn a return. The overarching purpose of blank-check companies has not changed since 1881; however, the underlying structure, benefitting parties, and use cases have changed by the decade. The evolution is due to changing regulation, market conditions, and transformational ideas such as the “democratization” of investing that have increased the number of retail investors in the market. While blank-check companies will continue to evolve over the next decade, they have consistently proven themselves as an appealing way to take a company public.

## **THE RECENT SURGE IN SPAC ACTIVITY**

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SPACs have been trading on the NYSE and NASDAQ for over a decade, but their popularity truly gained traction only a few years ago. Figure 1 shows the number of SPACs and IPOs since 2008. When SPACs were permitted to trade on the NYSE and NASDAQ in 2008, there was a slight increase in SPAC volume; however, volume remained low through 2017. From 2017 to 2019, SPAC IPOs made up 16% of all IPOs to 24%, respectively. In 2020, the narrative changed dramatically, with SPAC IPOs outnumbering traditional IPOs. SPAC volume continued to outpace traditional IPO volume through Q1 of 2021, where SPACs represented 68.5% of total transactions. In Q2 of 2021, SPAC deals dropped to 25.5% of total public offerings, the lowest level since Q3 of 2019 (Kiesche).

Figure 1 (Sources: Mackintosh and Potter)



The beginning of the SPAC surge can be traced back to the second half of 2019 when Virgin Galactic, Richard Branson’s space flight company, successfully merged with SPAC

named Social Capital Hedosophia (Virgin Galactic IR). At the same time, DraftKings, arguably the most popular sports betting platform, announced their plans to merge with SPAC titled Diamond Eagle Acquisition Corp (Pound). By mid-February of 2020, Virgin Galactic's stock reached as high as \$33 per share, over a 200% return for investors of the SPAC IPO (Yahoo Finance). The success of Virgin Galactic's IPO coupled with popular names such as DraftKings announcing plans to go public via SPAC truly started the SPAC surge of 2020 and 2021. However, many other factors contributed to the rise in SPAC activity.

When COVID-19 disrupted the global markets in March of 2020, traditional IPO volume declined dramatically, with only two completed in March and ten completed in April and May (Moore). KPMG argued that the extreme decline in traditional IPOs from March through May was because "IPO markets may only be open for select industries and offerings. In particular, companies that demonstrated 'coronavirus-resistance' and those that seem set to lead in the post-COVID-19 world" (Moore). Additionally, COVID-19 altered how the financial markets operated in terms of in-person meetings, roadshows, and virtual listing ceremonies, which complicated the traditional process and shut out many companies from seeking the route. More importantly, though, traditional IPOs have been in decline for decades.

Several factors have contributed to the decline in traditional IPOs over the last few decades, but none is more crucial than the traditional IPO process itself. Wharton finance professor, Nikolai Roussanov, notes that "we have seen a dramatic decline in the number of publicly-listed and publicly-traded companies in the U.S. from the peak of about 8,000 in the late 1990s that coincided with the Nasdaq tech boom to about half of that, if not less, in the early to mid-2000s and 2000 teens" (Roussanov). He credits the decline to the "sense that going public has become costlier for firms, both in terms of the monetary cost that the company founders bear

and in terms of the time it takes to go public” (Roussanov). The issue is not that companies do not need the capital that an IPO provides; rather, it is the process surrounding an IPO that makes other capital-raising alternatives more attractive to companies. While some companies have sought capital by way of private equity or venture capital, recent years have demonstrated that companies are turning to SPACs as well.

The SPAC surge of 2020 and 2021 first and foremost addressed the need to take more companies public, given a COVID-19 environment where lengthy IPO processes may not have been suitable. However, there are many other reasons pointing to the surge, including a difficult financing environment in the latter half of 2019, the rise of retail investing, and the need for timely private equity exits.

In 2019, many high-profile “unicorns” went public via traditional IPO, including Lyft, Uber, and Slack. A recent article by Wharton professor, David Erickson, argues that many companies were hesitant to go public because some of the unicorns “didn’t trade well in the latter half” of 2019 (Erickson). While his idea may seem far-fetched, he does call out a more important event of 2019 that very well could have influenced companies’ IPO plans. “The high-profile debacle of WeWork, filing to IPO in August 2019 and then having to be restructured by October at a fraction of its previous valuation, created more scrutiny on companies looking to IPO” (Erickson). Erickson’s argument that the WeWork situation may have caused other companies to rethink the traditional IPO route is understandable; however, it does not directly lead to a rise in SPACs. Rather, it solidified the idea that the traditional IPO route possesses more scrutiny, length, and therefore potential roadblocks.

One undeniable reason why the SPAC surge occurred was due to the rise in retail investing. Retail investing platforms, such as Robinhood and E\*Trade, have democratized

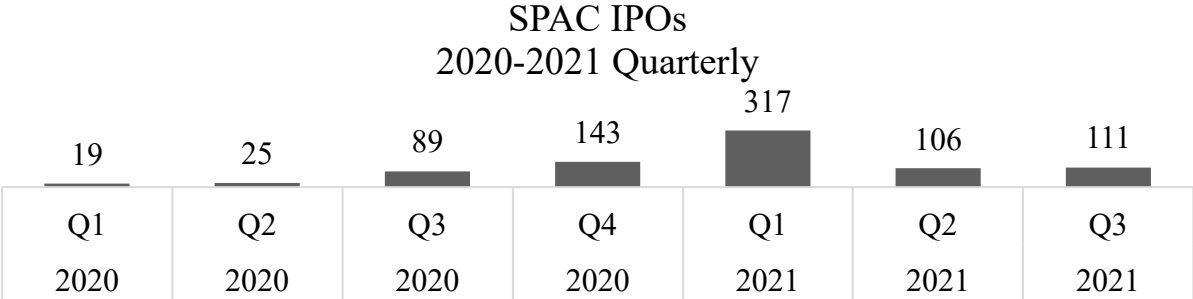
investing, leading to an increase in investments in “more speculative, volatile stocks” (Erickson). Many companies that merge with a SPAC are “companies that face challenges bridging information asymmetries with potential investors” (Klausner, 43). One example of an information asymmetry could be displaying a product-market fit for a company with no revenue to speak of. Investors are unable to easily assess the future performance of a pre-revenue company. In turn, those who invest in SPACs are likely more comfortable with risk. One who invests in a SPAC before an acquisition announcement is inherently gambling on the acquisition target, furthermore showing that SPACs are often speculative and volatile investments. Retail investors have entered the broader market in full-swing, many experimenting with SPAC investments during the COVID-19 stay-at-home orders. According to Robinhood’s S-1, 20% of US equity trading volume is carried out by retail investors, with a good portion of it being invested in volatile SPACs (Robinhood). That percentage has grown significantly since 2019 where retail investors only made up 14.9% of trading volume, and even more significant since 10.1% in 2010 (Linford). The rise in retail investing has undoubtedly fueled the SPAC boom by way of increased trading volume; however, the surge in SPACs is more so linked to SPAC sponsors capitalizing on retail investor interest and ignorance.

The third reason pointing to the SPAC surge was the number of private equity firms looking for suitable exit opportunities in an uncertain COVID-19 environment. In a report published by EY in April of 2021, they found that “approximately 30% of companies targeted by SPACs have been owned by PE firms” (Brown). SPACs are a suitable exit option for private equity portfolio companies because “relative to a traditional IPO, the sale process can be easier, cheaper and faster, with economics that are more certain” (Brown). In a COVID-19 environment where market uncertainty undeniably plagued the traditional IPO market, SPACs were seen as a

clearer alternative to accessing the public markets for many companies. Additionally, the surge in SPACs lined up particularly well for the historical hold period for private equity firms. Private equity firms typically hold their investments for four to six years, and as of 2021, “there [were] more than 2,800 companies currently backed by PE firms that were acquired between four and six years ago” (Brown). The rise in SPACs non-coincidentally happened when many private equity firms were looking to exit their portfolio companies. Successful 2019 SPACs coupled with private equity exit opportunities, the rise in retail investing, and the difficult public market environment of 2019 were all factors in the SPAC surge of 2020 and the first quarter of 2021; however, the rest of 2021 has witnessed a different narrative.

Although there were more SPACs announced in 2021 than 2020, the first quarter of 2021 disproportionately sways the results. In Q1 of 2021, 317 SPAC IPOs raised over \$100 billion, which far exceeds the number of 2020 SPACs at 248 (Stanfill). However, in the second and third quarters of 2021, only 106 and 111 SPAC IPOs took place, respectively. Although the number of SPACs remains extremely high as a percentage of total IPO listings, the downward trend from Q1 to Q2 is dramatic. Figure 2 shows the quarterly SPAC IPO volume from Q1 of 2020 to Q3 of 2021.

Figure 2 – (Source: Stanfill)



Perhaps Q1 of 2021 was an anomaly; even so, there are a few obvious reasons pointing to the dramatic decline from Q1 to Q2 of 2021. First off, historically, SPAC returns have been extremely disappointing, both in and of themselves and compared against traditional IPOs. Renaissance Capital reports that since 2015, of the 93 SPAC IPOs that have completed mergers, “the common shares have delivered an average loss of -9.6% and a median return of -29.1%, compared to the average aftermarket return of 47.1% for traditional IPOs” (Renaissance Capital). It is important to note that while SPAC returns post-merger (after the de-SPAC) have had a median return of -29.1%, that loss is largely hurting public investors as well as the merged company. On the other hand, while sponsors lose capital on the falling company share price, their 20% SPAC IPO equity, subject to dilution, of the merged company handily covers any decline in share price. A 2021 European Corporate Governance Institute report shows that “mean sponsor returns are close to 400%,” which demonstrates the magnitude of share price decline needed to make sponsors second-guess raising a SPAC (Klausner). Public investors and companies have therefore become more skeptical of SPACs, as their post-merger performance has been unattractive following a successful merger.

A second reason why the surge in SPACs came to a halt in Q2 of 2021 was due to “bubble speculation.” As witnessed many times throughout the market’s history, from the roaring twenties to the dot-com bubble of 2000 and 2001, “bubbles” are periods where asset volume and/or prices rise disproportionately to the fundamentals of the asset, resulting in major selloffs when the “bubble pops.” Many investment professionals, journalists, and professors believed that the speculation and resulting inflation of share prices for un-merged SPACs mirrored the dot-com bubble at the beginning of the century. Acquisition company vehicles were



witnessing share prices skyrocket prior to any acquisition announcement, which obviously goes against the fundamentals of the asset, which is only the trust account value. Adding to the bubble speculation was the influence of retail trading on many post-merger SPACs. For example, after DraftKings merged with Diamond Eagle Acquisition, the stock witnessed a five-week share price increase of more than 250%. Wharton professors described the retail investing phenomenon by saying, “as the ‘Robinhood cohort’ continued to make money on these more speculative names, they got even more aggressive. Instead of waiting for a merger to be completed, they also started speculating on the IBC announcements” (Erickson). Investment professionals, companies, and even sponsors began to take notice of the “bubble” whisperings, which undoubtedly increased hesitation towards SPACs.

Lastly, the SPAC surge halted after the first quarter of 2021 due to increased scrutiny from Congress and the SEC. In February 2021, Maxine Waters, a congresswoman from California, received a letter from Americans for Financial Reform and the Consumer Federation of America saying that the boom in SPACs is “fueled by conflicts of interest and compensation to corporate insiders at the expense of retail investors” (Americans for Financial Reform). The SPAC surge during the COVID-19 pandemic has stirred outrage among those who have lost, and triumph for those who have won. Retail investors and everyday people, overall, have been on the short end of the stick, while finance professionals and celebrities have witnessed extraordinary returns.

Since 1993, the SEC has not made any major changes to its stance on blank check companies, and SPACs have been operating in the market without high regulatory scrutiny for the past two decades. In recent months though, as the SPAC surge drew attention from celebrities, private equity firms, and everyday people, the SEC has found itself issuing

statements largely over investor protection. In April of 2021, the SEC’s John Coates said, “concerns include risks from fees, conflicts, and sponsor compensation, from celebrity sponsorship and the potential for retail participation drawn by baseless hype, and the sheer amount of capital pouring into the SPACs, each of which is designed to hunt for a private target to take public” (Coates). Regulatory scrutiny scared SPAC sponsors and investors, drying up the market in the second and third quarters of 2021. Although the SPAC surge lost momentum after the first quarter of 2021, the alternative form of going public will persist.

## **SPACS VS. ALTERNATIVES**

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The purpose of this paper is to demonstrate how SPACs have many flawed features that expose some investors while benefitting others; to properly analyze these discrepancies, comparing two forms of taking a company public is crucial. Companies can go public via traditional IPO, merging with a SPAC, or through a direct listing. For the purposes of this paper, and since direct listings are the least popular method of going public, only traditional IPOs and SPACs will be considered as options for going public. Traditional IPOs have always been the predominant method of taking a company public; however, recent years have demonstrated that merging with SPACs is feasible and advantageous for several reasons. It is important to note that traditional IPOs and merging with SPACs, while both achieving the goal of taking a company public, are not necessarily interchangeable, meaning that a company does not simply have a “choice” on which method to pursue. The process, incentives, players, and features make the two methods structurally different and difficult to compare on an apples-to-apples basis. The undeniable common feature between the two methods is that the resulting company receives an influx of capital to pursue growth.

Traditional IPOs and SPACs are both publicly traded securities. Traditional IPOs are initiated by the company itself, while SPACs target companies to merge with. Prior to a SPAC merging with an operating company, it is simply a publicly traded entity with a bank account. Once the SPAC finds an acquisition target, it uses the bank account to help fund the purchase price of the target company. While traditional IPOs start and end with the same company, a SPAC starts with the SPAC itself (the publicly traded bank account) and ends with an operating company. At the surface, this is the concrete difference between a traditional IPO and a SPAC.

Traditional IPOs have successfully served their purpose in the financial markets since their inception and are likely to stay for decades, if not centuries. Of course, that begs the question: why do we need SPACs? Traditional IPOs, which undergo a lengthy regulatory process and are oftentimes heavily scrutinized by investors, appeal to companies that are able to “tell their stories” to the market. To tell its story, the company must either be able to provide historical performance and realistic forecasts, have proven technology advantages, or some other characteristic that is appealing and easily conveyed to investors. Companies without historical performance or proven technology therefore have an extremely difficult time impressing investors during the roadshow (where the pre-IPO company presents to accredited investors) and are subject to increased scrutiny from the SEC. SPACs serve these companies.

The modern-day SPAC appeals to companies with minimal or “hard-to-convey” financial performance and a (potentially) volatile outlook. The SPAC boom began with Virgin Galactic, a futuristic space travel company, and has gained interest from many electric vehicle startups and other forward-looking ventures with little historical performance to speak of. Virgin Galactic CEO George Whitesides said they merged with a SPAC versus going public via traditional IPO because “it required less managerial bandwidth and less time” (Shen). By “less managerial

bandwidth,” he means less time would be needed to address regulatory scrutiny and less time needed to impress traditional investors. SPACs provide companies with an alternative method of going public; however, the method is not interchangeable with a traditional IPO. Traditional IPOs appeal to certain companies and SPACs appeal to others.

From a regulatory standpoint, IPOs and SPACs are treated in different ways and undergo similar yet distinct processes; specifically, there are differences in the time it takes to go public, the types of businesses that take the perspective routes, and the cost of going public. Traditional IPOs and SPACs are both required to file an S-1, which is the standard SEC-required document for all entities trying to list publicly. For a traditional IPO, companies provide hundreds of pages relating to risk factors, operating history, compensation structure, and more. An S-1 for a traditional IPO is far more time-intensive to produce, review, and “sign-off,” largely since there is an established operating business with financial history that must be audited and reviewed by countless parties. On the other hand, a SPAC S-1 does not have any operating business associated with it at the time of IPO, and therefore does not have financial history to review and audit, streamlining the overall process. According to Spencer Stuart, “companies can go public through a SPAC in 4 to 6 months versus 12 to 18 in a traditional IPO process” (“Board Governance and SPACs”). Roughly twelve months is a material difference for a company to go public when taking into consideration different market factors that may impel a company to list at a certain time.

There are often major differences in the types of companies that pursue being acquired via a SPAC versus a company that lists via a traditional IPO. The regulatory environment influences the types of companies that choose to pursue a merger with a SPAC by way of the Private Securities Litigation Reform Act (PSLRA), which “provides a safe harbor from liability

under the securities laws for projections and other forward-looking statements so long as they are accompanied by appropriate cautionary language” (Klausner, 42). Forward-looking statements can only be included in “proxy statements, annual reports, and other SEC filings. Importantly, however, it does not cover IPO prospectuses. As a result, IPO prospectuses rarely include financial projections or other forward-looking statements” (Klausner, 43). The safe harbor rule does not apply to IPO prospectuses as a means of investor protection; for example, if a company were to file an S-1 with revenue expectations exceeding 100% growth year over year, it is safe to assume that investors will buy the stock. While the safe harbor rule applies to a SPAC S-1 as well, it is insignificant because there is no operating business at the time of SPAC IPO. However, in future statements filed by the SPAC, and when the SPAC has found a target to merge with, it “can and routinely [does] include projections in [its] joint proxy statements, which are otherwise similar to IPO prospectuses” (Klausner, 43). This feature lures certain target companies to pursue a SPAC IPO: “for companies that face challenges bridging information asymmetries with potential investors, as some SPAC targets reportedly do, the freedom to provide and explain projections may be important” (Klausner, 43). As previously mentioned, Richard Branson’s Virgin Galactic, a company that had plans to make space travel a leisurely activity, benefitted from the safe harbor rules when they were announced to merge with a SPAC, as they were able to include financial projections in the SEC statements to the public. When Virgin Galactic went public via SPAC, the company did not have any revenue, but was able to showcase its potential top-line to investors due to the safe harbor rule. In the company’s investor presentation from 2019, they estimate \$31M of estimated revenue in 2020 and \$590M of estimated revenue in 2023 (“Virgin Galactic: The Leader in Human Spaceflight”). From an investor’s point of view – and if you were to believe those claims – this investment seems like a

no-brainer. However, at the end of the second quarter of 2021, the company has yet to produce any revenue, emphasizing the issue of safe harbor protection for SPACs. Furthermore, many electric vehicle (EV) start-ups have sought public offerings via SPACs due to their lack of financial history, but the ability to showcase their potential to investors. According to Bloomberg, 13 EV companies have gone public via SPAC in the past two years, with 14 more pending for the second half of 2021 (McKerracher). As showcased, SPACs can be advantageous for companies “with complicated circumstances, such as where companies need immediate rebalancing of capital structure, for companies missing research coverage and for companies with lack of exit opportunities” (Vulanovic).

Lastly, going public via a merger with a SPAC versus a traditional IPO comes with different cost burdens. While it is impossible to compare costs on an apples-to-apples basis, due to different processes and structures, it has been recently argued that SPACs are a cheaper way to bring a company public compared to an IPO, at least from the perspective of the company itself (in the SPAC process, the target company is not involved until the later stages). The SPAC process (for the target company) is shorter than for a company pursuing a traditional IPO, resulting in less time and capital allocated to the process. In summary, for a company pursuing an IPO and for a company pursuing a merger with a SPAC, the SPAC merger will usually prove to be the cheaper option. However, the entire SPAC process (from IPO to merger) measured against the traditional IPO process is likely very similar on a cost basis. “A typical SPAC comes with a 2% underwriter fee and 3.5% fee at completion compared with 7% for a traditional IPO” (Carrier). While one to two percent may seem immaterial, these percentages equate to millions of dollars. Additionally, SPACs do not entertain the same “road shows” that traditional IPOs usually do to raise awareness and lock up investors. On the other hand, though, a traditional IPO

process is anywhere from six to twelve months, whereas an entire SPAC process can last over two years (“A Guide to Every Step in the IPO Process”).

While there are many advantageous features of the SPAC structure and process, there are just as many features of traditional IPOs that are more appealing to certain companies. For one, a traditional IPO is not subject to giving sponsors 20% equity of the offering, which is a large and dilutive equity stake. Secondly, while regulatory scrutiny can be perceived as a negative, it can also be a token of validation for future investors. Lastly, the SPAC surge has witnessed many sub-par companies being taken public by celebrity investors and professional athletes with minimal investing experience. Traditional IPOs do not have greedy sponsors forcing acquisitions, which is a key feature and disadvantage of SPACs that this paper will examine.

Traditional IPOs and SPACs have different processes and are subject to varying regulatory standards. The market, evident by the SPAC surge, finds value in the SPAC structure for several reasons, including time to go public, costs associated with the process, and the fact that non-traditional companies are attracted to the alternative form of going public. However, as the remainder of the paper will demonstrate, there are many flaws in the SPAC structure that expose retail investors while benefitting sponsors and institutional investors. The SEC is responsible for addressing several key features of SPACs, including but not limited to timing pressures, underwriter’s fees, and dilution. Over the past two years, the market has clearly witnessed sponsors winning and investors losing following the de-SPAC. It is the SEC’s responsibility to protect investors and maintain a fair and efficient market.

## **THE SPAC PROCESS**

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SPAC sponsors have manipulated the market to some extent, gathering investor excitement in volatile and unproven companies while reaping maximal returns. Most retail investors are unaware of the structural features of SPACs that expose their wallets at the hands of sponsors. The only way to understand the problem with SPACs is to know exactly how they work.

Special purpose acquisition companies are entities that raise capital through an initial public offering, where at the time, the business has no financial history or operations. SPACs are set up and orchestrated by sponsors, who can take the form of hedge fund managers, private equity firms, industry executives, former government officials, celebrities, and professional athletes—just to name a few. Sponsors usually receive a 20% equity stake in the SPAC IPO, although all sponsor equity terms are defined in their respective S-1 (Appendix 1). The sponsor, therefore, acts as the founder of the SPAC, organizer of the SPAC, and one of the largest, if not the largest shareholder of the SPAC. Later sections of this paper will examine how certain SPACs perform better than others based on their sponsors, and how investors should examine sponsors before investing.

A trust is set up to hold the proceeds of the SPAC IPO until a target is found to be acquired using the proceeds. Specifically, “the SPAC will fund a trust account with an amount typically equal to 100% or more of the gross proceeds of the IPO, with approximately 98% of the amount funded by the public investors and 2% or more funded by the sponsor. The funds in the trust account are typically invested in short-term U.S. government securities” (Lenahan, 3). In the IPO, investors are sold “units,” which consist of a share worth \$10.00 and a warrant—the right to buy a partial share at a set price in the future. SPAC shares are traded during their lifespan before finding a target; however, share prices usually reflect the value of the trust account



(\$10.00) unless market speculation impacts the share price. The unit feature of SPACs gives investors choices, rewards, and risks; however, as this paper will demonstrate, the unit feature also results in increased dilution for those who stay invested from IPO through successful merger – mainly the retail investors.

Once the IPO is publicly traded, “the founders normally have only 18 months from the date of the IPO to make an acquisition,” which presents major consequences as this paper will address (Dimitrova, 102). This feature of SPACs creates unique incentives for sponsors and underwriters to force acquisitions with risky and sub-par operating companies (referring to a company as “sub-par” is to show how sponsors force acquisitions with companies that are likely not ready to be taken public, which eventually is exemplified in their post-merger share performance). Unfortunately, this paper will demonstrate how sponsors and underwriters remain victorious with the condensed timeline while other investors suffer share price declines.

A formal vote is held before the target is acquired, and if passed, the SPAC goes through a “de-SPAC,” which refers to the business consummation and the operating business being acquired (Appendix 3). If the acquisition is not approved of, then investors receive their capital back and sponsors typically bear any losses. At the time of business consummation, investors are given the right to redeem their shares and receive the value of the trust account, while also maintaining their warrant. Therefore, if investors want to redeem, they receive a government bond yield on their investment and keep a warrant. However, investors that stay invested through the de-SPAC are immediately diluted by the founder’s stake; after completion of the de-SPAC, the sponsors receive their 20% equity, subject to dilution, of the target company for their “work” to acquire the target company. As this paper will explain, institutional investors typically redeem their shares while retail investors stay invested through the de-SPAC; therefore, institutional

investors earn a government yield on what would otherwise be cash and are given a “free” warrant, while retail investors are heavily diluted and witness declining share prices following the de-SPAC.

The acquisition of the operating company is oftentimes a two to five times multiple of the SPAC IPO itself. For example, a \$250 million SPAC IPO likely would acquire an operating company with an enterprise value of somewhere near one-billion dollars. Law firm, Clifford Chance, notes that “it is common in the current de-SPAC market for target company valuations to be far larger than the SPAC trust account and for target shareholders to receive a substantial majority of the shares in the surviving public company in consideration for their interest in the target” (Clifford Chance). Acquisitions tend not to only be financed by the SPAC trust account itself; rather, new investors are brought in at the time of acquisition, known as PIPE investors.

Most SPACs have PIPEs (private investments in public equities) which provide more financing for the acquired company to fuel growth following the de-SPAC (Appendix 4). As explained by Harvard Law School, “In advance of signing an acquisition agreement, the SPAC will often arrange committed debt or equity financing, such as a private investment in public equity (“PIPE”) commitment, to finance a portion of the purchase price for the business combination and thereafter publicly announce both the acquisition agreement and the committed financing” (Lenahan). PIPEs are extremely important features of SPAC deals, as the acquisition purchase could not be financed without their support. PIPE investors usually take the form of institutional investors like hedge funds and mutual funds, and usually contribute up to 25% of the acquisition purchase price, while public investors contribute 64% and sponsors contribute the rest (Klausner). Additionally, PIPE investors play a very important role in validating the prospects of the to be acquired company as they give “investors the opportunity to scrutinize and

buy into a proposed deal before the market is even aware of its existence” (Batsev). PIPE investments can provide SPAC investors with more certainty surrounding the target company and its potential future success.

## **SPAC PROCESS CASE STUDY: OPENDOOR TECHNOLOGIES**

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Structurally, special purpose acquisition companies are complex, which makes them difficult to understand, especially for retail investors. To clear up any confusion about the SPAC process and its terminology, a real-life example of a recent SPAC will demonstrate how all the distinct features play a role in the process. Chamath Palihapitiya is one of the most infamous characters of the SPAC surge, as he successfully took Virgin Galactic public via his Social Capital Hedosophia I SPAC in 2019. His next SPAC, Social Capital Hedosophia II, announced in September of 2020 that they would be merging with the online real estate marketplace, Opendoor Technologies (Picker).

Social Capital Hedosophia was the sponsor of the SPAC, which is made up of Chamath’s Social Capital and London-based Hedosophia, both global venture capital firms. The SPAC had its IPO on the NYSE on April 27, 2020, offering 34,500,000 units at \$10.00 per unit (Social Capital Hedosophia Holdings Corp. II). Therefore, the SPAC raised about \$350 million at its IPO. The units consist of a share and a partial warrant, which “entitles the holder thereof to purchase one Class A ordinary share at a price of \$11.50 per share” (Social Capital Hedosophia Holdings Corp. II). Most unit structures consist of a partial warrant of one-third, meaning that an investor would need to buy three units to have one full warrant. As one might imagine, if units consisted of a full warrant, there would simply be too much potential “free equity” given away. One-third of a warrant allows for investors to be rewarded for investing in a blind trust while not

overly diluting the share count after the de-SPAC. In all SPACs, shares and warrants are traded separately, mostly because shares can be redeemed prior to the de-SPAC whereas warrants can be held. For Social Capital Hedosophia II, SPAC shares were traded under the ticker IPOB and warrants were traded under IPOB WS. Generally, SPAC shares can be traded at all times, and investors have the right to redeem their shares prior to the de-SPAC if they do not approve of the acquisition target. On the other hand, warrants have certain trading durations that investors must abide by. For example, in the Hedosophia II Form S-1, warrants “may be exercised only during the period commencing on the later of: (i) the date that is thirty days after the first date on which the Company completes a Business Combination, and (ii) the date that is twelve months from the date of the closing of the offering” (Social Capital Hedosophia Holdings Corp. II). The warrants are also terminated “at the earliest to occur of (x)... on the date that is five years after the date on which the Company completes its Business Consummation or (y) the liquidation of the Company” (Social Capital Hedosophia Holdings Corp. II). In practice, when an investor exercises their warrant, they receive a share at the price of the warrant – in the case of Hedosophia II, the share was bought at \$11.50. If the investor exercises the warrant when the stock price is trading at \$15.00 for example, then the investor just received their share at a 30% discount. Warrants provide SPAC investors with a discounted share price when the stock price trades above the exercisable price. At the time of SPAC IPO, the capitalization table would show public shareholders owning 80% of the outstanding shares while the sponsor would own 20%. However, the public shareholders would be paying \$10 per unit, whereas the sponsor is given the 20% equity essentially for free. The capitalization table outlined in the preliminary S-1 is shown below (Social Capital Hedosophia Holdings Corp. II).

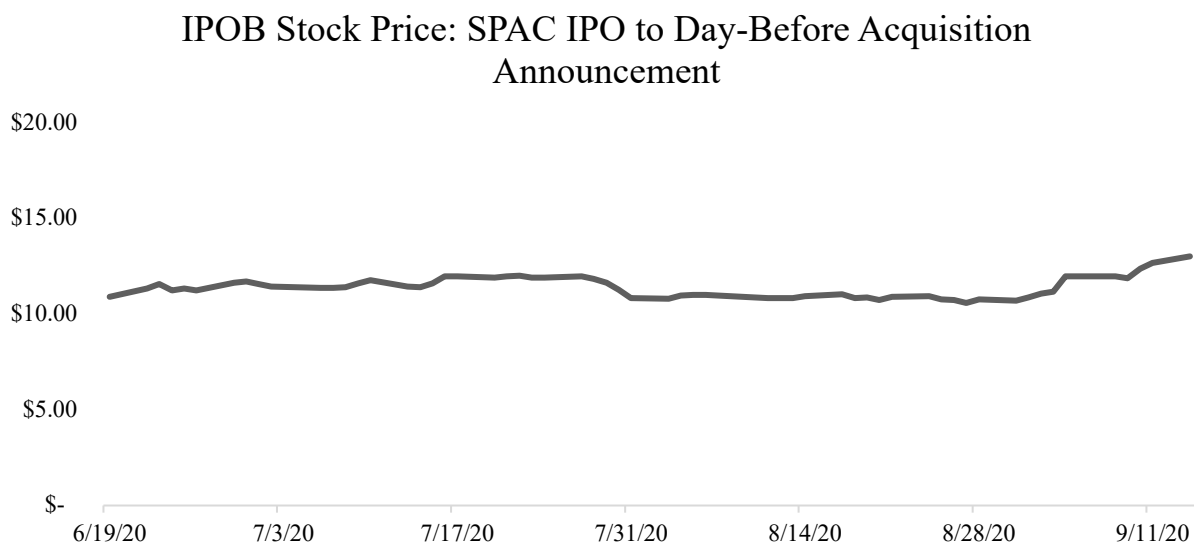
	Shares	% of Total Shares	Share Purchase Consideration	% of Purchase Consideration	Price per Share
Sponsors	7,500,000	20%	\$25,000	0.01%	\$0.003
Public Shareholders	30,000,000	80%	\$300,000,000	99.99%	\$10.00
<b>TOTAL</b>	<b>37,500,000</b>	<b>100%</b>	<b>\$300,025,000</b>	<b>100%</b>	

The Hedosophia II SPAC announced they were planning on merging with Opendoor Technologies on September 15, 2020. In August of 2020, the SPAC stock price accurately reflected the value of the trust account, closing on August 31<sup>st</sup> at \$10.73 (“Opendoor Technologies Inc”). On September 15<sup>th</sup>, once the market had time to react to the acquisition announcement, the stock closed at \$17.56. Investors seemed pleased with Opendoor Technologies as the acquisition target, and when the acquisition was finally completed on December 21, 2020, the stock closed at \$31.25, reflecting over a 200% share price increase for initial SPAC investors.

The trust account, before the acquisition, is where special purpose acquisition companies get the name “blank-check company” from. The trust account is the blank check, and it can be thought of like a traditional personal check: the trust account value is the dollar amount on the right-hand side of the check and the payee of the check is blank until an acquisition is made. From the time of SPAC IPO to the time of acquisition, the trust account is “to be invested only in United States government treasury bills with a maturity of 185 days or less” (Credit Suisse Securities, 16). If units are sold at \$10 per share, then theoretically the trust value per share, otherwise known as the share price of the SPAC, should trade at \$10 or just slightly higher given that the trust account is yielding a small return from government bonds. Unless market speculation or the influence of the sponsors affects the SPAC share price, all SPACs prior to

announcing a target should reflect the value of the trust account, which would be around \$10. The Social Capital Hedosophia SPAC, as shown in figure 3, accurately traded just above the trust value per share between the SPAC IPO and the acquisition announcement.

Figure 3 (Source: “Opendoor Technologies Inc”)



Unfortunately, most SPACs do not reflect the trust account value per share; market speculation, investor enthusiasm, and sponsor involvement manipulate the share price of a public entity worth nothing more than a bank account prior to an acquisition announcement. This phenomenon will be discussed in later sections of the paper.

When the acquisition was completed on December 21, 2020, Opendoor Technologies received about \$1 billion in cash proceeds at a near \$5 billion valuation (Kirsch). The capital to finance the acquisition came from the sponsors, public shareholders of the SPAC, and PIPE investors, with 500,000,000 shares transferred at closing, implying a \$5 billion acquisition given that the value per share was \$10 (Wheeler). The market capitalization table changed

dramatically following the influx of new investors to fund the total acquisition price. Following the business consummation, the pro forma common stock would be distributed as such: 82.4% of shares to Opendoor stockholders, 6.8% to the SPAC public shareholders, 4.3% to the sponsor, and 6.5% to the PIPE investors. The 82.4% of Opendoor stockholders include the founder's stake, Eric Wu at 6%, and a handful of investment firms, including Softbank at 13.5% and Khosla Ventures at 8.5% (Solomont). The SPAC IPO itself raised only \$345 million, which is why the SPAC public shareholders only received 6.8% of Opendoor shares and the sponsor only received 4.3%. It is extremely common for SPAC IPOs to raise a fraction of what the future acquisition price is, due to the feasibility of raising a SPAC multiples larger and because new investors can come in at the time of acquisition to make up the difference.

Opendoor Technologies has performed well as a public company. After an acquisition price of roughly \$5 billion, the company is trading at a \$15 billion market capitalization as of November 1, 2021 ("Opendoor Technologies Inc"). Investors of all kinds have been handsomely rewarded, which as much of this paper will continue to demonstrate, rarely happens. However, the Opendoor SPAC merger is an ideal case study to show how SPACs are *supposed* to function, which is to provide companies with a way to go public.

## **RETAIL INVESTING PLATFORMS**

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It is no coincidence that the rise in SPAC volume occurred when retail investing was at an all-time high. As mentioned, retail trading volume makes up 20% of total market trading volume, up 100% from only a decade ago. The implications of the retail investing boom are seen in news headlines daily, from the GameStop saga to an 845% rally within the first week of trading for Donald Trump's planned media SPAC (Li). I believe the SPAC boom would not have

occurred without retail investors, mainly because sponsors would not have been as aggressive entering the space. Although this will be addressed later in the paper, sponsors have been forcing sub-par (or “un-ready”) companies through mergers to earn their equity stake. In an efficient, fair, and data-driven market, many of those acquisitions would have never been approved by shareholders. However, retail investors, whether they mean to or not, willingly approve sub-par acquisitions with minimal foresight into the impacts of dilution or declining share prices.

New platforms like Robinhood and Coinbase, along with reputable brokerages like E\*TRADE and Schwab, have revolutionized the equity markets over the last several years because of their ease of use and broad access. During the COVID-19 pandemic, government stimulus checks helped introduce more retail investors to the market as a means of deploying extra capital. Coupled with stay-at-home orders and general boredom, people began investing in all types of stocks and other assets, including cryptocurrency and SPACs. While an influx in trading volume is by no means a negative result of the retail investing boom, the stocks and assets that attract retail investors are troubling. Many of the retail trading platforms emphasize that they are “democratizing finance,” which on the surface seems reasonable; in actuality, many users invest in highly risky and speculative assets promoted by social media forums and non-qualified individuals. To illustrate, Dogecoin, a cryptocurrency that was created as a joke, was boosted by retail investors to a \$70 billion market capitalization in May of 2021; to put that number into perspective, Dogecoin had a higher valuation than Moderna, a global pharmaceutical company that does about \$10 billion in yearly revenue (Financial News Media).

In terms of SPACs, retail investors have undoubtedly contributed to the surge in 2020 and 2021. In theory, the value of a SPAC trust account prior to an acquisition announcement should trade near \$10 to reflect the value per share of the trust; in reality, many SPAC stocks



“soared to dizzying heights on the back of little market-moving information” (Chinyamutangira). Retail investors have been drawn to SPACs with futuristic business models, celebrity sponsors, and oftentimes just because it was a “meme-stock.” The SEC has even come out saying “it is never a good idea to invest in a SPAC just because someone famous sponsors or invests in it or says it is a good investment” (SEC).

Chief Investment Officer at Atreides Management, Gavin Baker, says that there are three types of SPACs: “unserious SPACs, you know, sometimes you have celebrity sponsors. There’s unscrupulous SPACs that I think were preying upon retail investors and were highly concentrated in the EV SPAC area. And then I think there’s a third category of very, very serious SPACs” (Picker). Baker’s categorization is extremely accurate; however, all categories of SPACs rely on retail investor interest and participation in one way or another. Unfortunately for retail investors, SPACs have historically been detrimental investments overall. The “democratization of investing” has backfired for SPACs, mainly because retail investor enthusiasm and an appetite for speculative trading allowed for SPAC sponsors to take advantage of certain features that maximize their returns. In turn, retail investors have experienced declining share prices, heavy dilution, and stakes in sub-par companies.

## **HOW EACH STAKEHOLDER IS INVOLVED**

There are many parties involved in a SPAC, including the sponsor, the target company, institutional investors, retail investors, PIPE investors, the underwriters, and the SEC. Each party plays an important role in ensuring the success of a SPAC; though, each party is also responsible for the flawed processes and structures that misalign sponsors and retail investors. Many of these stakeholders are not necessarily to blame; in fact, they are simply taking advantage of what I

believe to be an antiquated SPAC structure to maximize their wealth. In a capitalistic society, that is no crime; however, some stakeholders stretch the line between taking advantage of a flawed system and manipulating other parties for returns.

The most important party of the SPAC process is arguably the sponsor, as they initiate the original acquisition company in the first place. The role of the sponsor at the onset is to raise a successful SPAC IPO. The predominant factor that differentiates a “good” SPAC IPO from a “bad” SPAC IPO relies on the reputation of the sponsor, as there is no financial history or data for investors to base their decisions on. Jim Kramer, one of the hosts at CNBC, was quoted saying that “newer SPACs increasingly feel like an inside joke for the super-rich and a way for celebrities to monetize their reputations” (Landy). On the other hand, there are many professionally raised SPACs where the sponsors have better intentions; for example, Chamath Palihapitiya of Social Capital has raised several SPACs, with many of them trading above the original trust account. Chamath used his reputation to his advantage, but there is an extreme difference between a financial professional leveraging their reputation versus musicians and professional athletes. Later sections of the paper will illustrate how sponsor reputation affects the future share price performance of the acquired company using academic research from the *Journal of Applied Finance* from 2011.

Once the sponsor raises the SPAC IPO, they usually have between 18 and 24 months to complete an acquisition. The sponsor equity stake of 20% in the SPAC IPO (equating to a meaningful equity stake in the to-be-acquired company) coupled with a rushed timeframe to complete an acquisition creates many perverse incentives that misalign sponsors and investors. Research from the *Journal of Applied Finance* will provide statistical data on how the rushed timeframe leads to forced acquisitions of sub-par companies.

Although investment banks (underwriters) help in the search for acquisition targets, the sponsors are technically responsible for finding a company for the SPAC to merge with. Once a target is found and transaction details are finalized, the sponsors announce the acquisition target to the public. At this time, the investors vote on the proposed acquisition and need “approval by at least a majority of the votes cast by public shareholders at the meeting” (Gül). Investors are also able to redeem their shares regardless of their vote if they do not approve of the business consummation. Even though the acquisition decision seems to be in the best interest of shareholders, many SPAC sponsors “buy” votes from investors to make the deal go through. The Journal of Applied Finance found that “by analyzing trading behavior around the date of the vote to acquire or liquidate, we show that in the case of Bad SPACs almost one-third of outstanding shares issued in the IPO are traded in the seven trading days before the decision to reject or approve the acquisition is taken” (Jenkinson). This phenomenon illustrates the levers that sponsors can pull to maximize their interests.

The next major stakeholder in the SPAC process is the to be acquired company. As previously mentioned, SPACs attract different types of companies compared to a traditional IPO. Many companies that have a difficult time showcasing their future to potential investors may choose the SPAC route, as it can be advantageous for non-traditional companies. Unlike many other stakeholders, the target company does not have any material impact or influence on the flawed SPAC structure. The only case where the acquired company may negatively influence the SPAC process is if they choose the SPAC route over the traditional IPO to hide from regulatory forces. For example, Nikola, the electric vehicle company, went public via SPAC, and months later the company was accused of fraud. Although it will never be proven, it is entirely possible that the fraudulent practices could have been caught in a traditional IPO process. These

occurrences are far and few between; overall, the target company is the least “to blame” stakeholder in the flawed SPAC structure that inherently misaligns sponsors and investors.

Investors obviously play a crucial role in the SPAC process, as they contribute to the proceeds used for acquisition and vote on the proposed business consummation. Throughout a SPAC’s life, there are three main sets of investors: institutional, retail, and PIPE. Institutional investors and PIPE investors, being professionals, avoid substantial losses by understanding the structural details of SPACs, while retail investors suffer acute losses due to a misunderstanding, a lack of experience, or the manipulation by sponsors.

Institutional investors are typically large money managers, like BlackRock and Fidelity, hedge funds, endowments, pension funds, and other private investment groups. These groups manage others’ capital, which means they have stricter risk tolerance than that of an everyday retail investor. Additionally, these large institutional investors are professionals; they do not involve themselves in too many areas that present obvious downside. Therefore, institutional investors view SPACs in a unique way. Institutional involvement in SPACs represents about 29% of the merged entity stake, but not as meaningful as institutional involvement in all other publicly traded stocks, which is over a 50% stake (Dimitrova).

The SPAC’s trust account, prior to an acquisition, is invested in government bonds, yielding a bit more than a pile of cash. On the surface, that is not very appealing; however, coupled with a warrant, and the SPAC unit presents tremendous upside with limited downside risk. There is limited downside risk because if the acquisition does not go through or if investors redeem, their capital in the trust account is returned pro-rata. The phenomenon of institutional investors redeeming shares prior to the merger and maintaining their warrant is known as SPAC arbitrage.

SPAC arbitrage is legal and advantageous for investors, but only the institutions typically do it. To illustrate, say a hedge fund purchases 3 units at the time of SPAC IPO for a SPAC that has a 1 share, one-third warrant structure. That means they have three shares and one warrant. Once the acquisition target is announced, two scenarios might occur: either the stock pops due to approval and enthusiasm, or the shares drop below the value of the trust account. If the stock pops, institutional investors sell their units for a profit. If the stock falls below the trust account, then the institutional investor will redeem their shares, maybe suffer a small loss, but will maintain the warrant for future upside. Institutional investors do not have immunity to losses; however, their downside is largely protected, and their upside is abundant as long as they redeem or sell their shares prior to the dilution that takes place following the acquisition. There are also institutional investors that do not redeem their shares and maintain their positions for the long-term. In certain situations, with strong acquisition targets and strong sponsors, holding one's SPAC position can yield handsome returns.

Institutional investors that invest in SPACs for the long-term often come in the form of PIPE investors. The SPAC process relies on PIPE investors because it “allows the SPAC to raise certain additional capital from private investors to ensure that the SPAC has enough funds to close on the acquisition” (Pipa). In all IPO prospectuses for SPACs, it is stated that “the initial target business that the SPAC acquires must have a fair market value equal to at least 80% of the SPAC's net assets at the time of acquisition” (Dimitrova). This rule exists to maintain the SPACs purpose, which is to use the funds raised to acquire a company, “not to provide the SPAC with proceeds for general corporate purposes or to turn it into an investment fund” (Dimitrova). At the time of acquisition, after many SPAC shareholders redeem, there often are not enough funds to be used towards acquisition, which is where the PIPE investors enter.

Of course, PIPE investors are given an attractive opportunity to invest in the to be merged company. In most cases, “the SPAC offers common stock to the PIPE investors at the same price offered in the SPAC’s IPO (which is usually \$10)” (Pipa). While public investors of the SPAC IPO buy-in at \$10 with no insight into the target company, PIPE investors come in at the same price, yet they can diligence and examine the target company. With that said, PIPE investors are still generally beneficial for public investors. When SPAC sponsors are trying to raise a PIPE investment, it often looks like a traditional IPO’s roadshow without the regulatory scrutiny. The SPAC’s presentation, and resulting PIPE investment, shows investors that outside investment professionals were willing to back the acquisition, which is reassuring for retail investors who are unable to properly diligence. PIPE investors play an integral role in the current SPAC process as they help to validate the target and front capital for the acquisition.

The last investor class to examine in the SPAC process is the retail investor. For the purposes of this paper, retail investors are all public investors that are not deemed institutional; as such, many of the broad claims made about retail investors do not apply to all public investors. Retail investors, whether they are young college students trading on Robinhood or working adults investing for the long-term, are critical stakeholders in the SPAC surge of 2020 and 2021. During the early months of 2021, though, enthusiasm for SPACs fell dramatically for the retail class. According to Reuters as of May 2021, “retail investors’ net daily purchases of SPACs have fallen to about \$181 million from \$500 million in late January” (Randewich). The decline in SPAC volume in the second quarter of 2021 is therefore directly linked to retail investing volume, but as mentioned, there are obviously other factors at play too. Understanding the retail investor’s journey throughout the life of a SPAC is important in justifying how retail investors are at a disadvantage due to the inherent SPAC structure.

According to the Financial Times in March of 2021, “individual investors account for about 40% of all trading in SPACs – double the amount for S&P 500 or Russell 2000 stocks” (Financial Times). Retail capital is deployed throughout the life cycle of a SPAC, first at the time of SPAC IPO and throughout the acquired company’s future. At the time of SPAC IPO, retail investors receive the same unit structure that institutional investors do, and in turn, earn the same percentage return up until the acquisition announcement. The difference between the two investing classes is that institutional investors redeem their shares before the merger while retail investors stay invested. According to research from Stanford and NYU, “over 90% of the institutions that invest in SPAC IPOs will either redeem their shares for cash or sell them to other investors before closing the merger” (Bernstein). It is safe to assume that the 10% are strategically investing in high-quality SPACs, with reputable and proven sponsors. At the height of the SPAC frenzy in Q1 of 2021, only 10% of all shares were redeemed, compared to 21.9% and 52.4% for the second and third quarters of 2021, respectively (DealFlow). These redemption rates are significantly lower than the average institutional redemption rate, showing that retail investors, overall, do not redeem nearly as much as institutional investors. This phenomenon will be discussed later in the paper, as it is a major flaw of the current SPAC structure leading to negative returns for retail investors.

Once an acquisition is announced, shareholders of the SPAC are allowed to vote on the proposed business consummation. Unlike most shareholder votes, where retail investor contribution is near meaningless, SPAC acquisition votes are different. For example, institutional investors hold a majority of the outstanding shares of Apple, at 58.61% (CNN). On the other hand, institutional investors in SPACs are about half that percentage, at 29%. Institutional shareholder voting is far less influential for SPACs, while retail investor voting is meaningful.

Unfortunately, “retail investors fail to show up in sufficient numbers for critical shareholder votes on the deals,” according to SPAC industry executives (Financial Times). This issue manifests itself by way of sponsors “buying votes.” Research from the Journal of Applied Finance shows that “there is an incentive for the founders, or their affiliates, to buy shares/votes just before the decision date, especially if they can identify the ‘no’ voters” (Jenkinson). The data shows how the average share turnover—shares trading over shares offered in the IPO—greatly increases days before the shareholder vote, implying that sponsors are “buying” votes from those who would otherwise redeem. Following the merger of the operating business with the SPAC, retail investors act and trade like they would in traditional stocks.

Retail investors play a major role in the SPAC process, yet post-merger performance does not reward them for their participation. To some degree, it is their own fault. However, the SPAC structure inherently sets up sponsors for success at the hands of retail investor losses. Future sections of the paper address the structural flaws that expose the retail investing class, but knowledge of all stakeholders in the SPAC process is necessary for determining the underlying issues.

To that extent, underwriters are another major contributor to the flawed SPAC process; however, the burden falls on the SEC rather than the investment banks. Investment banks typically serve as underwriters for both traditional IPOs and SPACs, helping sponsors and companies prepare for listing and advising them on financial decisions. In the SPAC process, underwriters help sponsors raise the initial SPAC IPO as well as find a target company to merge with. Oftentimes, there will only be one lead underwriter for both the SPAC IPO and the acquisition, but there are also many cases where there are two underwriters, each taking one of the responsibilities. Similar to how sponsors force deals to earn their equity stake, resulting in



future losses for retail investors following the de-SPAC, underwriters “force” acquisitions to earn a fee. Earlier in the paper, the difference between underwriter’s fees in a traditional IPO versus a SPAC was explored, and aside from SPAC fees being lower overall, the main difference was that SPAC fees are paid upfront and deferred whereas traditional IPO fees are only upfront. Deferred fees for underwriters align them with the goal of the sponsors: to complete an acquisition at all costs. Unfortunately, this idea does not align with the interests of shareholders, who desire a strong operating company with a successful future. Later sections of the paper will examine the role of the underwriter in more detail and how they enhance the misalignment between sponsors and investors.

The last major stakeholder that must be addressed is the regulatory body in charge of maintaining a fair and efficient market: the SEC. The Securities and Exchange Commission (along with US Congress for other issues) is the regulatory body responsible for controlling the SPAC market. Since 1993, following the PSRA, the SEC has not altered any rules of the SPAC game. In their defense, SPACs made up such a minority of the overall market for most of the 2000s and 2010s that there were never major issues to address; however, the SPAC surge of 2020 and 2021 tells a different story. During the surge, many retail investors have suffered extreme losses due to greedy sponsors, and the SEC is partially responsible for the flawed SPAC process that allows it to happen. The SEC has an extremely important role in the SPAC market, yet they have only issued statements and no material changes. Nonetheless, their statements resulted in the market coming to a halt in the second quarter, limiting the number of sub-par operating companies merging with SPACs, and therefore limiting potential retail losses. Further sections of the paper will examine some of the recent SEC statements and specific issues the

SEC is responsible for. The intricate details and structure of SPACs rely on many stakeholders, but the flawed process and manipulation by certain parties expose retail investors the most.

## **SPAC RETURNS ANALYSIS**

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The SPAC surge of 2020 and 2021, in terms of investor returns, can be summarized by Fast Companies' March 2021 article titled, "SPACs are an Inside Joke on Wall Street, and the Joke is on You." While all stakeholders we've discussed have different investing strategies, the overwhelming majority of "professional investors" have come out on top, while retail investors have suffered extreme losses. Before diving into the data, let's revisit how each stakeholder generally approaches SPAC investing.

Sponsors receive shares for "setting up" the SPAC and are rewarded with 20% of shares, before the acquisition dilution that occurs. Institutional investors, overall, invest in the SPAC from the time of IPO up until acquisition announcement. This strategy takes advantage of the limited downside in investing in a trust account while maintaining the upside of an enthusiastic acquisition announcement, and the ability to keep the warrants. PIPE investors invest at the time of acquisition and acquire shares at the same price that the blind trust investors got in at. Therefore, they have clarity and time to diligence the acquisition target, limiting the downside of investing in a blind trust, while taking advantage of what is often a low entry price. Retail investors, on the other hand, invest at nearly all stages of the SPAC's life. First, they buy shares at the time of SPAC IPO, putting their money into a blind trust. Some retail investors will buy in prior to an acquisition announcement, after the acquisition announcement, and then when the target is trading under its own ticker following the de-SPAC. Retail investors are subject to

heavy dilution following the de-SPAC and are at risk of sponsors pursuing sub-par deals to earn their equity stake before time runs out.

From the peak of the SPAC boom in February 2021 to early September of 2021, “an ETF of SPACs across stages of the lifecycle (ticker: SPAK) has returned -35%, vs. +14% for the S&P 500” (Sraders). This statistic shows the high-level difference in returns for SPACs versus traditional publicly traded companies. A different perspective on returns can be found by looking at the returns prior to a target acquisition as well as following the business consummation. An analysis from Renaissance Capital shows that “70% of SPAC IPOs so far this year are trading below their \$10 offer price (that's through September 15 and includes those that have announced and a few that have completed mergers). And of the SPACs that have completed mergers in 2021, 58% trade below their original offer price” (Sraders). Based on this 2021 data, institutional investors and retail investors both seem to have been subject to negative returns. For the institutional investors, if they invested in every SPAC IPO, roughly 70% of their investments are trading below the \$10 trust account price per share, but they still have their warrants for any potential upside. Retail investors experience the same share decline; however, the data also suggests that following the de-SPAC, 58% of target company stocks are still trading below \$10 per share. On the surface, it seems that both institutional investors and retail investors, overall, have experienced losses in 2021. However, data from the past decade more accurately shows the discrepancies between retail investor and institutional investor returns.

University of Florida and University of South Carolina professors examined the SPAC market for the past decade in their recent 2021 paper titled “SPACs.” The professors attempt to address many of the concerns included in this paper and provide valuable statistics on SPAC investor returns since 2010. SPACs and traditional IPOs both are processes that bring companies

public, but the return profile for each is starkly different. In their analysis of over 100 successful SPAC mergers since 2010, “29% of SPAC mergers end up having common share returns lower than -90% in the first three years after the mergers, while only 9% of traditional IPOs performed worse than -90% in the first three years after the IPOs” (Gahng). Said differently, there are many more “terrible” SPACs than there are “terrible” traditional IPOs. Moreover, data from “SPACs” in Figure 4 shows one-year returns and three-year returns for SPACs following the merger compared against CRSP, which is a value-weighted market index. SPACs produce far lower returns than the overall IPO market, aside from in 2020 when retail investor enthusiasm and an influx of SPACs distorted the statistics. Examining the “difference” columns tells the true story of overall investor returns for post-merger SPACs and traditional public companies, with an average one-year difference of -20.9% and a three-year average difference of -27.6%. To put the average returns in perspective, “investor A” puts \$100 into a SPAC IPO and “investor B” puts \$100 into a traditional IPO. While this is an oversimplification, one year following the SPAC’s merger with an operating company, investor A will have lost \$7.30, and their balance would be \$92.70. Over a three-year period, investor A gains \$3.30 and ends with a balance of \$103.3. On the other hand, investor B, who put \$100 into a traditional IPO, is up \$13.60 after the first year and has a balance of \$113.60. After three years, investor B has gained \$30.90 and has a balance of \$130.90. To reiterate, this is overly simplified, but it tells the story of returns for investors in SPACs versus traditional IPOs. Long-term investors in SPACs are statistically at a disadvantage compared to traditional IPO investors.

Figure 4 – SPAC Merger Common Share Returns (Source: Gahng)

Year	Number	One Year Returns			Three Year Returns		
		SPACs	CRSP	Diff.	SPACs	CRSP	Diff.
2010	0	-	-	-	-	-	-
2011	0	-	-	-	-	-	-
2012	1	-53.2%	20.4%	-73.6%	-98.1%	37.2%	-135.3%
2013	5	-30.1%	17.9%	-48.0%	-41.1%	28.0%	-69.1%
2014	4	-51.6%	5.7%	-57.3%	-89.6%	26.7%	-116.3%
2015	9	-19.5%	0.7%	-20.2%	87.7%	33.1%	54.6%
2016	9	-5.2%	19.0%	-24.2%	-35.1%	40.3%	-75.4%
2017	13	-11.0%	11.7%	-22.7%	-44.5%	30.3%	-74.8%
2018	23	-35.0%	8.8%	-43.8%	-19.4%	34.9%	-54.3%
2019	25	2.0%	8.8%	-6.8%	35.6%	28.4%	7.2%
2020	25	28.0%	26.7%	1.3%	28.0%	26.7%	1.3%
<b>Total</b>	<b>114</b>	<b>-7.3%</b>	<b>13.6%</b>	<b>-20.9%</b>	<b>3.3%</b>	<b>30.9%</b>	<b>-27.6%</b>

Institutional investors and retail investors both are considered long-term investors in SPACs; however, given that 90% of institutions redeem their shares prior to mergers, the vast majority of post-merger investors are retail. The presented data makes it clear that SPACs are generally not advantageous investments, mainly because of their inherent structure that misaligns sponsors and investors. However, some investors other than sponsors can make a return by timing appropriately. Institutional investors are known to redeem their shares before the business consummation, therefore yielding a return through investor enthusiasm and acquisition announcement pops, while limiting the downside since the value of the trust account can be returned.

The paper published by professors from University of Florida and University of South Carolina separates return profiles into two categories: from the time of SPAC IPO until five days prior to business consummation, and from the time of merger to one-year and three-years out. This paper just examined the returns for investors following the SPAC merger, and the findings suggest that post-merger performance, overall, is detrimental to investors, especially when compared to traditional public companies. On the other hand, examining returns from the SPAC IPO up until the SPAC merger demonstrates how institutional investors earn handsome returns.

Figure 5 shows 151 SPAC IPOs from 2010 to 2018 and their respective annualized returns from the time of SPAC IPO to five days prior to the merger with an operating company. In every year from 2010 to 2018, returns from the time of SPAC IPO up until the merger have been positive, with a weighted average of 12%. 90% of institutional investors redeem their shares before the merger, so their returns look in line with the data presented in Figure 5. SPACs are a high-yielding investment, with minimal risk, if an investor is wise enough to redeem their shares before the merger. Indeed, retail investors experience the same returns during this period; however, most retail investors do not redeem their shares and they are subject to declining share prices following the merger.

Figure 5 – Based on Year of SPAC IPO (Source: Gahng)

<b>Year</b>	<b>Number</b>	<b>Annualized Returns</b>
2010	2	1.4%
2011	6	3.4%
2012	9	3.9%
2013	10	11.0%
2014	11	5.4%
2015	20	6.1%
2016	13	19.6%
2017	34	9.5%
2018	46	19.1%
<b>Total</b>	<b>151</b>	<b>12.0%</b>

Institutional investors wisely earn profits by redeeming prior to SPAC mergers, while most retail investors remain invested through the entire life of SPACs and as a result, witness negative returns. As is the case with any financial tool or investment vehicle, unless at least one party wins, the tool or vehicle will fail to exist. Institutional investors keep SPACs alive, as the redemption structure allows for great upside with limited downside. Unfortunately for the retail

investing class, history shows that they are the clear losers. The grand winners, though, are the SPAC sponsors. As mentioned previously, a 2021 report from the European Corporate Governance Institute found that mean sponsor returns were near 400%.

During the SPAC surge of 2020 and 2021, most SPACs have performed quite well; however, against the traditional IPO market or market indexes, SPAC returns lag far behind. This paper has argued that retail investors specifically are subject to declining share prices and historically that is a fact, as seen previously in Figure 4. The broader market is reaching all-time highs daily, and SPACs have come along for the ride, but they are still lagging the returns seen for the S&P 500, the Russel 2000, or the DJIA. However, SPACs have produced tremendous returns for sponsors. Some reports find that mean sponsor returns are averaging around 400%, while a report from JP Morgan covering 85 IPOs has average SPAC sponsor returns at a whopping 958% (JP Morgan). The same report shows median sponsor returns at 682%, with the 85<sup>th</sup> percentile at 1,713% return and the 15<sup>th</sup> percentile at a 178% return. In the worst SPAC deals, sponsors are still earning well over a 100% return on their investment, which in and of itself should cause some perplexment. Whether one chooses the data from the European Corporate Governance Institute or the recent report from JP Morgan, it can be agreed upon that SPAC returns for sponsors are completely outrageous.

Historically, retail investors have been subject to negative returns while institutional investors safely earn double-digit percentage returns. During the SPAC boom, retail investors and institutional investors have both been rewarded for many of their investments, typically regardless of timing or redemption. However, history repeats itself; SPACs are inherently bad investments for the long-term, which is why retail investors have witnessed disappointing return profiles. Historically, but more so currently, SPAC sponsors are handsomely rewarded with

enormous returns at very low risk. Future sections of the paper are going to address how the current SPAC structure allows for sponsors to win at the hands of retail investors. Before analyzing the misaligned SPAC structure, one very important player in the SPAC market needs to be readdressed: the SEC.

## **THE SECURITIES AND EXCHANGE COMMISSION**

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The SEC is responsible for protecting investors, facilitating capital formation, and maintaining fair, orderly, and efficient capital markets (“What We Do”). During the SPAC surge of 2020 and 2021, many investors were not aware of the underlying structure of SPACs that greatly favor sponsor returns. While SPACs undoubtedly facilitate an influx of capital for target companies, they do so in an antiquated and biased fashion, and more so than the traditional IPO process. The SEC is in part responsible for the heightened SPAC activity over the past two years, as finance professionals and celebrities took advantage of an inherently biased structure to earn returns. Unfortunately, they earned returns at the hands of retail investors, a group that the SEC is responsible to protect. Although the SEC is supposed to protect investors by means of company disclosure requirements, I believe the SEC has fallen short in this regard. The issue of safe harbor provisions, which will be discussed shortly, provide a clear-cut example of how the SEC failed to quickly respond to the SPAC surge.

The SEC’s history in the SPAC market dates to the 1990s when they had to address blank-check company fraud on the penny stock market. In 1993, the SEC and US Congress, the regulatory bodies responsible for maintaining a fair market, successfully implemented Rule 419 which blocked blank check companies from listing on the penny stock exchange. However, clever lawyers and bankers, seeking returns for themselves and their clients, implemented the



SPAC as a means of going public. Since 1993, the SEC has not made any major changes to its stance on blank check companies, and SPACs have been operating in the market without high regulatory scrutiny for the past two decades. In recent years though, as the SPAC surge drew attention from celebrities, private equity firms, and everyday people, the SEC has found itself issuing statements largely over investor protection. In April of 2021, the SEC's John Coates said, "concerns include risks from fees, conflicts, and sponsor compensation, from celebrity sponsorship and the potential for retail participation drawn by baseless hype, and the sheer amount of capital pouring into the SPACs, each of which is designed to hunt for a private target to take public" (Coates). Although the SEC has issued several statements regarding key features of SPACs, very little action has been taken. Nevertheless, regulatory scrutiny scared SPAC sponsors and investors, drying up the market in the second and third quarters of 2021.

The most extreme regulatory scrutiny came against safe harbor provisions, which protects SPACs when including financial projections in their SEC reports. Traditional IPOs do not have safe harbor protections for their S-1 filings, which is technically the most crucial information document to IPO investors. This rule exists to prevent to-be public companies from giving unrealistic forecasts to woo investors into buying their IPO. SPACs, on the other hand, avoid this rule because at the time of SPAC IPO, there is no operating company to include financial projections for. But, when the SPAC merges with an operating company, it is technically not the operating company's IPO, rather, it is just an acquisition. While traditional IPOs are regulated under "public offering rules", SPACs are "regulated under merger rules" (Klausner). As such, the SPAC is allowed to include forward-looking statements for their acquisition target in their post S-1 filings. These projections, like the unrealistic ones mentioned in the Virgin Galactic SPAC merger, attract investors into buying the SPAC IPO shares. As seen with Virgin Galactic,

the projections “tricked” investors because the company has yet to even come close to its desired revenue targets.

In the SEC’s April 2021 statement addressing the SPAC surge, John Coates, an Acting Director in the Division of Corporate Finance, discusses the issue of safe harbor provisions for SPACs. In response to safe harbor protections for forward-looking SPAC statements, Coates says that “these claims raise significant investor protection questions” (Coates). Coates argues that the safe harbor protections should not be applied to de-SPACs because the business consummation is effectively the IPO, in the sense that an operating company becomes public. Current legislation classifies the SPAC IPO as the IPO and therefore is not subject to safe harbor provisions. Coates argues that “many investors in the SPAC’s own initial public offering are not the investors in the ultimate public company’s ongoing business operations. If a major shift in owners is in fact occurring in most or all SPACs as they progress through a de-SPAC, it is the de-SPAC as much as any other element of the process on which we should focus the full panoply of federal securities law protections – including those that apply to traditional IPOs” (Coates). Statements like these scared investors and sponsors from pursuing SPACs following the boom in the first quarter of 2021. Safe harbor protections have a role in SEC-filed statements; however, “forward-looking information can also be untested, speculative, misleading or even fraudulent” (Coates). John Coates and the SEC must address the issue of safe harbor provisions to ensure that investors are not misled by sponsors at the time of the de-SPAC.

The recent SEC statements scared investors and sponsors from pursuing SPACs, but the underlying issues of the SPAC structure and process still exist. To this point, the paper has emphasized the flawed SPAC structure without providing an in-depth analysis of how structural issues manifest. In the next section, many of the most crucial issues with the SPAC process and

structure will be analyzed, and some possible solutions to those issues will be presented. The misalignment between sponsors and investors lies in the flawed structure of special purpose acquisition companies; if SPACs want to survive, stakeholders need to find financial and operational alignment. The features that misalign sponsors and investors include including timing pressures, sponsor reputation, redemption, dilution, and underwriters' fees.

## **ISSUE ONE – TIMING PRESSURES**

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Sponsors of the SPAC are required to complete an acquisition using the IPO proceeds in a set timeframe, resulting in pressure to complete a deal. In turn, sponsors make poor last-minute decisions to complete acquisitions with sub-par target companies. Given that sponsors receive equity of the target following a successful acquisition, their main priority is to complete a deal at all costs. Unfortunately, retail investors who do not redeem their shares before an acquisition will own shares of a sub-par company and are still subject to the sponsor's dilution. Regulation is needed to alter the period that sponsors must complete an acquisition because retail investors are not properly protected from sponsors making poor decisions; additionally, sponsors must be held accountable for the long-term success of their acquisitions, as opposed to an automatic equity stake.

The NYSE and NASDAQ define that SPACs have 36 months to complete an acquisition from the time of IPO in Rule 102.6 and Rule IM-5101-2, respectively. However, most SPACs define their acquisition period as shorter: "A SPAC will typically provide for a two-year period to identify and complete an initial business combination transaction. However, some SPACs have opted for shorter periods, such as 18 months" (Office of Investor Education and Advocacy). The condensed window to complete an acquisition results in perverse incentives for sponsors to

make bad investment decisions due to their enormous equity stake obtained following business consummation.

Sponsors receive 20% of the SPAC's outstanding common stock, resulting in a large equity stake of the acquired business following the de-SPAC. Therefore, sponsors are incentivized to complete an acquisition at all costs, whether they believe the acquisition to be "good" or not. "Although the founders have a significant stake in the SPAC, their shares will be worthless if the business combination is not consummated. These factors create extreme financial incentives to complete a business combination whether or not it is the optimal choice, as their payoffs are dependent on completing an acquisition" (Jenkinson). Academic research from the Journal of Applied Finance demonstrated that a major factor in a SPAC's success is how soon or how late the sponsors announced the acquisition from the date of the SPAC IPO. If the acquisition was completed in a timely fashion, that may show that sponsors had certainty in their target; on the other hand, sponsors that announced acquisitions towards the end of their two-year period likely rushed the decision before the deadline. In the research, Jenkinson and Sousa organize their analysis of 43 SPACs by "Good" and "Bad" SPACs. Good SPACs were ones where the price at the acquisition decision date traded above the trust value per share. Said differently, Good SPACs are those where investors favored the sponsor's acquisition target. On the other hand, Bad SPACs were those where the price at the acquisition decision date traded below the trust value per share, signaling that investors were not pleased with the acquisition target. Jenkinson and Sousa found that Good SPACs had an average time of 331 days between the SPAC IPO and the acquisition announcement; Bad SPACs had an average time of 393 days (Jenkinson). The median was more profound and meaningful, with Good SPACs at 298 days and Bad SPACs at 456 days. The data shows that Good SPACs, ones where investors seemed

pleased with the target, are found and announced in a reasonable time frame; on the other hand, Bad SPACs find their targets at the last minute simply to complete a deal. However, research from Dimitrova's "Perverse Incentives of SPACs" suggests that the relationship between acquisition announcement time and success is more complicated. She finds "evidence of an inverted U-shaped relationship between the time it takes for SPAC sponsors to find a potential target and SPAC performance. In other words, the longer it takes for the SPAC to announce an acquisition, the higher are the stock returns, as the sponsors are potentially putting in more time to conduct thorough due diligence and purchase the most suitable target. However, acquisitions that are announced too quickly or too late are perceived by the market as less valuable and have worse performance" (Dimitrova, 114).

In May of 2018, VectoIQ raised a SPAC targeting companies in the transportation industry. Although the SPAC was led by former GM executives, the sponsors were unable to find a target for almost two years—until they announced they would be taking Nikola public via their SPAC. Nikola, one of the world's most talked-about electric vehicle companies, was announced as the acquisition target in March of 2020, about 22 months following the IPO (McKerracher). Although the SPAC traded well above the trust value per share due to the heightened news and retail enthusiasm surrounding the acquisition, the following months told a very different story. In June of 2020, days after Nikola began trading, the stock rose to as high as \$65 per share; however, as of October 2021, the stock is hovering around \$10 per share—the same value as the original trust account (Nikola Corporation (NKLA) Stock Price). In the second half of 2020, Nikola founder Trevor Milton was accused of fraud and lying to investors, which sent the stock plummeting. Regardless of his actions, the sponsors of the SPAC who were supposed to diligence the acquisition in its entirety obviously missed something. The acquisition with

Nikola was announced two months before the SPAC would be forced to delist, which would have resulted in the sponsors losing millions of dollars. Although the answer will never be known, it is extremely possible and very likely that the VectoIQ sponsors rushed into the Nikola deal to save their capital.

In situations like Nikola as well as the research conducted by Jenkinson and Sousa, the winners and losers are clear. Sponsors force acquisitions to earn a material equity stake while retail investors suffer from diluted equity in an underperforming and volatile company. Institutional investors are wise enough to redeem their shares prior to the acquisition, but retail investors are uneducated on the structure of SPACs, persuaded by sponsors to maintain their investment, or a myriad of other factors. While one can easily blame the retail investor's loss on their own decisions, the rules of the game must be changed.

The SEC and other regulatory bodies are required to protect investors from sponsors making selfish decisions. The timeframe for a SPAC to complete an acquisition is an antiquated feature of SPACs. To limit sponsors from having to make last-minute decisions to save their capital, the time frame to complete an acquisition should increase. If investors want to invest in SPACs, they need to be comfortable with their capital sitting in a low return environment until the sponsors feel that an acquisition is ready. The only downside for investors is that their capital could be put to better use; however, increasing the time frame for sponsors would hopefully limit the number of forced acquisitions that end up hurting investors following the de-SPAC.

Additionally, sponsors must be held accountable for their investment decisions and need more "skin in the game." The SEC should attempt to mimic the private equity fund structure for the world of SPACs. "The 20% of equity received by SPAC sponsors initially resembles the fixed management fee received by PE fund managers... However, the success measure is

significantly different, since SPAC managers receive this compensation at the stage of investing in the target, whereas PE managers receive the carry upon realization of profit at the stage of selling off the investment. Hence, PE managers have a stronger incentive to create value in the companies in which the fund invests” (Okutan Nilsson, 266). SPAC sponsors receive a handsome amount of equity without having to materially add value to the company following the de-SPAC. The SEC and US Congress need to create an equity compensation structure for SPAC sponsors where they earn their equity stake based on the future performance of the acquired company. Retail investors will therefore be protected from SPAC sponsors rushing into decisions to selfishly save their capital.

## **ISSUE TWO – SPONSOR REPUTATION**

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The reputation of the SPAC sponsors plays a crucial role in the future of the SPAC and the merged company. SPACs traditionally were investment vehicles carried out by industry professionals and finance professionals, but the surge in 2020 and 2021 came with a new class of sponsors: the famous. Movie stars, NBA all-stars, musicians, former senators, and all walks of fame in between have sponsored SPACs over the past two years. Jim Cramer, a leading host at CNBC, stated that “these newer SPACs increasingly feel like an inside joke for the super-rich and a way for celebrities to monetize their reputations” (Landy). Celebrities with zero financial experience sponsoring SPACs is the equivalent of finance professionals writing and singing pop songs. Yes, if finance professionals like Bill Ackman, Steven Cohen, and Henry Kravis co-produced an R&B track, it likely would receive quite a bit of attention. However, would it be successful in the long term? The answer is no. Similarly, celebrity SPAC sponsors rally enthusiasm, but do not have the foresight, experience, or diligence to create value. Jim Cramer

astutely notes that the SPAC surge of 2020 and 2021 has been a way for “celebrities to monetize their reputations.”

In practice, the issue of sponsor reputation is an enormous factor in determining the future success of the SPAC, and therefore is of great importance to investors. In an April 2021 report from the ECGI, the authors found extreme differences in post-merger performance for “high-quality” sponsors versus others. “High-quality” sponsors were either affiliated with a fund having over \$1B of assets under management or the sponsor was a former Fortune 500 company executive. Said differently, high-quality sponsors are financial and operational professionals. On the other hand, low-quality sponsors comprise of athletes, musicians, government officials, and more; needless to say, many of these low-quality sponsors may have financial and operational experience, but overall, they are simply trying to monetize their reputations.

The ECGI report found that high-quality sponsors produce better returns for investors because “their SPACs may not be as dilutive as SPACs sponsored by others” and because they “may be able to add value to a post-merger company” (Klausner, 33). The report analyzes 47 SPACs that completed mergers in 2019 and 2020; out of 47, twenty-four were classified as high-quality sponsored SPACs. Figure 6 shows ECGI’s analysis of the SPAC cohort by three-month, six-month, and twelve-month returns, as well as benchmarked against an IPO Index and the Russell 2000.

Figure 6 – Post-Merger SPAC Returns for High Quality (HQ) and Non-High Quality (Non-HQ) SPACs (Source: Klausner)

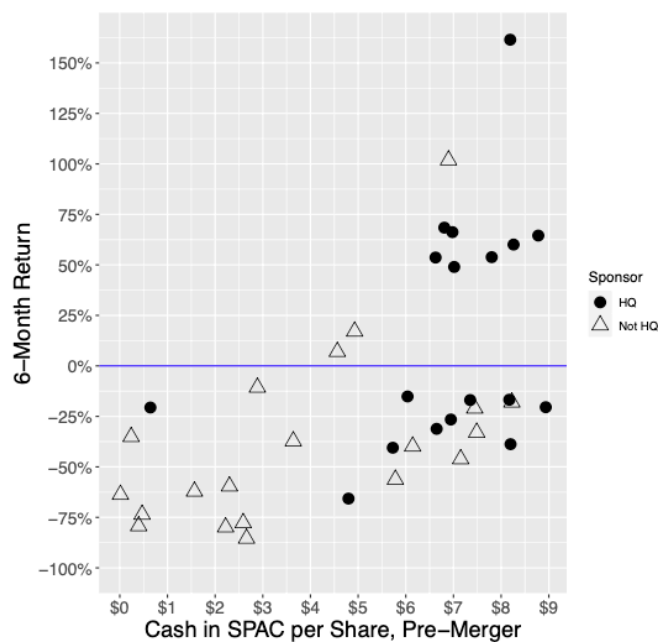


	Three-Month		Six-Month		Twelve-Month	
	HQ	Non-HQ	HQ	Non-HQ	HQ	Non-HQ
Mean Return	31.5%	-38.8%	15.8%	-37.6%	-6.0%	-57.3%
Median Return	-4.6%	-46.9%	-15.9%	-43.0%	-34.6%	-66.3%
Mean Return (Excess over IPO Index)	25.1%	-53.0%	0.4%	-63.1%	-11.8%	-74.6%
Median Return (Excess over IPO Index)	7.1%	-52.1%	-31.0%	-56.3%	-54.8%	-89.9%
Mean Return (Excess over Russell 2000)	37.5%	-41.9%	22.5%	-41.0%	9.7%	-45.7%
Median Return (Excess over Russell 2000)	16.9%	-47.2%	-2.4%	-57.0%	-36.3%	-55.0%
N SPACs	24	23	18	20	7	9

In the ECGI cohort, there was not a recorded period where high-quality sponsored SPACs performed worse than non-high-quality SPACs. It is extremely evident that high-quality sponsors add more value than non-high-quality sponsors. Moreover, many of the high-quality sponsored SPACs perform better than the IPO index and the Russell 2000, especially in the shorter term. This data shows how sponsor reputation is a major factor in determining the future success of the SPAC.

The two major differences, aside from reputation itself, that affect the discrepancies in HQ versus non-HQ sponsor returns are the dilution that takes place and the value that sponsors can add to post-merger companies. Given that this cohort is from 2019 and 2020, it would be difficult to determine how sponsors of high-quality add value, but it is evident that high-quality sponsors create less dilution for post-merger shareholders. Figure 7 plots high-quality sponsors and non-high-quality sponsors based on the amount of dilution that takes place by how much cash is in the SPAC on a per-share basis at the time of merger. As mentioned previously, the cash in the SPAC (per share) is, on average, around \$7 following dilution.

Figure 7 – Cash in the SPAC Pre-Merger (Source: Klausner)



Overall, there are many more HQ sponsors plotted on the right side of the figure, signaling that HQ sponsors are less dilutive to shareholders as there is more cash per share. High-quality sponsors dilute the cash per share by \$1 to \$5, while non-high-quality sponsors dilute the cash per share anywhere from \$2 to \$10. Dilution occurs at the time of merger mostly because of the number of redemptions and the sponsor equity stake. High quality sponsors can minimize the amount of dilution that takes place because of the low number of redemptions. On the other hand, non-high-quality sponsors often have over 50% redemptions, resulting in higher dilution and a lower cash per share. The act of redeeming removes money from the trust account to fund the merger (while the warrant is maintained, increasing future dilution once again), but a lower trust account balance means that more financing will be needed at the time of merger. More financing results in an even more dilutive environment. High quality sponsors minimize the effect of dilution by fewer investors redeeming their shares before the merger. Additionally,

“proportionately more high-quality sponsors generated positive returns, which suggests that they were able to generate sufficient surplus to fill holes created by dilution embedded in their SPACs” (Klausner, 37).

The issue of sponsor reputation can be addressed in several different ways. First and foremost, investors need to be aware of the data presented above; being drawn to invest in a SPAC based on celebrity sponsors will lead to disappointing returns. The SEC even came out to say “it is never a good idea to invest in a SPAC just because someone famous sponsors or invests in it or says it is a good investment” (SEC). However, it is difficult to convey this information to retail investors. A better solution to combatting the issue of sponsor reputation would be to make it harder to achieve maximal returns with little effort. As this paper has demonstrated, it is very easy for sponsors to make a handsome return on their investment, which is why many celebrities have entered the space. If sponsors had more “skin in the game,” it would prevent non-professionals from trying to easily monetize their reputation. There is a reason why Colin Kaepernick, Stephen Curry, and Ciara haven’t set up a private equity fund – creating value is not always simple. Generating a return on a SPAC, though, is. For example, what if the sponsors were required to invest 10% of the SPAC IPO, and received the remaining 10% equity upon successful merger? Sponsors typically receive 20% of the SPAC IPO equity for an investment of only 3% to 4% (Jefferies). In a \$100 million SPAC IPO, the sponsor receives \$20 million of equity, but only invests \$3 million (which is their investment in the warrants). If their stake was raised to \$10 million, or 10%, the sponsors would be more aligned with shareholders. This small feature would dramatically change how sponsors evaluate mergers and would eliminate celebrities from trying to take advantage of a flawed structure to reap returns.

## ISSUE THREE – REDEMPTION

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The redemption feature in the SPAC structure allows for investors to receive their capital back if they do not approve of the merger target. In the 2019-2020 cohort analyzed by ECGI in the previous section, mean redemption rates were 58% and median redemption rates were 73% (Klausner, 14). More recently, SPAC research from DealBook found that of the SPACs that closed in August of 2021, they had redemptions of 58% (Graffeo). Redemption is an intricate feature of SPACs, shown by the extremely high rates of redemption over the past several years. If an investor decides to redeem their shares, they receive the price per share at the time of SPAC IPO. For most SPACs, this value is \$10 per share; however, since the trust account is invested in government securities, investors may receive slightly more than the \$10 per share. Institutional investors redeem their shares 90% of the time, which means they receive their \$10 per share back, but hold onto their warrants, capturing any upside following a successful merger. Retail investors, on the other hand, oftentimes do not redeem and are subject to increased dilution by holding onto their shares. The redemption feature is advantageous for investors because it adds flexibility; however, redemption causes increased dilution for post-merger shareholders, which disproportionately affects the retail class.

The institutional investor class takes advantage of the redemption structure, but their actions increase dilution for post-merger shareholders. Institutional investors have two ways of getting rid of their shares. They can either sell their shares on the secondary market (sell their shares to another investor), or they can truly “redeem” during the redemption period, which takes place around the time of the merger vote. The SPAC boom of 2020 and 2021 has seen investor enthusiasm drive up the price of SPACs before an acquisition announcement due to celebrity involvement, rumors, or even social media jokes. When the price of the SPAC jumps on zero

news, many institutional investors rightly sell their shares on the secondary market, usually to retail investors who want to join the enthusiasm. In return, the institutional investors earn a return on the share, and they keep the warrant they received at the time of IPO. For SPACs that remain near \$10 per share throughout their life, institutional investors oftentimes redeem their shares before the merger, mostly to avoid any downside. They maintain their warrant to keep any upside in the post-merger company. In the ECGI cohort, redeeming shareholders, which are mostly institutional investors, “earned annualized returns of 11.6%,” due to the government bond yield on the trust account and the future value of the warrants (Klausner, 18). For institutional investors, the redemption feature provides flexibility to avoid downside and capitalize on the upside. Unfortunately, high redemption rates result in more dilution for the post-merger company; this burden typically falls on retail investors who stay invested through the de-SPAC.

When shares are redeemed, the overall value of the trust account falls significantly. To fund the acquisition, more capital needs to be raised to replace the capital lost from redemptions. About 77% of SPACs raise additional capital at the time of merger, and on average, “83% raised money from third-party investors, 61% raised money from the sponsor, and 44% raised money from both” (Klausner, 15). Third-party investors are typically PIPE investors. Given that 77% of SPACs need to raise additional capital at the time of merger, it can be argued that those involved in the SPAC IPO are not the ones involved in the merger. The redemption structure creates a scenario where the SPAC IPO and merger are separate processes, with very little overlap aside from the sponsor’s involvement. The investor class for the SPAC IPO is made up of institutional investors who will redeem before the merger, retail investors, and sponsors, while the merger is largely made up of PIPE investors, lingering retail investors, and the sponsors. The lingering

retail investor class is not rewarded for staying invested through both the SPAC IPO and the de-SPAC, as they are subject to high dilution.

SPACs issue units, which consist of a share and a partial warrant. When investors redeem their shares before the merger, they still hold on to their warrant. In essence, the shareholders who redeem are given “free” equity in the post-merger company. The dilution that occurs when giving out free equity directly impacts the retail investor class. Redeeming shareholders can exercise their warrant following the de-SPAC, which increases the number of shares outstanding, while not affecting the share price. To illustrate, the figure below shows what happens in a hypothetical SPAC structure when there are no redemptions (and all warrants are exercised after the merger) versus a scenario when 50% of shareholders redeem before the merger (and all warrants are exercised after the merger).

<b>Scenario 1: No Redemptions, all warrants exercised after merger</b>	<b>Scenario 2: 50% Redemptions, all warrants exercised after merger</b>
<p>Unit Structure: 1 share, ¼ warrant</p> <p><u>SPAC IPO</u>            Shares outstanding: 100            Warrants outstanding: 25            Price per share: \$10.00            Trust Account value: \$1,000</p> <p><u>Pre-Merger</u>            Shares outstanding: 100            Warrants Outstanding: 25            Price per share: \$10.00            Trust Account value: \$1,000</p> <p><u>Post-Merger</u>            Shares outstanding: 125            Value per share: \$8.00            Market Capitalization: \$1,000</p>	<p>Unit Structure: 1 share, ¼ warrant</p> <p><u>SPAC IPO</u>            Shares outstanding: 100            Warrants Outstanding: 25            Price per share: \$10.00            Trust Account value: \$1,000</p> <p><u>Pre-Merger</u>            Shares outstanding: 50            Warrants Outstanding: 25            Price per share: \$5.00            Trust Account value: \$500</p> <p><u>Post-Merger</u>            Shares outstanding: 75            Value per share: \$6.67            Market Capitalization: \$500</p>

In both scenarios, dilution takes place due to the exercised warrants; however, the difference in shareholder dilution in the scenarios is quite large. When there are no redemptions in scenario 1, the value of the trust account at the time of merger is the same as when the SPAC raised its IPO. Hypothetically, following the de-SPAC, the dilution that would take place would be attributable to the 25 warrants being exercised, resulting in an increase to the shares outstanding. Scenario 1 shareholders, following the de-SPAC, have been subject to \$2 of dilution. In scenario 2, when 50% of investors redeem, the value of the trust account falls from \$1,000 to \$500. When all the warrants are exercised following the de-SPAC, 75 shares are outstanding, but the value of the trust account, or market capitalization, is only \$500. This results in a price per share of \$6.67; these investors were subject to \$3.33 of dilution. This hypothetical example does not consider many market factors and other features of SPACs, like the dilution from the sponsor promote, but it accurately illustrates how redemptions increase dilution for SPAC shareholders.

The dilution caused by redemptions is not just hypothetical; all SPACs are subject to high dilution, especially those with high levels of redemption. In October of 2020, Ken Moelis, an investment banking professional, helped raise a \$500 million SPAC for Atlas Crest Investment Corporation. The SPAC IPO issued 50,000,000 units for \$10 per unit, with a unit structure consisting of a share and a 1/3 warrant (Atlas Crest Investment Corp). Atlas Crest announced their plans to take Archer Aviation public, with a merger date set for September 17, 2021. Before the merger, roughly 48% of investors redeemed their shares (Drapkin). Without accounting for PIPE investors, sponsor promote, or other dilution effects, the number of shares outstanding would equate to 42,500,000 if all warrants were exercised. The theoretical trust account value would be \$260 million, meaning the value per share would be \$6.12. Again, this situation does

not consider many of the other variables that account for the dilution at play, but if anything, these theoreticals are conservative given it is only considering the dilution resulting from redemptions and warrants. Interestingly enough, Archer Aviation closed trading on November 19, 2021, at \$5.92, very close to representing our calculated value per share (Archer IR). In the Archer Aviation example, institutional investors redeemed before the dilution took place, while many retail investors were subject to the \$4 of dilution. Unfortunately, retail investors that bought units at \$10 per share at the time of SPAC IPO are currently at a major loss on their investment. This phenomenon is evident for all SPACs with high levels of redemption.

The redemption feature in SPACs serves a very important role as it gives flexibility to investors who are willing to invest in a blind trust. Unfortunately, only some investor classes use the feature, leaving others to bear high levels of dilution. The issue with redemption is that it increases dilution. One solution to combat its effect on post-merger dilution is to decrease the partial warrant from the typical one-third to an even smaller fraction. On one hand, post-merger dilution would decrease, but on the other hand, SPAC IPO and pre-merger investors may be less inclined to invest in SPACs. However, institutional investors may still find value in a limited downside investment, with less of an upside, but an upside nonetheless. Redemption is an important feature in the SPAC structure, but it needs to be revised to protect the interests of those who stay invested through the de-SPAC. Redemption is one feature that affects dilution for investors; however, dilution in and of itself is a major flaw in the SPAC structure.

#### **ISSUE FOUR – DILUTION**

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Dilution is a very common feature of most financial instruments and processes. For example, when new shares are issued in an IPO, secondary offering, or even a new round of



funding, dilution takes place. The Corporate Finance Institute defines dilution as “when there is a reduction in the percentage of existing shareholders’ ownership in a company” (“Dilution.”).

Finance professionals and retail investors alike understand that dilution is practical and inevitable in many circumstances. However, the dilution that takes place in a de-SPAC transaction is second-to-none. Retail investors and all those who remain invested through the de-SPAC are subject to enormous levels of dilution due to the sponsor’s equity stake following business consummation. It can be argued that the level of equity sponsors receive is outrageous for the time, effort, and risk that they exert and have in a deal, but the larger issue regards the resulting dilution that takes place.

The dilutive effect of SPACs is disclosed in the S-1 prospectus; however, considering that 20% of US equity trading volume is carried out by retail investors, it is safe to assume that many SPAC investors are unaware of the dilutive effects (Robinhood Markets). For example, the Social Capital Hedosophia II S-1 provides a section dedicated to dilution and an anticipated dilution calculation. It reads, “such calculation does not reflect any dilution associated with the sale and exercise of warrants, including the private placement warrants, which would cause the actual dilution to the public shareholders to be higher, particularly where a cashless exercise is utilized” (Social Capital Hedosophia Holdings Corp. II). The capitalization table is shown below.

	Shares	% of Total Shares	Share Purchase Consideration	% of Purchase Consideration	Price per Share
Sponsors	7,500,000	20%	\$25,000	0.01%	\$0.003
Public Shareholders	30,000,000	80%	\$300,000,000	99.99%	\$10.00
<b>TOTAL</b>	<b>37,500,000</b>	<b>100%</b>	<b>\$300,025,000</b>	<b>100%</b>	

The sponsors own 20% of the SPAC entity, however, they only paid \$0.003 for each share. On the other hand, public shareholders own 80% of the company at \$10.00 per share. This simplified capitalization table from the S-1 demonstrates how the 20% sponsor equity stake affects the total funds raised as well as the inherent dilution at play.

According to the Bloomberg Editorial Board, retail investors pay \$10 per unit (share and warrant) before the acquisition, but after accounting for dilution following the de-SPAC, the share, on average, is only worth \$7 (Landy). Said differently, and analyzed by the EDHEC Business School in France, “initial investors experience dilution of 35.31 percent primarily because SPAC founders purchase equity at approximately \$0.05 and maintain at least 20.00 percent of the entire SPAC equity after the IPO” (Vulanovic, 690). Institutional investors wisely buy shares at the time of SPAC IPO and often redeem their shares prior to acquisition to avoid any dilutive effect to their share while retaining their warrant. On the other hand, many retail investors, whether they know it or not, stay with the SPAC through acquisition and are diluted by more than 30%. The sponsor’s 20% SPAC IPO equity stake after successful business consummation is detrimental to investors that stay invested through the de-SPAC.

SPACs issue units, which are comprised of a share and a partial warrant. When investors redeem their shares, they keep the warrant, which is essentially “free.” Therefore, when investors exercise their “free” warrant following the de-SPAC, investors are diluted once again. In 2021, the European Corporate Governance Institute (ECGI) issued a report that found “the median cost of dilution is 50.4% of money raised. In other words, if the median SPAC has \$100 to deliver to the combined, post-merger company, the company will bear a cost of \$50.40 in dilution” (Klausner, 27). SPAC dilution is outrageously high due to a mix of the sponsor equity stake and the structure of units and redemption.

It is unlikely that the structure of units will change because investors need to be rewarded with a warrant for providing their capital to a blind trust. The sponsor equity stake, as previously mentioned, should be altered to reflect post-acquisition share price performance. Sponsors need to be held accountable for the long-term success of the business consummation, rather than receiving an enormous stake for minimal upfront work. Bill Ackman, one of the world's leading hedge fund managers, attempted to solve the issue of dilution with his Pershing Square Tontine Holdings SPAC. In the prospectus, it states that "Unlike other blank check companies, our Sponsor is not being afforded the opportunity to purchase 20% of our stock at a nominal price; our Sponsor will instead purchase the Sponsor Warrants at their fair market value, and the Sponsor Warrants will generally not be salable, transferable or exercisable until three years after the date of our initial business combination. Thus, unlike other situations in which the Sponsor is entitled to a portion of the value of the company regardless as to whether the company increases or decreases in value, our Sponsor will only participate in the value of our company if our stock price is at least 20% higher than the initial offering price in this offering (and only then if the Sponsor Warrants are salable, transferable or exercisable at that time)" (Klausner, 53). Unfortunately, Ackman's SPAC is planned to liquidate after it backed away from acquiring a stake in Universal Music Group (Lombardo). The SEC should try to mimic many of Ackman's SPAC features, as his proposed plan for Pershing Square Tontine Holdings protected investors from dilution and held sponsors accountable for the acquisition's long-term success.

## **ISSUE FIVE – THE UNDERWRITER**

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Another key feature of the SPAC process that results in sponsors winning and retail investors losing regards the role of the underwriter. The SEC defines an underwriter in Section

2(a)(11) as “any person who has purchased from an issuer with a view to, or offers or sells for an issuer in connection with, the distribution of any security, or participates or has a direct or indirect participation in any such undertaking, or participates or has a participation in the direct or indirect underwriting of any such underwriting...” (Paul, Weiss, Rifkind, Wharton & Garrison LLP). Investment banks typically serve as the underwriters for IPOs and SPAC IPOs. In a traditional IPO, the investment bank advises the company on going public, advertises and executes the road show, prices the securities, and acquires the shares before selling them to the public. In a SPAC, the investment bank carries out many of the same duties but does not have the same road show responsibilities and does not help price the IPO, as the price at IPO is typically \$10 per share. However, the investment bank will help advise the sponsors on determining the value of the acquisition target. As mentioned previously, traditional IPO underwriter fees hover around 7% of the total transaction value while SPAC underwriter fees are typically 2% upfront, followed by 3.5% once an acquisition is completed (Clark). The 3.5% deferred underwriting fee is an extremely flawed feature of the SPAC structure; it creates an aligned incentive for sponsors and underwriters to complete a deal at all costs, even with a sub-par target company. In turn, those who do not redeem before the acquisition or those that buy shares following the de-SPAC invest in companies that should not have been brought public in the first place.

Similar to a traditional IPO, there are often several underwriters in a SPAC IPO process. It is common for there to be different underwriters for the SPAC IPO versus the acquisition (the de-SPAC). In Dimitrova’s “Perverse Incentives of Special Purpose Acquisition Companies,” she finds that there is a relationship between underwriters’ participation in the entire SPAC process and deferred fees. In her cohort of SPACs, 47% of the IPO underwriters stay on as the de-SPAC underwriters. Of that 47%, “in approximately 66% of the SPAC IPO contracts, a portion of the

underwriter's compensation is deferred and paid only upon a successful merger completion" (Dimitrova, 106). Her data shows that many SPACs have deferred underwriting fees, providing the leeway to hypothesize that underwriters are willing to force poor acquisition decisions to earn a fee. Additionally, she finds that "the underwriter becomes the company's acquisition advisor 63% of the time if part of the underwriting fees is being deferred, but only 16% of the time if there are no deferred fees" (Dimitrova, 106). Dimitrova follows up this data with a regression analysis with the dependent variable being a four-year buy-and-hold abnormal return. When examining deferred underwriter's fees as an independent variable, the "results suggest that buy-and-hold abnormal returns are, on average, 47.9 percentage points lower for SPACs when part of the compensation of the IPO underwriter is deferred and paid upon successful merger completion" (Dimitrova, 114). Her findings show that SPAC IPO underwriters that have deferred fees are incentivized to become involved in the de-SPAC process and push for sub-par deals to earn their fees.

As witnessed with the timing pressures to complete an acquisition, deferred underwriter's fees are aligned with sponsors' ambitions to complete a deal at all costs while neglecting the interests of investors. Once again, investors that do not redeem before the de-SPAC are at risk of being invested in a company that was forced through the acquisition process by sponsors to retain an equity stake and underwriters to collect their fees. Regulation is needed to hold underwriters accountable for their responsibility in the SPAC IPO and de-SPAC processes. In a traditional IPO, the underwriter holds some level of liability for the IPO shares, although most if not all of them are allocated to institutional investors beforehand. Nevertheless, there is a level of risk and responsibility that underwriters have in the issuance of securities that they do not entirely have in a de-SPAC. The SEC must alter how underwriters receive fees in a de-SPAC

transaction. According to several outlets, the SEC has already begun considering the potential conflicts of interests between underwriters and sponsors: “The SEC is examining potential conflicts in such situations when a bank works for both sides of the transaction and stands to earn a chunk of fees when the merger goes through” (Sen, Anirban, and Chris Prentice). One potential solution is to eliminate deferred fees for the SPAC IPO underwriter and to have a separate underwriter for the SPAC IPO and another for the de-SPAC. Therefore, underwriters of the SPAC IPO would not have the incentive to stay involved in the de-SPAC process and push for an acquisition at all costs. If some form of the proposed idea was implemented, investors following the de-SPAC would be protected as sponsors and underwriters would be aligned to acquire diligence-backed companies.

All the issues discussed are flawed features in the SPAC structure, which lead to misaligned incentives and enormous deviations in returns. Although some possible solutions were introduced, implementing them in practice is a different story. Nonetheless, the inherent structure of SPACs misaligns investor classes, and if SPACs want a chance at surviving, many of the key features analyzed need to be revisited.

## **CONCLUSION**

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As demonstrated throughout this paper, the fundamental structure of SPACs harm investor returns while sponsors comfortably acquire sub-par companies and earn extremely high returns. Of the many structural flaws that SPACs possess, this paper demonstrated how timing pressures, sponsor reputation, underwriting fees, redemption, and dilution emphasize the misalignment. The SEC and other regulatory bodies are largely at fault for allowing SPAC sponsors to take advantage of a flawed structure at the hands of retail losses. Even though retail

investors have suffered losses in SPAC investments over the past two decades, many were also rewarded. QuantumScape, DraftKings, and Iridium, just to name a few, have proven to be worthy investments for sponsors, institutional, and retail investors alike (NASDAQ). However, the success stories are far and few between. The inherent structure of SPACs misaligns sponsors and investors, resulting in clear winners and losers, especially following the de-SPAC.

While the regulatory bodies are largely to blame, some of the faults lie with investors themselves. In a capitalistic society, one cannot blame a sponsor for taking advantage of a flawed structure to earn enormous returns. Nor can one blame an institutional investor for taking advantage of timing to protect the downside and enable the upside. However, the argument can be made that retail investors caused their own problems. The SPAC surge saw celebrities raising pools of capital marketed by social media memes, and garnering support from non-financial professionals. Institutional investors did not invest in SPACs based on if a celebrity was a sponsor, but some retail investors did. Part of the blame falls on the retail investor because the compounding effects of their interest and enthusiasm for SPACs created an influx of demand, mispricing, and eventual downfall. Even with that said, retail investors need to be better protected by regulatory bodies. The SEC and US Congress are responsible for letting the SPAC surge get out of hand, but thankfully, they stepped in after the first quarter of 2021 to slow down activity.

The downturn in SPACs in Q2 and Q3 of 2021 will likely not last forever. SPACs are proven alternatives for taking non-traditional companies public, and while they possess many flaws, they serve an important role in the capital markets. If SPACs want to make a comeback, though, they need to better serve all the stakeholders involved.

Bill Ackman tried to change the SPAC structure with his Pershing Square Tontine Holdings but was unsuccessful in acquiring a target. Nevertheless, the Wall Street Journal notes that Ackman is staying committed to altering the SPAC structure through what he calls a special purpose acquisition rights company (SPARC). The proposed investment structure “would give shareholders the right to buy into a deal when it is presented. It also wouldn’t be under pressure to complete a transaction within the typical two-year time frame” (Lombardo). Ackman’s proposed structure could fix many of the flaws in the current SPAC structure that misalign sponsors and investors. It is now in the hands of the SEC and the NYSE to approve Ackman’s SPARC structure. The SEC either needs to approve Ackman’s SPARC or fundamentally change the current structure if special purpose acquisition companies want to survive. Bill Ackman agrees, tweeting, “If you find yourself in a leaky boat, often times you are better off switching boats than patching leaks to complete the mission” (Ackman).



## **Appendix**

### Appendix 1 – Aurora Technology Acquisition Corporation

Founder Shares: On August 7, 2021, we issued 5,750,000 founder shares to our sponsor for an aggregate purchase price of \$25,000, or approximately \$0.0043 per share. The per share purchase price of the founder shares was determined by dividing the amount of cash contributed to the company by the aggregate number of founder shares issued. The number of founder shares issued was determined based on the expectation that the founder shares would represent 20% of the outstanding shares after this offering (not including the representative shares). As such, our initial shareholders will collectively own 20% of our issued and outstanding shares after this offering (not including the representative shares and assuming they do not purchase any units in this offering). Neither our sponsor nor any of our officers or directors have expressed an intention to purchase any units in this offering. Up to 750,000 founder shares will be subject to forfeiture by our sponsor depending on the extent to which the underwriters' over-allotment option is exercised so that our initial shareholders will maintain ownership of 20% of our ordinary shares after this offering (not including the representative shares). We will effect a share dividend or share contribution prior to this offering should the size of the offering change, in order to maintain such ownership percentage.

### Appendix 2 – Social Capital Hedosophia Holdings Corp II S-1

We will provide our public shareholders with the opportunity to redeem all or a portion of their Class A ordinary shares upon the completion of our initial business combination at a per-share price, payable in cash, equal to the aggregate amount then on deposit in the trust account described below calculated as of two business days prior to the completion of our initial business combination, including interest (which interest shall be net of taxes payable), divided by the number of then issued and outstanding Class A ordinary shares that were sold as part of the units in this offering, which we refer to collectively as our public shares, subject to the limitations described herein. If we have not completed our initial business combination within 24 months from the closing of this offering, we will redeem 100% of the public shares at a per-share price, payable in cash, equal to the aggregate amount then on deposit in the trust account, including interest (less up to \$100,000 of interest to pay dissolution expenses and which interest shall be net of taxes payable), divided by the number of then issued and outstanding public shares, subject to applicable law and as further described herein.

### Appendix 3 – Social Capital Hedosophia Holdings Corp II S-1

Voting rights: With respect to any other matter submitted to a vote of our shareholders, including any vote in connection with our initial business combination, except as required by law, holders of our founder shares and holders of our public shares will vote together as a single class, with each share entitling the holder to one vote.

### Appendix 4 – Social Capital Hedosophia Holdings Corp II S-1

At the time we enter into an agreement for our initial business combination, we will not know how many shareholders may exercise their redemption rights and, therefore, we will need to structure the transaction based on our expectations as to the number of shares that will be submitted for redemption. If our initial business combination agreement requires us to use a portion of the cash in the trust account to pay the purchase price, or requires us to have a minimum amount of cash at closing, we will need to reserve a portion of the cash in the trust account to meet such requirements, or arrange for third-party financing. In addition, if a larger number of shares is submitted for redemption than we initially expected, we may need to restructure the transaction to reserve a greater portion of the cash in the trust account or arrange for third-party financing. Raising additional third-party financing may involve dilutive equity issuances or the incurrence of indebtedness at higher than desirable levels. The above considerations may limit our ability to complete the most desirable business combination available to us or optimize our capital structure.

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