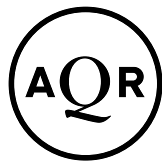

ARBITRAGE

October 2024

Are SPACs Still Alive?

Executive Summary

Special purpose acquisition companies (SPACs) captured the attention of financial market observers in recent years due to the meteoric rise in SPAC issuance in 2020 and 2021 and the colorful stories surrounding some of the operating companies that merged with those vehicles. More recently, media coverage of the SPAC market focused on the disappointing returns of that cohort of SPAC mergers. As a result of those disappointments and other factors, including regulatory changes, SPAC issuance has been muted since early 2022.

Although the recent rise and fall of SPAC issuance and the poor returns of SPAC mergers might suggest that SPACs are a flash in the pan, this is far from the truth. To the contrary, SPACs have been a compelling asset class for more than two decades and a strong contributor to our clients' investment portfolios at AQR Arbitrage since 2008.

There are many potential ways to invest in SPACs. The AQR Arbitrage SPAC strategy seeks to earn a liquidity premium while mitigating exposure to fundamental risk. Our approach has provided steady excess returns and has proven robust to changing market dynamics, including the challenges of the past few years. Moreover, our SPAC strategy is uncorrelated with other asset classes, making it an ideal component of a multi-strategy portfolio.

This short article explores the SPAC market, its history, and its investment characteristics. We focus on two themes. First, the SPAC market has innovated over time to align incentives among participants in the vehicle and to optimize the investment appeal of the product. Second, SPACs are a safe investment when managed properly, with the potential for significant upside. This payoff profile compensates investors for providing liquidity to sponsors seeking to buy operating assets without requiring knowledge of those assets at the time of investment.

The SPAC market is currently experiencing a mild resurgence in issuance, resulting in an expansion of the investible universe for the first time since February 2022.[1] Although we do not expect a return to the SPAC mania of 2020 and 2021, we expect the themes covered in this article to continue to play out in the future.

Rocky Bryant
Principal

Michael Schwert
Managing Director

1 See Megaw, Nicholas, "Funding surge for blank cheque companies points to Spac bounceback," Financial Times, July 25, 2024; and Lipschultz, Bailey, "Wall Street's SPAC machine picks up despite 'odd' lack of IPOs," Bloomberg, October 9, 2024.

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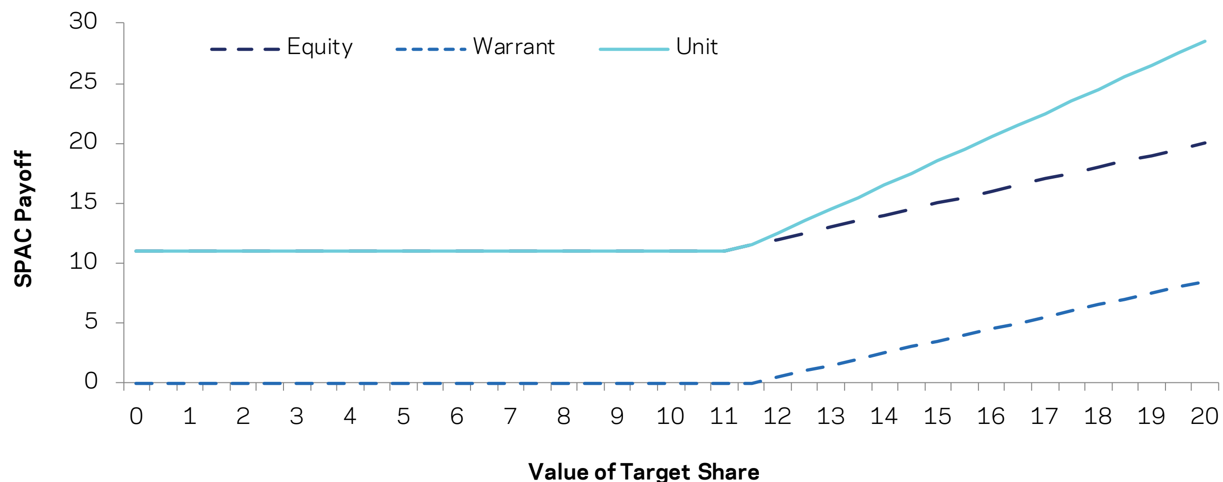
What Is a SPAC?

A SPAC is a publicly traded company whose sole asset is a trust account that is invested in short-term Treasury bills or government money market funds. The cash is raised by a SPAC sponsor in an initial public offering (IPO) and is intended to be used to buy operating assets within a specified period, typically between 12 and 24 months. After the sponsor identifies assets to purchase, individual SPAC investors can elect to (1) retain their SPAC equity, effectively transforming their claim on the trust account into a claim on operating assets or (2) redeem their shares for the cash equivalent of their claim on the trust.

To entice investors to buy shares in a SPAC IPO, the offering is typically sold as a unit consisting of one share of stock and some number of warrants. **Figure 1** depicts the payoff on SPAC equity, warrants, and units.

This structure offers valuable optionality to SPAC investors. The option to redeem for the trust value causes SPAC investments to have very low fundamental risk.[2] In the bad state of the world where the SPAC sponsor is unable to complete a merger or a value-decreasing transaction is proposed, investors receive their principal investment plus the risk-free interest earned in the trust account. In the good state where the SPAC sponsor proposes a value-increasing merger, investors can reap substantial profits. This upside potential is enhanced by the long life of SPAC warrants, which typically expire five years after the merger closes.

Figure 1: SPAC Payoff Profile



Source: AQR/AQR Arbitrage. For illustrative purposes only. This assumes a $10 initial investment in the trust account, a constant risk-free rate of 5% over a two-year period, and the typical warrant strike price of $11.50.

2 A recent legal challenge underscores the fundamental safety of the SPAC structure. Financial Strategies Acquisition Corp. filed for Chapter 11 bankruptcy in the Eastern District of Texas in an attempt to resolve the sponsor's unpaid vendor expenses using proceeds from the trust account. The judge overseeing the case ruled that the trustee cannot be compelled to turn over funds for such a purpose, eliminating a potential weakness in the mechanism that provides downside protection to SPAC investors.

SPACs are structured to attract capital that a sponsor can use to take an operating company public. The floor on investor returns at the risk-free rate helps to facilitate an arm's-length transaction without the need for advance knowledge about the characteristics of the eventual merger. From the sponsor's perspective, it is less costly to offer participation in a successful deal's upside than to pay an unconditionally higher yield to access capital.

The sponsor's compensation for running the SPAC also comes in the form of upside participation. The sponsor receives "promote" shares equal to 20% of the total shares which become valuable after the completion of a merger but do not have a claim on the trust account. In addition, the sponsor purchases private placement warrants, which have the same economic terms as the warrants included in the IPO units, to help fund issuance costs. Therefore, the sponsor has upside exposure in the event of a successful merger but bears a loss in the event of liquidation as both the promote shares and the warrants expire worthless.

Beyond this high-level view of the SPAC structure, there are many nuances that help to align incentives between sponsors and investors while maximizing the likelihood of a successful deal. The history of the SPAC market provides useful insight as to how these features evolved over time.

History of the SPAC Market

The precursor to the SPAC concept can be traced to the penny stock boom in the 1980s. At the time, many newly formed companies were obtaining bulletin board stock listings without a specific business plan. By the end of the decade, these aptly named "blank-check" companies accounted for 70% of all penny stock issuance.

Unfortunately, the excitement around the new offering type lent itself well to "pump-and-dump" schemes as fraudsters found it easy to fabricate the financial statements of private target companies with which blank-check firms were merging. Thus, blank-check companies were quickly regarded as a means for "boiler-room" broker-dealers to bilk investors.

The pervasive fraud in this space eventually drew the attention of regulators. When Congress enacted the Penny Stock Reform Act of 1990 (PSRA), it included a specific section on blank-check companies. The PSRA was largely ineffective, as multi-party scams were developed whereby management and broker-dealers conspired. This fraudulent activity continued until the SEC adopted Rule 419 in 1992, which contained three main provisions:

1. Escrow IPO proceeds in a trust account until a merger is completed, and only release funds if the fair market value of the target business is greater than 80% of the amount held in trust.
2. Require investors to confirm their desire to invest in the target company prior to completion.
3. Adhere to an 18-month time limit measured from IPO to deal completion.

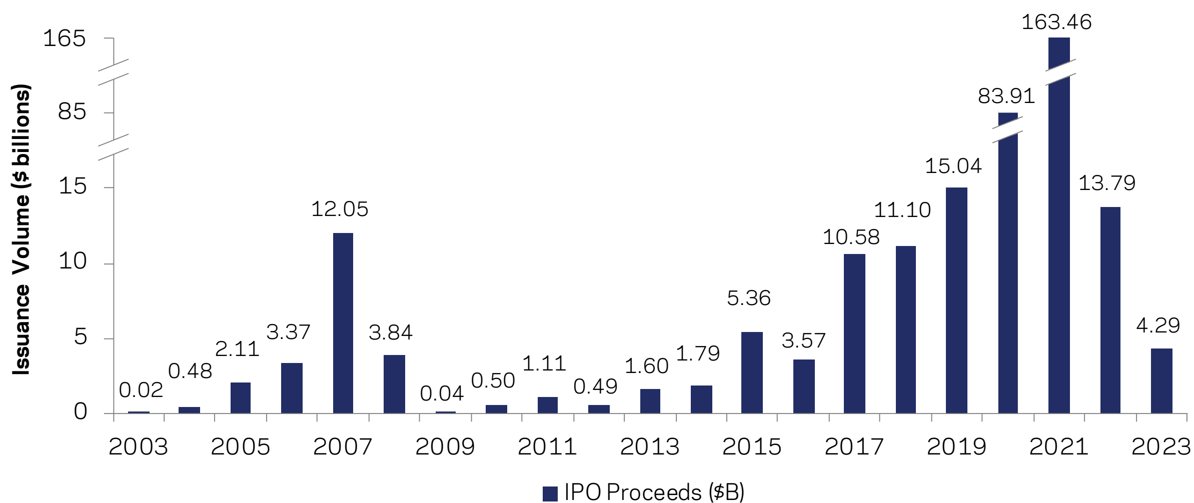
Rule 419 was an effective fraud deterrent, but it stifled issuance as it was costly for small vehicles to comply with its requirements.

Nevertheless, many small private companies grew rapidly during the 1990s, and so did their need to access capital markets.

Recognizing this demand, David Nussbaum of GKN Securities created a novel vehicle following the blank-check company blueprint and called it a Special Purpose Acquisition Company ("SPAC"). These larger investment vehicles were exempt from Rule 419 because they exceeded the $5 million size threshold covered by the rule. However, in an effort to mitigate fraud concerns associated with the new product, Nussbaum voluntarily structured the SPAC to comply with Rule 419.

GKN launched 13 SPAC vehicles in 1993-1994, 12 of which successfully acquired operating companies.[3] The initial success of the new product was short lived, as the dot-com boom soon allowed private companies to go public at lofty valuations without the sponsor assistance provided by a SPAC. Eventually, the dot-com bubble burst and the first real wave of SPAC issuance began in 2003 with a $24 million listing underwritten by Nussbaum's newly formed firm, Early Bird Capital. The wave built to a then-record high of 66 SPAC IPOs raising $12 billion in 2007 (**Figure 2**). The record level of SPAC issuance soon collided with the 2008 financial crisis, creating a unique investment opportunity in the secondary market.

Figure 2: SPAC IPO Proceeds
August 1, 2003 – December 31, 2023



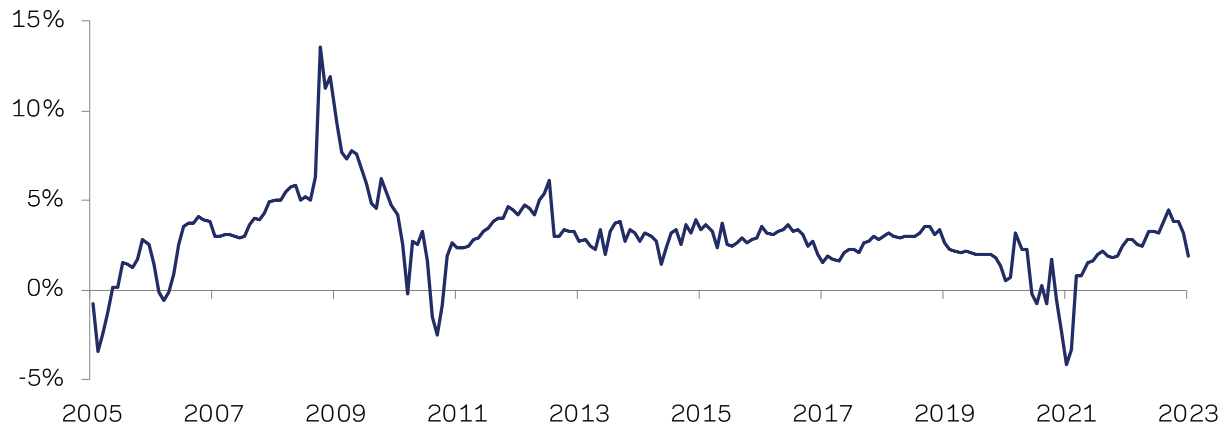
Source: QR/AQR Arbitrage. Aggregate proceeds of SPAC issuance by year, in billions of dollars.

AQR Arbitrage entered the SPAC market in April 2008, shortly after the collapse of Bear Stearns. At the time, market turmoil caused investors to reduce risk across the board, and a "flight to quality" ensued. Investors who held SPAC shares purchased during the IPO wave in 2007 had little near-term recourse to cash as the underlying trust accounts weren't due to liquidate for another 6-12 months. As a result, many SPAC investors sold at significant discounts to the trust value in the secondary market. The selling pressure became so great that at the peak of the crisis in Fall 2008 we were able to buy SPAC equity

3 Daniel S. Riemer, Special Purpose Acquisition Companies: SPAC and SPAN, or Blank Check Redux?, 85 WASH. U. L. REV. 931 (2007).

at "spread-to-trust" levels greater than 10% annualized (**Figure 3**).[4] Effectively, liquidity providers like AQR Arbitrage could earn a substantial premium to hold a claim backed by Treasury bills as long as we were willing to wait a few months for repayment.

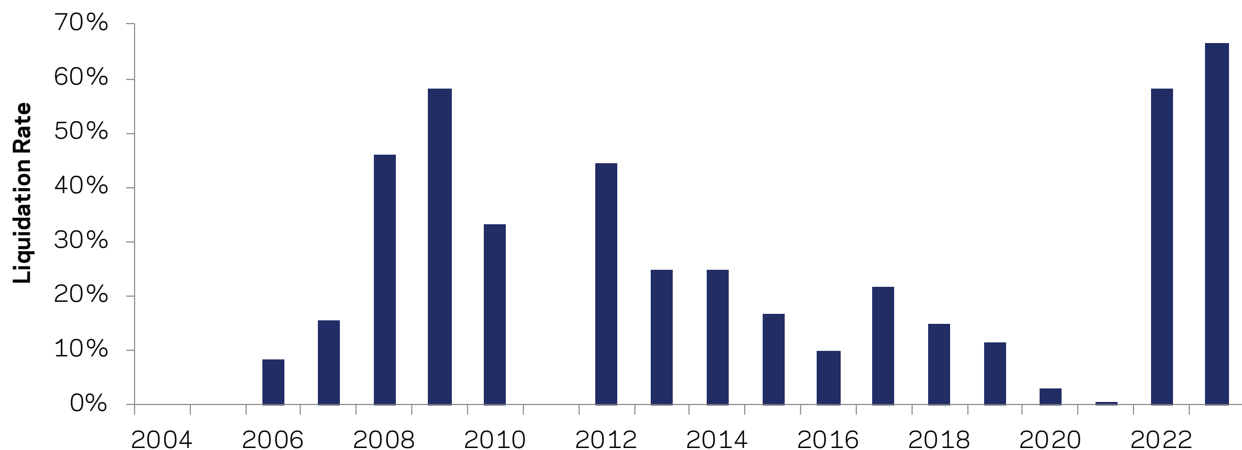
Figure 3: Median SPAC Spread-to-Trust
January 31, 2005 – December 31, 2023



Source: AQR/AQR Arbitrage. Spread-to-trust is the annualized percentage difference between the current price of a SPAC's common shares and the current estimated trust value, assuming the accrual of interest at a money market rate since the last report date.

As the market recovered after the liquidity crunch, the attractive yields disappeared and most SPACs liquidated (**Figure 4**), returning the cash held in trust to shareholders. The wave of liquidations was due in part to structural features of the pre-crisis wave of SPACs and occurred despite the opportunity to buy operating assets at bargain valuations in the post-crisis recession.

Figure 4: Liquidation Rate of SPACs Expiring or Closing a Deal
March 1, 2004 – December 31, 2023



Source: AQR/AQR Arbitrage. Liquidation rate is the number of liquidated SPACs divided by the total number of completed deSPAC transactions and liquidations in each year.

4 Spread-to-trust is the difference between the yield-to-trust, the annualized return an investor would earn by buying SPAC equity today and redeeming for the trust value on the expiration date, and the yield on Treasury bills maturing on the SPAC's expiration date.

Pre-crisis SPACs tied the shareholder vote and the redemption feature together, so even if sponsors identified a merger target, they were at the mercy of shareholders' demand for liquidity at the time of the vote. In some cases, investors accumulated blocking positions in SPACs to demand early liquidation, accelerating the payoff from the spread-to-trust trade, or additional consideration in exchange for a "yes" vote on a transaction ("greenmail").[5] We have taken a more constructive approach during our time investing in SPACs, forming relationships with serial sponsors and underwriters that have helped facilitate their transactions and improve our IPO allocations.

The IPO market for SPACs shut down completely for more than a year as investors recovered from the crisis (see Figure 2). After the inefficient outcomes from many of the pre-crisis SPACs, underwriters recognized that the structure needed another overhaul to attract sponsors and investors back to the SPAC market. Therefore, several changes were introduced that became standard terms in post-crisis SPACs:

1. Separation of the shareholder vote from the redemption election. Shareholders could now vote "yes" for a transaction, but also elect to tender their shares for the cash held in trust.[6]
2. Increase in cash held in trust as a percentage of the IPO price to at least 100%, guaranteeing a positive return for IPO investors. Additional cash came from selling private placement warrants to sponsors.
3. "Bulldog" provision preventing an individual investor, or a group of investors acting in concert, from redeeming more than a specified percentage of shares (e.g., 15%).[7]
4. Provision allowing the SPAC management team to use funds from the trust account to buy their own shares back in the secondary market at attractive "spread-to-trust" levels, providing liquidity to shareholders in the event of another crisis and setting a soft floor on secondary market prices.[7]

These changes helped to revive the SPAC market by improving the attractiveness of the vehicle to investors and sponsors alike. Investors received better downside protection and the ability to redeem for trust while voting in favor of a deal, perpetuating the value of their warrants. Sponsors were better able to close mergers without clearing a redemption limit or negotiating with rent-seeking activists. The added skin-in-the-game from sponsor warrant purchases also strengthened the incentive to merge with a high-quality target. In addition to these contractual improvements, the IPO unit price was standardized to $10 to ease calculations.

The upgraded "SPAC 2.0" structure proved to be wildly successful, raising a total of $317 billion in aggregate trust capital through 1,233 vehicles as of the end of 2023.[8] Post-crisis issuance started slowly, with a single issue in late 2009, seven in 2010, and 16 in 2011. Most of these vehicles traded over-the-counter or listed on Nasdaq, with the NYSE waiting until 2016 for its first post-crisis SPAC listing after being the dominant pre-crisis venue. Many SPACs began incorporating outside of the U.S.,

5 For example, see Keehner, Jonathan, "For blank-check IPOs, popularity comes at a price," Reuters, February 25, 2008.
6 GSME Acquisition, underwritten by Cohen & Co. in November 2009, appears to be the first SPAC to separate the shareholder vote from the redemption election.
7 Andina Acquisition, underwritten by Early Bird Capital in March 2012, allowed the sponsor to repurchase up to 25% of the outstanding shares using funds from the trust account.
8 Issuance data are from the AQR/AQR Arbitrage SPAC Proprietary Database. Please see the disclosures for additional details.

particularly in the Cayman Islands, during this wave of issuance.

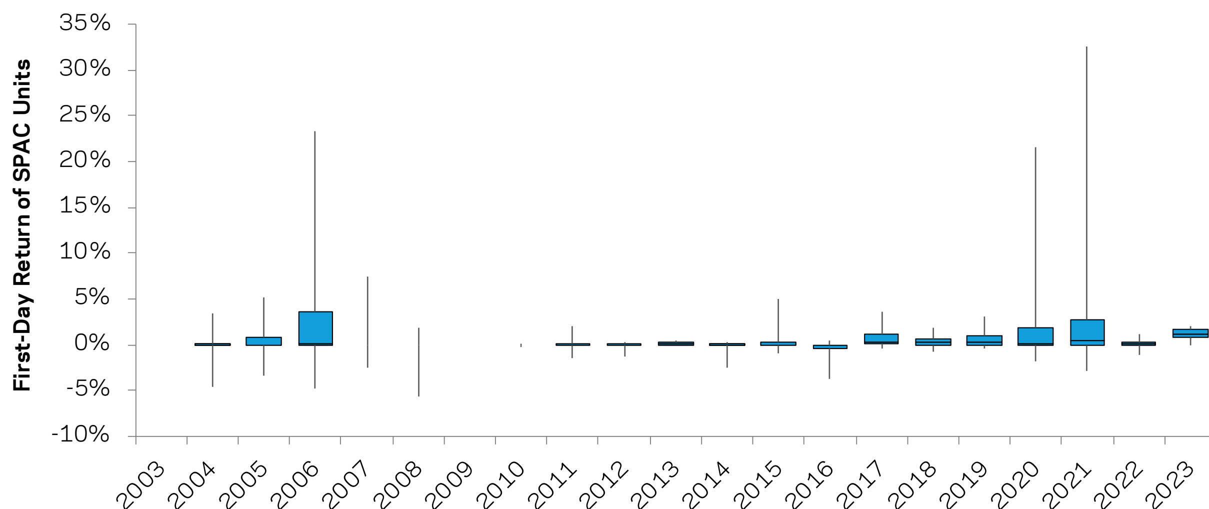
SPAC issuance accelerated in 2015, with over $5 billion of capital raised, and increased further with over $10 billion of issuance in each of 2017, 2018, and 2019. Many successful listings of operating companies were completed from this era of SPACs, including household names such as DraftKings and Hostess Brands.

However, 2020 is when the SPAC boom really took off. The year started at a good pace and continued through the onset of the Covid-19 pandemic, then accelerated rapidly in the summer in response to increased investor appetite for speculative assets. By year-end, $84 billion of trust capital had been raised by 251 vehicles, eclipsing the roughly $73 billion issued over the entire history of the SPAC market. The SPAC boom reached new heights in 2021, with 617 vehicles raising a total of $163 billion in trust capital, again exceeding the cumulative issuance over the market's history including 2020 (see **Figure 2** above).

One indication of the ravenous investor demand for SPACs was the first-day "pop" in the price of newly issued units (**Figure 5**). Prior to 2020, the average SPAC IPO unit traded up by 0.43% on the first day, a small amount compared to the 18% average first-day return of non-SPAC IPOs over the same period.[9] During the SPAC boom of 2020-2021, the average SPAC IPO "pop" quadrupled to 1.73%, with some units trading up more than 20% on the first day of trading. Similar behavior was observed in 2006, another period of rising SPAC issuance, but it was less impactful with IPO volume at 1.4% the level seen in 2020-2021.

Figure 5: Box Plot of SPAC First-Day Unit Returns

August 1, 2003 – December 31, 2023



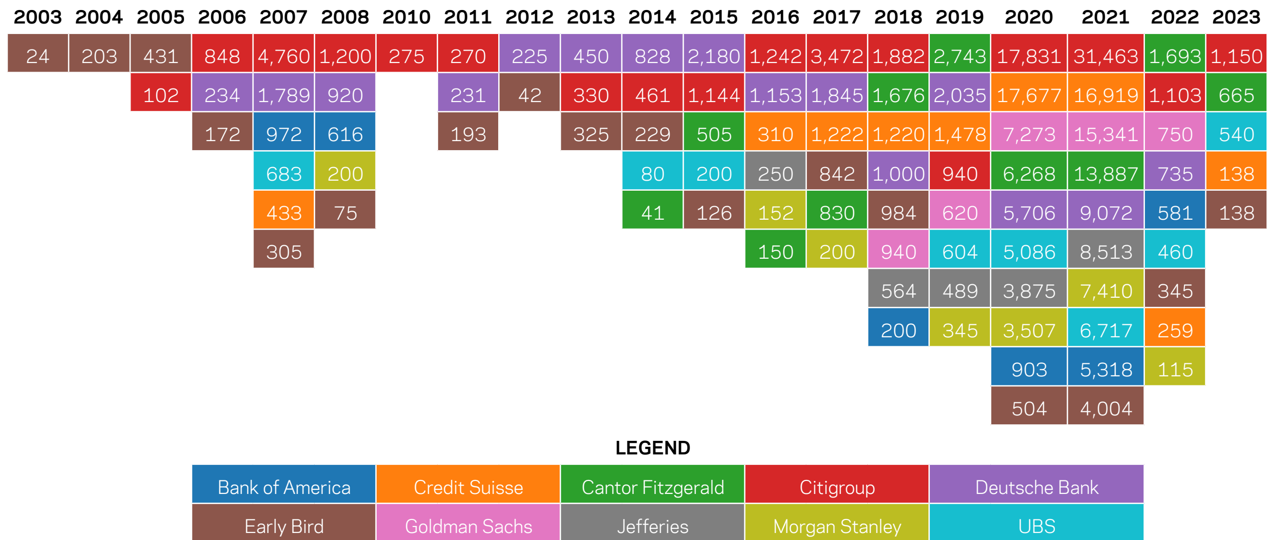
Source: AQR/AQR Arbitrage. First-day unit returns of SPAC IPOs. Boxes represent the interquartile range of first-day returns in each year, with the middle line representing the median. Whiskers represent the range from the minimum to maximum return.

Market participants who weren't normally involved with SPACs entered the market during the boom to profit from SPAC mania. Bulge bracket banks, which had underwritten

9 See Jay Ritter's website, https://site.warrington.ufl.edu/ritter/files/IPOs-Underpricing.pdf.

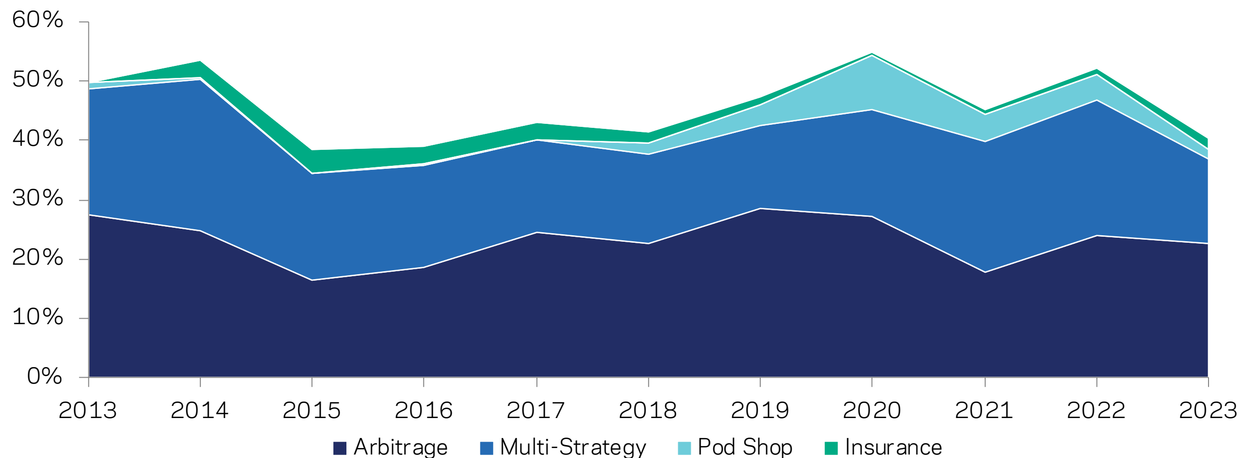
SPACs before in light volumes, accounted for most of the ramp-up in issuance (**Figure 6**). More strikingly, large "pod shop" hedge funds that had not previously participated in the market bought up a large share of the new issuance, increasing their combined stake in the SPAC market from 0.1% in 2017 to 9.2% in 2020 (**Figure 7**).

Figure 6: Underwriting Activity by the Top 10 All-Time SPAC Underwriters ($ millions)
August 1, 2003 – December 31, 2023



Source: AQR/AQR Arbitrage SPAC Proprietary Database. Please see disclosures for additional details. Annual amount underwritten, in millions of dollars, by the top ten underwriters.

Figure 7: SPAC Ownership by Top 25 All-Time SPAC 13-F Filers
December 31, 2013 to December 31, 2023



Source: AQR/AQR Arbitrage. Amounts reported in SEC Form 13-F filings by SPAC investors, grouped into four categories, as a percentage of the investible SPAC universe, as measured in AQR Arbitrage's proprietary SPAC database. Please see disclosures for additional details. Sample of investors is limited to the top 25 investors by total amount reported in 13-F filings over the period. Arbitrage category includes AQR Arbitrage, Aristeia Capital, Castle Creek Arbitrage, Glazer Capital, HGC Investment Management, Highbridge Capital Management, Linden Advisors, Periscope Capital, Polar Asset Management, Radcliffe Capital Management, and Shaolin Capital Management. Multi-Strategy category includes Adage Capital Partners, D.E. Shaw & Co., Davidson Kempner, Fir Tree Partners, Hudson Bay Capital Management, Magnetar Financial, Marshall Wace, Saba Capital Management, Sculptor Capital, UBS O'Connor, and Weiss Asset Management. Pod Shops include Citadel Advisors and Millennium Management. Insurance includes W.R. Berkley Corp.

Merger activity surged in line with new issuance, with sponsors' rate of success at executing a merger increasing despite the competition induced by the enormous increase in the number of outstanding SPACs. As shown in **Figure 4** above, the liquidation rate fell below 5% in both 2020 and 2021 for the only time aside from 2011, when only one SPAC completed a transaction.

The time from IPO to deal announcement and closing also shortened during this period. The median SPAC merger was announced nine months after the IPO, compared to 16 months from IPO to announcement in the 2015-2019 period. SPAC equity generally traded up after deal announcements and sometimes even before then, as evidenced by the sharply negative median spread-to-trust over this period (see **Figure 3** above).

Perhaps most striking about this period were the types of companies being acquired by SPACs. Much of the activity was in speculative growth industries, most prominently electronic vehicles (EVs) and EV-related products such as batteries and charging stations. There were a total of 27 EV deals in 2020-2021, including carmakers Fisker, Lordstown, and Lucid, the truckmaker Nikola, and even four flying taxi companies, most of which received multi-billion dollar valuations. Many of the companies brought public by SPACs relied on optimistic projections, which were reined in by subsequent SEC regulations discussed below. Nikola became infamous for filming a video of its truck rolling down a hill with the camera tilted to give the appearance of driving on a flat road.

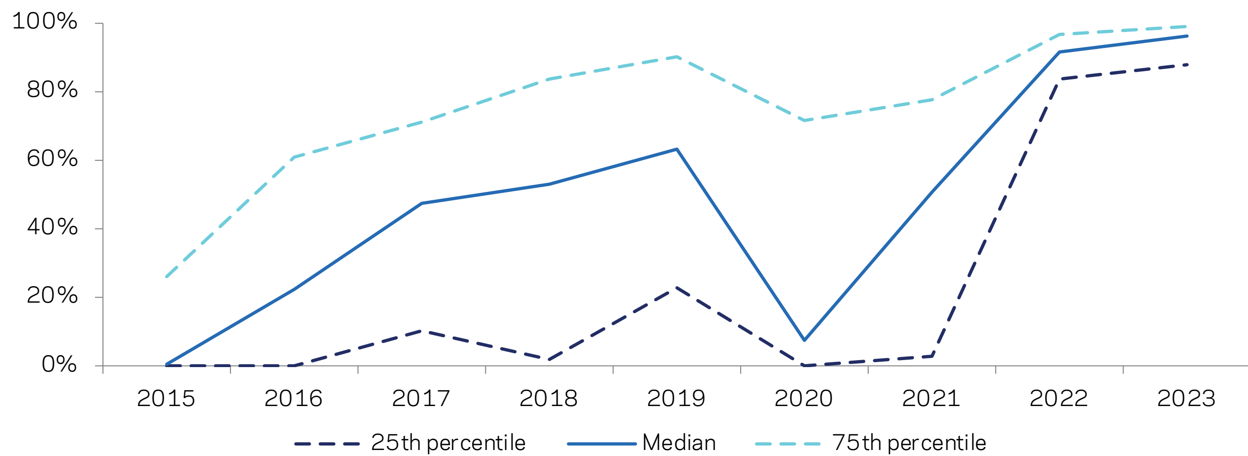
The music stopped when the SEC proposed new rules to enhance disclosure and investor protections in March 2022. Although issuance had slowed from the peak of SPAC mania in early 2021, the first quarter of 2022 still saw 55 new SPACs raise $10 billion in trust capital. In contrast, only $8 billion was raised by 66 vehicles over the following seven quarters between the SEC's proposal and the end of 2023. The bulge bracket banks exited the market, with the exception of Citigroup, fearing the potential underwriter liability suggested by the SEC proposal.

Around the time of the SEC proposal, the Federal Reserve began hiking interest rates and equity markets began to tumble from their peak. deSPAC shares sold off even more than the broader market, a natural result of merging with risky operating companies and the inherent dilution from the sponsor promote. The financial press and academic literature highlighted the poor performance of deSPACs and, creating headwinds for sponsors with outstanding SPACs seeking to find deals.[10]

Redemption rates surged as enthusiasm for deSPAC transactions waned among fundamental investors. When sponsors brought mergers or deadline extensions to a shareholder vote, SPAC investors largely opted to redeem their shares in the absence of a strong fundamental bid. This created difficulties for sponsors who needed to deliver cash as part of a merger agreement. Even among SPACs that successfully closed a merger in 2022, the median redemption rate exceeded 90% (**Figure 8**).

10 For example, see Ramkumar, Amrith, "Stock selloff crunches SPAC creators as they race to find deals," Wall Street Journal, May 18, 2023. In the academic literature from this period, prominent papers include Klausner, Michael, Michael Ohlrogge, and Emily Ruan, 2022, "A sober look at SPACs," *Yale Journal on Regulation* 39, pg. 228-303, and Gahng, Minmo, Jay R. Ritter, and Donghang Zhang, 2023, "SPACs," *Review of Financial Studies* 36, pg. 3463-3501.

Figure 8: Redemption Rates for Closed SPAC Mergers
January 1, 2015 to December 31, 2023

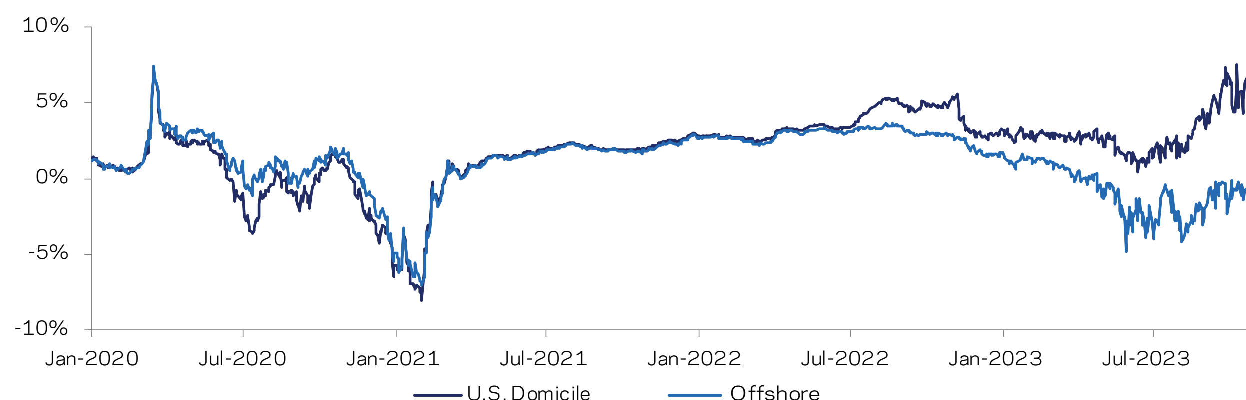


Source: AQR/AQR Arbitrage, TD Cowen. Median and interquartile range of redemption rates by year of deSPAC transaction.

Adding to the regulatory uncertainty around SPACs, the Inflation Reduction Act (IRA), which passed in August 2022, included an excise tax on share repurchases that could be construed to apply to SPAC redemptions. The application of the excise tax was not clarified until early 2023, but the SPAC market reacted negatively to the potential risk. After the passage of the IRA, the spread-to-trust of SPACs incorporated in the U.S., which would be subject to the excise tax, widened relative to the spreads of SPACs domiciled offshore (**Figure 9**). Many sponsors have indemnified investors from the excise tax liability, but the IRA remains a drag on pricing for SPACs incorporated in the U.S. and has resulted in most new SPACs being incorporated offshore.

The confluence of poor sentiment, high redemption rates, and heightened regulatory risk resulted in a wave of liquidations (see **Figure 4** above). Before year-end 2022, many sponsors liquidated pre-emptively to avoid potential excise tax exposure when the IRA kicked in at the start of 2023. Liquidations continued into 2023, albeit at a slower pace, as sponsors failed to close mergers with operating companies. The fraction of SPACs liquidating at the end of their life instead of closing a merger surged from below 1% in 2021 to 58% in 2022 and 67% in 2023, exceeding the liquidation rate in the financial crisis.

Figure 9: Spread-to-Trust of U.S. Incorporated and Offshore SPACs
January 1, 2020 to December 31, 2023



Source: AQR/AQR Arbitrage. Estimated spread-to-trust for U.S. and offshore-domiciled SPACs before and after the Inflation Reduction Act was signed on August 16, 2022. Spread-to-trust is the annualized percentage difference between the current price of a SPAC's common shares and the current estimated trust value, assuming the accrual of interest at a money market rate since the last report date.

The first half of 2024 brought some positive developments. First, the SEC finalized its proposed SPAC rules in January 2024, cementing the heightened disclosure requirements that had already been implemented by market participants after the SEC's initial proposal in 2022, but omitting underwriter liability from the final rule. Second, the liquidation rate fell to 36% in the first quarter of 2024, indicating that sponsors are finding ways to close mergers despite redemption rates that continue to be elevated.

At the time of writing, the SPAC market is experiencing a mild resurgence in issuance. Syndication of at-risk capital to outside investors is a central theme of the current wave of SPACs, with investors purchasing private placement warrants alongside sponsors in exchange for promote shares and favorable IPO allocations. This trend highlights the flexibility of the SPAC structure along multiple dimensions, as contract terms have shifted in favor of sponsors to attract them to the market after two years of slow issuance.

SPAC Investment Life Cycle

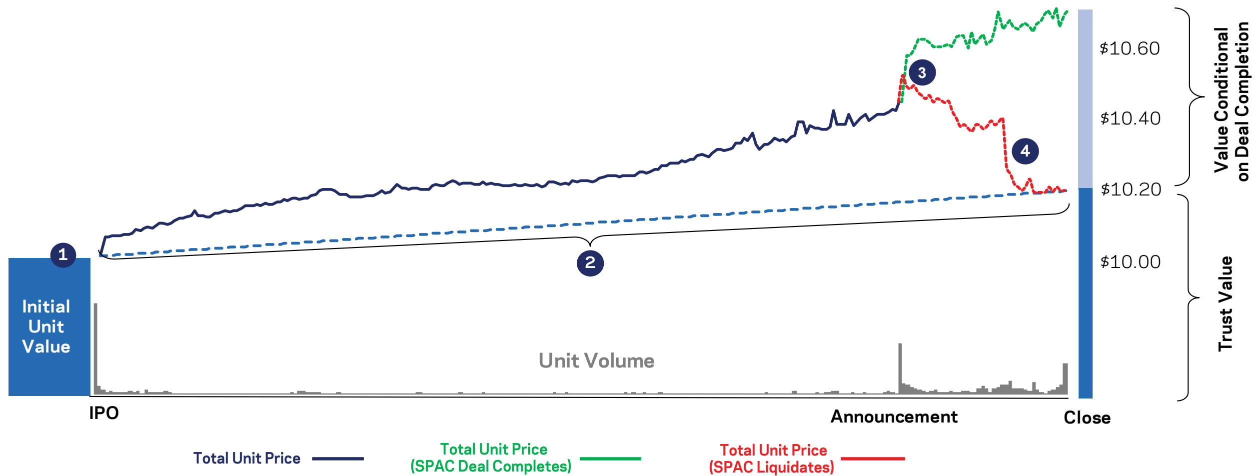
Figure 10 illustrates the life cycle of a SPAC and the potential outcomes for investors. The IPO involves the sale of SPAC units consisting of one share of equity and a warrant or a right to purchase additional shares. The first day of trading involves a high amount of volume, like most IPOs, but after that trading volume typically falls off until the announcement of a merger. SPAC units are split into their component securities after some time has elapsed, usually 45 to 60 days, after which the equity and other claims trade separately.

After the announcement of a merger, there is another surge in volume as shares trade between SPAC investors and fundamental investors interested in the operating company. When the market response to the deal announcement is positive, this provides an attractive exit opportunity. When the market reaction is negative, the redemption

feature offers an exit route without the risk of principal loss. If the sponsor fails to find a target company, then the SPAC winds down, with shares redeemed at the trust value and warrants extinguished with no payoff. Either way, it is optimal for investors to vote in favor of a deal to preserve the value of their warrants.

The warrants become exercisable and their expiration clock, which typically runs for five years, starts after the SPAC completes a merger. If the SPAC liquidates, equity is the only claim that receives a payoff from the trust account, while warrants and the sponsor promote expire worthless. Therefore, between the announcement and completion of a transaction the warrants tend to appreciate as the probability of those securities coming to fruition increases. As a result of their long maturities, SPAC warrants are valuable and contribute significantly to the returns to SPAC investing.

Figure 10: SPAC Life Cycle and Illustration of Potential Outcomes



Source: AQR/AQR Arbitrage proprietary model. For illustrative purposes only.

Sometimes after the redemption results are announced, there is a temporary spike in the equity price that looks like a short squeeze. This behavior appears to be driven by "meme stock" traders seeking low-float situations to drive retail buyers into the name. Interestingly, the associated warrants do not exhibit the same price behavior because they are not subject to a post-redemption drop in float. Although these situations appear to offer a trading opportunity, they are difficult to predict before the redemption deadline, creating an operational barrier for redeeming investors and a risk for investors who forgo redemption to speculate on a spike occurring.

In many transactions, the sponsor will initiate a tender offer to buy back warrants at a premium to eliminate their dilutive impact on the value of shares in the post-merger company. This offers an attractive exit route for investors who would otherwise have to sell warrants in the secondary market, which can take several months for a large position, or wait for an opportunity to exercise that may never come. In the same spirit, some sponsors have forfeited their sponsor shares to quell target shareholder concerns about dilution.[11]

11 The merger between Lionsgate Studios and Screaming Eagle Acquisition Corp. is a recent example. As part of the transaction, Screaming Eagle's sponsor forfeited nearly 90% of the promote. The deal was also contingent on a successful tender offer for all outstanding warrants.

AQR Arbitrage Approach to SPAC Investing

The AQR Arbitrage SPAC strategy seeks to earn a liquidity premium while mitigating exposure to fundamental risk. We provide liquidity to sponsors in the IPO and to other market participants by purchasing equity in the secondary market when the price is below the trust value. However, we tend not to hold onto equity after the SPAC merges with an operating company, given the substantial increase in fundamental risk after the option to redeem for trust expires. We maintain exposure to the upside potential of "deSPAC" firms through a highly diversified portfolio of warrants acquired in IPOs.

Opportunities to buy equity at attractive spreads-to-trust in the secondary market can arise during periods of high liquidity demand, like the financial crisis. The spread-to-trust trade prompted our entry to the SPAC market in 2008, but similar opportunities of smaller magnitude were common prior to the SPAC boom of 2020-2021 as well as in 2022 after SPACs fell out of favor (see **Figure 3** above).

Likewise, opportunities to sell shares for more than the trust value can arise when fundamental investors assess the probability of a value-enhancing merger to be high, a common occurrence during the SPAC boom. Many SPACs traded for multiples of their trust value after announcing deals during the boom. Although SPACs normally have little fundamental risk due to the redemption feature, there is substantial downside risk when their share prices are so elevated. To manage risk exposure, we proactively took profits in the most highly valued vehicles before their mergers closed during this period. Indeed, at a certain price it could even be appealing to sell equity before a deal is announced, but this requires a careful assessment of the optionality sacrificed by not waiting.

Though we redeem our equity in many SPACs, we generally hold onto warrants through the deSPAC transaction. Warrants tend to appreciate after key events in the SPAC lifecycle as the probability of deal completion increases, culminating with the deSPAC. Most of these claims realize a low payoff, but in a diversified portfolio with exposure to hundreds of SPACs, some may become "home runs" that boost the entire portfolio.[12] This provides an excess return above the baseline risk-free return of SPAC shares that are redeemed for the trust value when they cannot be sold at a higher price in the market. Considering the empirical evidence showing downward drift in deSPAC equity prices, we typically begin liquidating our warrant positions immediately after a merger closes.[13]

12 For example, warrants traded at double-digit prices after many of the deSPAC transactions from the SPAC boom referenced on pg. 7. Prior to the SPAC boom, deals including Ayr Wellness Inc., Blue Bird Corp., and Del Taco Restaurants led to warrant prices in the high single-digits.

13 See Gahng, Minmo, Jay R. Ritter, and Donghang Zhang (2023), "SPACs," *Review of Financial Studies* 36, 3463-3501.

Concluding Thoughts

SPACs serve a useful function in the capital markets, providing an alternative to the standard IPO process for private companies seeking to go public, and can be a valuable component of a multi-strategy portfolio. When accessed through a strategy that mitigates unwanted risks, SPACs can provide a well-behaved stream of excess returns that is orthogonal to standard risk factors. The package of options embedded in the SPAC structure provides investors with upside exposure to a successful transaction with minimal downside risk.

The evolution of the SPAC has only made the structure more attractive on both fronts. Drawdown risk was reduced by increases in the initial trust value and allowances for sponsors to purchase discounted shares using the trust account. Upside potential was improved by the separation of the redemption feature and the shareholder vote, allowing more transactions to close and more warrants to pay off.

Although the SPAC market has slowed over the past two years, history suggests that the SPAC structure will persist and continue to evolve as a means for providing capital to sponsors looking to invest in private operating assets. Indeed, at the time of writing SPAC issuance is in the midst of a mild resurgence, with June 2024 marking the first month-over-month increase in the size of the SPAC market since February 2022.

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