Are SPAC Revenue Forecasts Informative?

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ABSTRACT: This paper examines the informativeness of special purpose acquisition company (SPAC) revenue forecasts. We document a positive association between the compound annual growth rate in revenue forecasts and abnormal returns, retail trading, and Twitter activity in the five-day window surrounding the disclosure of a merger announcement. By contrast, we find limited evidence that institutional investors and traditional information intermediaries respond to SPAC revenue forecasts. We also find evidence that SPAC revenue forecasts positively predict future operating underperformance, stock underperformance, and class action lawsuits. Overall, our results affirm the SEC's concerns about the attractiveness of aggressive revenue projections to retail investors.

JEL Classifications: G34; G32; M40; M48.

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I. INTRODUCTION

> There's more forward-looking information in the SPAC space. Maybe one thing we can learn from this is that there should be more forward-looking information in the IPO space.
> —Jay Clayton, Securities and Exchange Commission Chair. Public Statement. November 19, 2020.

> Forward-looking information can of course be valuable…That is true for companies being acquired, as well as for companies going public. But forward-looking information can also be untested, speculative, misleading or even fraudulent.
> —John Coates, Acting Director in the Division of Corporation Finance at the SEC. Public Statement. April 8, 2021.

Special purpose acquisition companies (SPACs) are blank-check companies that raise capital via an initial public offering (IPO) for the sole purpose of acquiring a private company. Unlike traditional IPOs, private companies that go public via a SPAC merger (also known as a de-SPAC transaction) are presumably protected by the safe harbor provision (Safe Harbor) of the 1995 Private Securities Litigation Act (PSLRA), which theoretically shields merger targets' forward-looking statements (FLS) from liability (Klausner, Ohlrogge, and Ruan 2022). Although

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traditional IPOs are excluded from Safe Harbor and tend to omit FLS entirely, the majority of private firms that go public via de-SPAC transactions exploit the provision and provide FLS.

From 2020 to the first half of 2022, SPAC IPOs outpaced traditional IPOs. Their rapid ascendancy caught the attention of practitioners, regulators, and the media, who expressed concern about permitting highly speculative firms to disclose FLS when going public (Brown 2021; Coates 2021; Kruppa and Aliaj 2021). In support of this concern, Blankespoor, Hendricks, Miller, and Stockbridge (2022) provide descriptive evidence that SPAC revenue forecasts are optimistic, on average, compared with peer firms' projections and own-firm revenue realizations. But it is unclear whether, and to what extent, investors react to FLS and if they are informative.[1] Blankespoor et al. (2022) have called on scholars to explore these issues. Our study responds by examining two research questions: (1) whether SPAC revenue forecast disclosures are associated with capital market participant attention and (2) whether such SPAC revenue forecasts are predictive of future outcomes.

SPAC targets' FLS disclosures are an important component of capital market participants' information sets. Prior literature suggests that disclosure can mitigate information asymmetry and valuation uncertainty, both of which are especially pronounced in IPOs and mergers where the target company is private.[2] The SEC has consistently maintained that providing increased disclosure, for example, FLS, benefits investors (Securities and Exchange Commission (SEC) 1989, 2003, 2020; Levitt 1996), and Kim and Ritter (1999) have shown that using forecasted financial performance to value IPOs results in more accurate valuations. Given that many private targets have limited historical performance, FLS also offer an opportunity to explain growth strategies to prospective investors (Damodaran 2021; Klausner et al. 2022). When FLS are deployed primarily as a communication tool, they may enhance investors' information sets.

However, firms might exploit investors' reliance on FLS in the SPAC setting, particularly when they are unsophisticated. More specifically, SPAC targets and their acquirers may use the safe harbor provision as a "license to lie" to convince investors to vote in favor of the merger.[3] Although the target's incentives are most salient, the sponsor is also highly incentivized to complete the merger, because their compensation is largely derived from its approval and the retention of a large stake in the merged company (Jenkinson and Sousa 2015). Recent studies find that the sponsor can profit from the acquisition even if the company's shares decline post-merger (Chung and Ramkumar 2021; Gahng, Ritter, and Zhang 2023).[4] Accordingly, although the sponsor firm conducts due diligence on the target, they may acquiesce to a higher valuation based on aggressive projections due to competition with other sponsors and strategic buyers (Blankespoor et al. 2022).

To address our research questions, we hand collect information from investor presentations for 480 de-SPAC transactions announced between January 1, 2010 and June 30, 2022.[5] Following Blankespoor et al. (2022), our study focuses on revenue forecasts, the most commonly forecasted financial statement item issued by private firms. Approximately 81 percent of our sample includes revenue forecasts in their investor presentations (390 firms). We create a measure based on the compounded annual growth rate of forecasted revenue (*Revenue CAGR*), which is commonly used in practice to assess the reasonableness of long-term projections for young growth firms (Damodaran 2006). Our empirical analyses focus on the 373 firms that provide at least two years of projected revenue from which we can compute *Revenue CAGR*. The average (median) *Revenue CAGR* in our sample of de-SPAC acquisitions is 67.7 percent (39.0 percent).

To examine our first research question regarding the association between capital market participant attention and SPAC revenue forecasts, our first outcome variable of interest is the five-day cumulative abnormal return surrounding the filing of the investor presentation (*IP CAR*), which coincides with the merger announcement. Next, we decompose investor attention into retail and institutional investor attention and examine the net trade imbalances of both investor types during the same five-day window. Then, to explore how investors learn about SPAC investments, we look at social and traditional media coverage in the same window. Similarly, we explore whether equity analysts differentially cover firms with higher projected revenue growth. To address our second research question regarding whether *Revenue CAGR*s predict future SPAC outcomes, we focus on the de-SPAC company's subsequent operating and stock return performance and their likelihood of being subject to class action litigation.

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[1] Even in the context of optimistic FLS disclosure (Blankespoor et al. 2022), prior literature shows that investors can "see through" optimism when firms raise capital (Michaely and Womack 1999; Dambra, Field, Gustafson, and Pisciotta 2018). Shivakumar (2000) finds that investors rationally undo earnings management around seasoned equity offerings.

[2] See Leone, Rock, and Willenborg (2007) and Even-Tov, Ryans, and Davidoff Solomon (2022).

[3] For background on regulatory and legal concerns regarding "license to lie," see U.S. Congress (1995), Levitt (1995), U.S. Senate (1995), Coffee (1996), Horwich (2010), and McCann (2018).

[4] Specifically, Gahng et al. (2023) note that all sponsor compensation (payoffs on shares and warrants) is contingent on the consummation of a business combination. They also document that sponsors receive a net dollar gain of $51 million, on average, producing a total return of 619 percent one year after a de-SPAC acquisition.

[5] We explain our sample construction in Section III.

Our first set of empirical analyses examine the relation between SPAC revenue forecasts and capital market participant responses. We find that investors react favorably to merger announcements as a function of the *Revenue CAGR*s disclosed in the investor presentations. The result holds when we control for both deal and target characteristics and measures of the target's historical revenue performance and the transaction price to historical revenue multiple disclosed in investor presentations. In economic terms, we document that a 1 percent increase in *Revenue CAGR* is associated with a 2.9 basis point (bps) increase in *IP CAR*. This initial test provides some evidence that investors find revenue FLS incrementally informative above and beyond historical revenue-based measures.

Next, we explore whether retail and institutional investors respond differently to the revenue forecasts. Although we do not observe a robust relation between institutional investor net buying and *Revenue CAGR*, we find that retail investors engage in larger net buying as a function of the *Revenue CAGR* surrounding the merger announcement. These results suggest that retail investors, but not institutional investors, find revenue FLS informative.

We then explore media attention during the merger announcement window, starting with SPAC ticker mentions on social media (i.e., Twitter), an integral source of information for retail investors (Rakowski, Shirley, and Stark 2021; Blankespoor 2022). We find that Twitter mentions increase significantly as a function of the target firm's *Revenue CAGR* (above and beyond controlling for historical revenue-based measures). By contrast, we do not observe a relation between *Revenue CAGR* and traditional media sources (i.e., Ravenpack), which cater more to institutional investors (Guest, Ochani, and Sethuraman 2023). Relatedly, we fail to find a robust relation between *Revenue CAGR* and analyst coverage in our multivariate specifications, consistent with the notion that sophisticated information intermediaries do not differentially cover firms with more aggressive revenue projections.

Although our results suggest that revenue FLS in the SPAC setting are associated with investor attention, particularly retail investor attention, it is unclear whether they inform investors about target quality. Therefore, our second set of multivariate tests explores whether FLS predict long-term SPAC outcomes. We find some evidence that higher *Revenue CAGR* firms are more likely to miss future revenue expectations (i.e., more optimistically biased revenue forecasts) in the first annual earnings announcement following the merger close.[6] In addition, we observe that higher *Revenue CAGR* firms' stock returns underperform similar peers, IPO firms, and the Russell 2000 index in the 12-month period following the merger completion date.

Our final test examines whether there is an association between aggressive revenue forecasts and subsequent class action litigation. Although practitioners argue that Safe Harbor shields SPACs from FLS liability, the PSLRA does *not* provide protection against knowingly false or misleading statements, and firms can be held liable if management is proven to have deliberately communicated a falsehood. We find that higher *Revenue CAGR* firms are more likely to be named in a lawsuit that includes at least one allegation of materially false or misleading statements. Overall, our results shed new light on the informativeness of private firms' financial projections and the potential threat posed to unsophisticated investors in de-SPAC mergers.

Our research should interest scholars, practitioners, and regulators. From an academic perspective, we directly respond to Blankespoor et al. (2022) call to study FLS responses in the SPAC setting.[7] We also add to prior research on voluntary disclosure in the U.S. IPO market that has focused on nonquantitative measures, such as textual analysis and redaction decisions (e.g., Hanley and Hoberg 2010; Boone, Floros, and Johnson 2016). We augment this strand by examining revenue forecasts, a quantitative measure of voluntary disclosure that is not covered under Safe Harbor for traditional IPO firms.

From a practitioner perspective, we also contribute to the debate on Safe Harbor's application in de-SPAC transactions (e.g., Coates 2021) *vis-à-vis* the linkage we identify between aggressive revenue projections and future litigation. This finding directly challenges practitioners' assumptions that SPACs can effectively exploit the regulatory loophole to shield FLS from litigation as a "license to lie" (e.g., U.S. Senate 1995; Horwich 2010; Olazábal 2011; Asay and Hales 2018).

Finally, our evidence bears on two concurrent regulatory proposals. First, on November 17, 2021, the U.S. House Committee on Financial Services (HCFS) introduced a proposal to bar investment advisors from marketing SPACs to retail investors and formally exclude SPACs from Safe Harbor for FLS (Flook 2021). Second, on March 30, 2022, the SEC called for additional disclosures to help investors assess the validity of FLS in de-SPAC transactions (Securities and Exchange Commission (SEC) 2022). Our evidence shows that revenue FLS have some capacity to predict

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[6] However, the relation between *Revenue CAGR* and forecast bias weakens when we include historical revenue or transaction value to revenue multiples or when we simultaneously include all three historical revenue-based measures.

[7] Chapman, Frankel, and Martin (2021) offer a contemporaneous working paper that examines the tone, existence, and frequency of FLS in the SPAC setting. Although we both study capital market responses to SPAC FLS, we differ in several key ways: (1) we examine media attention surrounding the issuance of SPAC forecasts, (2) we study whether the Safe Harbor provision grants SPAC firms a "license to lie" via our litigation tests, (3) we include historical revenue information in our empirical analyses, and (4) we collect a larger sample of SPAC FLS through June 2022.

underperformance in SPAC returns following merger completion. This finding, paired with our evidence that firms with high revenue growth forecasts have greater appeal to retail investors, suggests that they are misled by revenue forecasts issued in the de-SPAC merger process. This finding affirms the SEC's concerns regarding sponsors' incentives and their communication with retail investors (SEC 2022).

It is important to note two caveats regarding this interpretation of our findings. First, it is possible that the target's endogenous choices may drive our results, specifically (1) whether they go public via SPAC versus a traditional IPO or direct listing, (2) which SPAC acquires them, (3) what fraction of equity to sell, and (4) whether they provide revenue FLS, how much revenue growth they forecast, and how many years they forecast. The theoretical and empirical literature on SPACs is not sufficiently developed to permit modeling of all these choices simultaneously, and it would likely be impossible to find natural experiments that exogenously change only the features of interest (Boone et al. 2016). Second, we cannot rule out the possibility that our results are driven, at least in part, by other firm characteristics that could be correlated with high revenue forecasts. Although we do control for observed historical revenue-based measures and other firm characteristics in our multivariate regressions, ideally we would control for them through the use of matched samples. However, this is not feasible because there is insufficient overlap in the independent variables between our high and low revenue growth observations (e.g., few high CAGR firms have high prior-year revenue). Given that we are relying primarily on association-based tests, readers should interpret our results with caution.

II. BACKGROUND

SPAC History and Structure

A SPAC is a "blank-check company" founded to acquire an operating company and raise capital from a pool of investors via an IPO. Following the IPO, at least 85 percent of the net proceeds are placed in escrow by SPAC management (the "sponsor"), who then searches for an acquisition target (Dimitrova 2017). SPAC IPO investors receive shares (usually priced at $10 per share) and warrants to cover acquisition search costs. The warrants serve as options to purchase SPAC IPO shares at the close of the merger transaction or after a period of at least 12 months following the IPO (Veal 2021). The largest component of the sponsor's compensation is a 20 percent share of the SPAC before the IPO (the "promote").

Once a SPAC goes public, the sponsor is typically allotted 18 to 24 months to find a target. When they identify a target and agree to a merger, the SPAC's public shareholders must vote to approve the transaction and decide whether to redeem their SPAC share ownership for the original IPO price (Gahng et al. 2023). If the merger is completed, the sponsor's promote transfers to an equivalent share ownership of the newly combined company. If a merger is not completed by the expiration date, the SPAC must unwind, and each shareholder on record is repaid their initial investment. Because of this unique compensation structure, the sponsor has perverse incentives to complete a SPAC acquisition (Dimitrova 2017; Damodaran 2021). Figure 1 provides an illustration of the timing of key economic events over the SPAC life cycle.

Although no single catalyst propelled the recent spike in SPAC activity in 2020, the coronavirus disease (COVID-19)-related IPO market shutdown, which made in-person roadshows impossible to conduct (Osipovich 2020), and significant positive media attention on several de-SPAC transactions, such as DraftKings and Nikola (Sherman 2020), likely contributed to the uptick. Figure 2 presents the total number of U.S. SPAC and traditional IPO transactions between January 1, 2010 and June 30, 2022, and the total dollar amount raised.[8] In 2021, SPAC IPOs comprised 58.6 percent of the entire IPO market's proceeds. Both SPAC and traditional IPO activity declined significantly during the first half of 2022.

Going public via SPAC merger offers unique benefits. First, the timeline is significantly shortened. A SPAC merger is typically finalized in three to six months, whereas a traditional IPO usually takes 12 to 18 months to complete (Lambert 2021). Second, the structure provides more certainty about the target's value and proceeds, which are finalized at the time of the merger agreement (Osipovich 2020). Third, because SPACs' FLS are presumably protected by Safe Harbor, they can offer a more comprehensive narrative to prospective investors and substantiate prospective planning with quantitative data (Damodaran 2021).

Alongside these benefits, the SPAC structure has several disadvantages compared with traditional IPOs. First, SPAC mergers incur indirect costs of dilution that do not exist in a traditional IPO. These costs consist of the sponsor's

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[8] We start our sample in 2010 to coincide with the beginning of the most recent SPAC generation, called "SPAC 3.0" (Gahng et al. 2023). We discuss recent innovations to the SPAC structure in more detail in the Online Appendix in the SPAC 3.0 section.
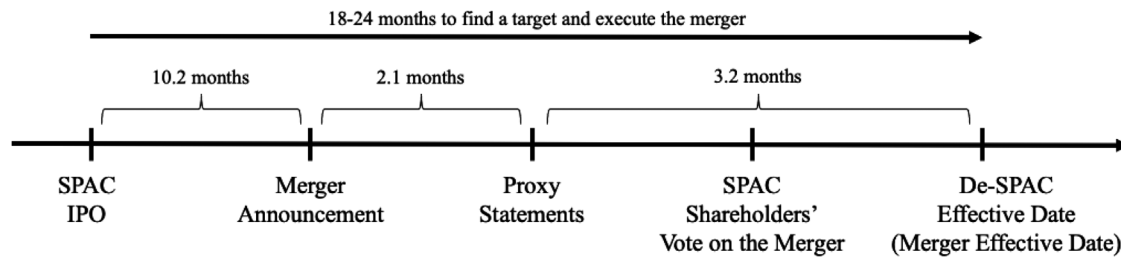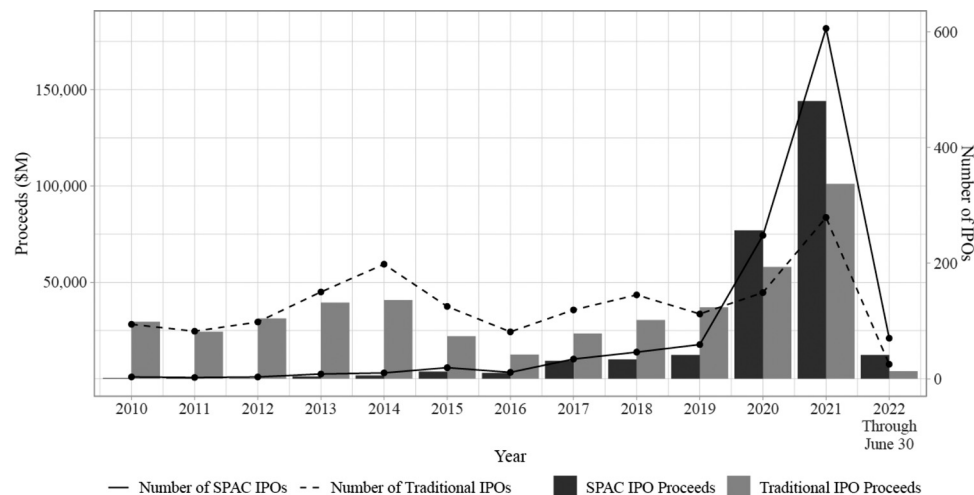
FIGURE 1
A Typical SPAC Timeline

Figure 1 provides a timeline of the de-SPAC process. SPACs, often referred to as "blank-check companies," go public by raising capital from investors through a traditional initial public offering (IPO). Funds raised via the SPAC IPO are held in a trust until the SPAC sponsor finds a target. Generally, SPACs are given 18–24 months to search for a suitable target and execute the merger. Once a formal merger agreement has been reached, the announcement is publicly disclosed in a Form 8-K. In most cases, investor presentations are attached to the announcement 8-K or filed separately within the next two days. Investor presentations may include financial projections and historical financial data for specific line items, such as revenue or EBITDA, but rarely include full financial statements. Next, in most cases, SPACs disclose proxy statements (Form PRE 14A, PREM 14A, S-4, F-4, or DEFM 14A), which contain information required by the SEC, including historical financial statements for the target company. Following the filing of the proxy statement, SPAC investors vote to either accept or reject the merger. If approved by shareholders, the merger is executed, and the target company becomes public—often called a de-SPAC transaction. If SPACs fail to find an acquisition target or the merger is rejected by SPAC shareholders, the raised capital is returned to investors.

FIGURE 2
Traditional IPO and SPAC IPO Counts and Proceeds, 2010–2022

Sources: SDC Platinum and Boardroom Alpha.
Figure 2 shows the total number of and total amount raised by all special purpose acquisition companies (SPAC) and traditional initial public offerings (Traditional IPOs) in the United States between January 1, 2010 and June 30, 2022.

promote and warrants or rights held by public SPAC shareholders and sponsors. Second, a de-SPAC transaction's completion is subject to a shareholder vote and is thus beyond the scope of a private firm's control. Third, the costs (including underwriter fees and money left on the table) are higher when firms go public via a SPAC. Gahng et al. (2023) provide evidence that the total cost of a median company going public via a SPAC between January 2015 and March 2021 was 15.1 percent of the post-issue market cap compared with only 3.2 percent for traditional IPOs. This is partly

attributable to capital provided by private placement in public equity (PIPE) investors in a SPAC transaction at a discounted price relative to the deal price (Damodaran 2021).[9]

SPAC Disclosure Regulation

Safe Harbor for Forward-Looking Statements

In 1995, Congress passed the PSLRA to curtail abusive litigation that hindered firm managers' ability to communicate forecasts to the public market (Johnson, Kasznik, and Nelson 2000). The PSLRA offers public companies Safe Harbor from liability for forward-looking statements.[10] According to the act, if the company provided appropriate cautionary language and the FLS do not come to fruition, they are not held liable *unless* they knowingly communicated a falsehood. The legislation made it more difficult for a plaintiff to sue an issuer, which prompted more companies to provide FLS to the market (Johnson, Kasznik, and Nelson 2001).

Notably, IPOs are excluded from Safe Harbor. As a result, traditional IPO prospectuses in the United States tend to omit FLS. SPACs exploit a loophole by offering private companies a way to go public *and* provide FLS. SPAC targets often include projections in investor presentations and proxy statements—the equivalent of an IPO prospectus—based on the assumption that they are protected by Safe Harbor. Whether these protections *should* apply to SPACs is now subject to debate. In April 2021, John Coates, then Acting Director of the SEC's Division of Corporate Finance, maintained, "[i]n simple terms, the PSLRA excludes from its Safe Harbor IPOs, and that phrase may include de-SPAC transactions. That possibility further calls into question any sweeping claims about liability risk being more favorable for SPACs than for conventional IPOs" (Coates 2021).

Recent SPAC Regulatory Proposals

There are several concurrent SPAC regulatory initiatives, each with a different agenda. The first initiative, issued on November 17, 2021, by the HCFS, introduced two proposals intended to protect investors (Flook 2021): (1) banning investment advisors from marketing SPACs to retail investors and (2) excluding SPACs from Safe Harbor for FLS. The second initiative was issued by the SEC on March 30, 2022, and calls for additional disclosures to help investors assess the bases of de-SPAC transaction projections and determine to what extent they should rely on such projections (SEC 2022). Specifically, the SEC proposed that (1) any projected measures not based on historical financial results should be clearly distinguished from those that are, (2) it should be considered misleading to present projections based on historical financial results without presenting the historical measures with equal or greater prominence, and (3) SPACs should provide more disclosures specifically related to projections that include non-GAAP measures.

The complete removal of Safe Harbor protections for SPACs would bear significant consequences. Managers would not be able to provide quantitative data on expected future performance, which could influence prospective investors' decisions and limit the ability of firms to raise capital. Thus, the utility of SPACs' FLS is an open policy question.

III. SAMPLE AND DATA

Sample Selection

We use Boardroom Alpha to identify 606 SPACs that announced a merger with a private company through a de-SPAC transaction between January 1, 2010, and June 30, 2022.[11] To study the effect of FLS on a de-SPAC merger, we exclude the following types of transactions: (1) when multiple targets are merged, (2) when the SPAC is delisted before the merger effective date due to noncompliance with minimum shareholder requirements, (3) when the SPAC is listed only on the Over-the-Counter (OTC) Market or non-U.S. exchange, (4) when the SPAC is missing from CRSP, (5) when there is a contemporaneous spinoff, and (6) when the SPAC did not file an investor presentation. To ensure that information environments at the investor presentation filing date are similar across our sample, we drop 28 deals that

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[9] PIPE allows a SPAC to raise additional capital from private investors to ensure that they have enough funds to close on the target acquisition and/or to satisfy the target's minimum cash conditions.

[10] The PSLRA defines forward-looking statements as projections of revenues, income, or other financial items; management's plans and objectives for future operations (including products or services); and statements regarding future economic performance.

[11] To confirm Boardroom Alpha's coverage, we compared it with that of two other SPAC data providers, SPAC Analytics and SPAC Research, during our sample period. Boardroom Alpha provided equal or more extensive coverage than both providers and offered the most expansive set of variables of interest to our study.

TABLE 1

Sample Construction

Panel A: Initial Sample Construction

	Number of Observations
All SPACs announcing mergers between 01/01/2010 and 06/30/2022	606
Less:	
De-SPAC mergers with multiple targets	(21)
De-SPAC mergers that delist before merger effective date due to non compliance with minimum shareholder requirements	(6)
De-SPAC mergers that list only on the OTC Market or Non-U.S. Exchange:	(9)
De-SPAC mergers that are missing from CRSP	(7)
De-SPAC spinoff deals	(2)
De-SPAC deals with no investor presentation	(24)
De-SPAC deals that file historical financial statements before the investor presentation filing date	(28)
De-SPAC mergers with biotech targets	(29)
Initial sample	**480**

Panel B: Frequency of Forward-Looking Statements

	Revenue	Revenue CAGR	EBITDA or Adjusted EBITDA	Profit Margin	Capital Expenditures	Net Income	At Least One FLS Measure
Number of Observations	390	373	356	205	163	65	414
Percentage of Sample	81.25	77.71	74.17	42.71	33.96	13.54	86.25

Table 1, Panel A provides details on the construction of our initial sample of de-SPAC mergers. Panel B provides descriptive statistics on the frequency of forward-looking-statements (FLS) for various financial statement line items in de-SPAC target investor presentations. In Panel B, the Revenue CAGR column reflects the number of de-SPAC firms that provided enough information to calculate our measure of *Revenue CAGR*.

filed an S-4 or DEFM14A before filing the investor presentation.[12] Last, we exclude 29 de-SPAC transactions with target firms in the biotech industry, identified by SIC codes 8731 and 8733. We implement the last restriction because biotech investors tend to focus on product pipeline disclosures in IPO prospectuses, and, thus, most biotech firms do not provide projections (i.e., Guo, Lev, and Zhou 2004).[13] These steps result in an initial sample of 480 observations (Table 1, Panel A).

Table 1, Panel B reports the frequency of different FLS measures provided by de-SPAC targets in investor presentations. Our hand-collected data yield a greater proportion of FLS (86.25 percent of observations) than documented in Blankespoor et al. (2022) (80 percent of observations), likely due to our more recent sample period. Out of the initial sample of 480 transactions, 390 (81.25 percent) [373 (77.71 percent)] provide at least one year [multiple years] of revenue forecasts, 356 (74.17 percent) provide at least one year of earnings before interest, taxes, depreciation and ammortization (EBITDA) or adjusted EBITDA forecasts, 205 (42.71 percent) provide at least one year of profit margin forecasts, 163 (33.96 percent) provide at least one year of capital expenditure forecasts, and 65 (13.54 percent) provide at least one year of net income forecasts. Because revenue forecasts garner the most attention in the financial press[14] and are the

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[12] In observations where the merger prospectus predated the investor presentation, we were less certain that we could isolate the market/media reaction to FLS disclosed in the prospectus versus the detailed quantitative information that is simultaneously disclosed in a merger prospectus. In untabulated tests, our results remain qualitatively similar when we do not exclude these transactions (except for *Revenue CAGR* coefficients in Table 7, Panel B columns (3), (5), and (6); Table 10, Panel A columns (5) and (6); and Online Appendix, Alternative Measures of Long-Term Stock Performance, Panel A, columns (3), (4), and (6), and Panel B columns (5) and (6), which become statistically insignificant).

[13] Similar to Willenborg, Wu, and Yang (2015), we conduct our analyses with and without biotech firms. In untabulated tests, our results remain largely similar when we include the biotech firms with revenue forecasts (except for *Revenue CAGR* coefficients in Table 7, Panel A, columns (1)–(4) and column (6), and Online Appendix, Alternative Measures of Long-Term Stock Performance, Panel A, columns (2) and (4), which become statistically insignificant).

[14] For example, Brown (2021) notes that "It took Google eight years to reach $10 billion in sales, the fastest ever for a U.S. startup. In the current SPAC frenzy, a spate of electric-vehicle companies planning listings are vowing to beat its record—in some cases by several years."

most common and comparable measure disclosed in investor presentations (and because EBITDA forecasts are often negative, which renders CAGRs impossible to calculate), we focus our analysis on the 373 de-SPAC transactions that provide multiple years of revenue forecasts, from which we compute *Revenue CAGR* (the compounded annual growth rate of the revenue projections included in investor presentations).

In Table 2, Panel A, we report the number of announced de-SPAC mergers by year. Given the recent surge in SPACs' popularity, the majority of our sample transactions are concentrated in 2020–2021 (75 percent). Table 2, Panel B reports the 12 Fama-French industry classification for the announced mergers in our sample. Although the target companies represent a broad range of industries, 57 percent of them are in the computers, software, and electronic industry (38 percent); the finance industry (11 percent); or the manufacturing industry (8 percent).

TABLE 2

Sample Distribution by Year and Industry

Panel A: Merger Announcement Year

Year	Number of Observations	Percentage of Sample
2010	1	0.3
2011	1	0.3
2012	0	0.0
2013	2	0.5
2014	3	0.8
2015	2	0.5
2016	8	2.1
2017	8	2.1
2018	18	4.8
2019	22	5.9
2020	80	21.4
2021	200	53.6
2022	28	7.5
Total	373	100.0

Panel B: Target Industry

Industry	Number of Observations	Percentage of Sample
1. Consumer Nondurables	20	5.4
2. Consumer Durables	19	5.1
3. Manufacturing	30	8.0
4. Oil, Gas, and Coal Extraction Products	5	1.3
5. Chemicals and Allied Products	4	1.1
6. Computers, Software and Electronics	142	38.1
7. Telecom	6	1.6
8. Utilities	7	1.9
9. Wholesale, Retail and Services	22	5.9
10. Healthcare, Medical Equipment and Drugs	23	6.2
11. Finance	41	11.0
12. Other	54	14.5
Total	373	100.0

Table 2 reports the sample distribution of 373 de-SPAC merger announcements with multiple years of revenue FLS between January 1, 2010 and June 30, 2022. Panels A and B present the distribution by merger announcement year and by the 12 Fama-French industry classification, respectively.

Empirical Approach and Variable Definitions

To investigate how SPAC revenue forecasts relate to various outcomes, we deploy the following empirical design using a linear probability model (LPM):

$$[SPAC\ Outcome_{it}] = \alpha_1 Revenue\ CAGR_i + \sum Controls + \psi_i + \varphi_t + \varepsilon_i. \tag{1}$$

For a consistent FLS measure across firms, we focus our analysis on *Revenue CAGR*. We compute *Revenue CAGR* as follows:

$$\left(\frac{Revenue_n}{Revenue_1}\right)^{1/n} - 1, \tag{2}$$

where *n* is the total number of years forecasted, $Revenue_1$ is the revenue forecast for the first fiscal year after the merger, and $Revenue_n$ is the revenue forecast for the last projected year.[15] When $Revenue_1$ is equal to 0, we replace the value with 1. The average (median) *Revenue CAGR* in our sample is 67.7 percent (39.0 percent), and revenues are projected for 4.3 (4) years on average (at the median, untabulated). Given the skewness of the *Revenue CAGR* distribution, we natural log adjust this variable in Equation (1).[16]

To investigate our first research question as to whether there is an association between capital market participant attention and SPAC revenue forecasts, we examine several *[SPAC Outcomes]*. Our first measure of attention is stock market response to investor presentations, computed as the market-adjusted cumulative abnormal return over the five-day window surrounding the investor presentation filing date (*IP CAR*).[17]

Second, we measure trade imbalance for retail and institutional trading separately over the same window as *IP CAR*. We follow Boehmer, Jones, X. Zhang, and X. Zhang (2021) to identify retail trades as trades in Trade and Quote (TAQ) with exchange code "D" executed at prices just above or below a round penny. We compute *Retail Imbalance* (*Large Imbalance*) as the average total retail (large) purchases less total retail (large) sales scaled by total retail (large) shares traded each day over days [−2, +2] surrounding the investor presentation filing date. We identify large trades as trades over $50,000 (Bushee, Cedergren, and Michels 2020).

Next, we explore the channels through which SPAC investments generate attention. The first is social media (i.e., Twitter), which has been documented as an integral source of information for retail investors (Rakowski et al. 2021; Blankespoor 2022), and we use two measures of SPAC social media coverage. The first, *Social Media Mentions*, is the total number of Twitter posts that mention the SPAC ticker during the five-day window surrounding the merger announcement. The second, *Social Media Mentions – Revenue*, is the total number of tweets that mention all of the following: (1) the SPAC ticker, (2) the words "revenue" or "sales," and (3) the words "forecast," "project," or "future" in the five days surrounding the investor presentation filing date. This measure allows us to more precisely capture discussions about revenue forecasting, which is the focus of our paper.

The second channel is traditional media sources (i.e., Ravenpack), which cater to institutional investors (Guest et al. 2023). Our measure, *Traditional Media Mentions*, is the total non-firm initiated media articles identified with a relevance score of 100 by Ravenpack in the same five-day window. As another measure of traditional information intermediary attention, we use the total number of analysts who issue an annual earnings forecast for the first fiscal year after merger completion (*Analyst Coverage*). Given the skewness of these measures, we natural log adjust *Social Media Mentions*, *Social Media Mentions – Revenue*, *Traditional Media Mentions*, and *Analyst Coverage* in our regression analyses.[18]

To address our second research question concerning the predictive capacity of SPAC revenue forecasts, we use several long-run outcomes. For operating performance, we measure *Forecast Bias* as the difference between the forecasted revenue of firm *i* and actual revenue scaled by actual revenue for the first fiscal year after merger completion.[19] For stock

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[15] We measure *Revenue CAGR* relative to the first forecasted year of revenue instead of actual revenue because many of our firms are pre-revenue at the time of the de-SPAC merger announcement.

[16] In an untabulated robustness test, we reran Equation (1) calculating *Revenue CAGR* over a de-SPAC's two-year forecasted projection. Our results are qualitatively similar in most specifications in that the two-year *Revenue CAGR* is positively (negatively) associated with *IP CAR*, *Forecast Bias*, and *I(Class Action)* (future stock performance), but we observe no evidence that retail investors or social media differentially respond to two-year *Revenue CAGR*. Our discussions with venture capitalists suggest that the earlier years of forecasted projection are more pessimistic than subsequent years. In light of the fact that a CAGR normalizes the different years of growth, we deployed the full *Revenue CAGR* for our empirical analyses.

[17] We use a five-day return window [−2,+2] given that (1) firms have up to four business days to file an 8-K following a triggering event such as a merger announcement, although they rarely wait the maximum number of days (Cheng, De Franco, Jiang, and Lin 2019), and (2) merger-related news tends to leak before formal announcements (Schwert 1996).

[18] Due to the presence of zeroes in the distribution of each of these variables, we natural log adjust these values by first adding one to the variable before taking the natural log. Results are quantitatively similar if we adjust *Social Media Mentions*, *Social Media Mentions – Revenue*, *Traditional Media Mentions*, and *Analyst Coverage* using an inverse hyperbolic transformation rather than a natural log transformation.

[19] We use Compustat to compute forecast bias. When Compustat data are missing, we hand collect revenue data from 10-K filings. We collect all actual revenue realizations through September 30, 2022.

return performance, we use two different measures for the 12-month period after the merger effective date. We first examine raw buy-and-hold returns. Second, we compute *Size and Industry Portfolio Adjusted Return* as the raw buy-and-hold return adjusted for the return of an equal-weighted portfolio of 20 firms that were publicly traded for at least five years in the same two-digit SIC industry with the closest size. Similar to Dimitrova (2017), we measure long-term performance from the merger effective date, rather than the announcement date, to have a consistent return measure across observations that exclusively captures the target's performance.[20,21]

Our final SPAC outcomes gauge the probability of subsequent class action litigation. Specifically, we look at the number of lawsuits that contain at least one allegation regarding materially false or misleading statements. We search Securities Class Action (SCA) information from Securities Class Action Services (SCAS). Following Rogers, Van Buskirk, and Zechman (2011), we use plaintiff complaints to identify each alleged misstatement. For cases filing an SCA following the merger announcement that contain at least one allegation regarding materially false or misleading statements, *I(Class Action)* equals 1 and 0 otherwise. Our second litigation measure, *I(Class Action – Projections)*, is an indicator equal to 1 if (1) the SPAC was the subject of a class action lawsuit with at least one allegation of materially false or misleading statements and (2) allegations in the class action lawsuit mention specific future financial metrics or refer to "future financial prospects" and is equal to 0 otherwise.

For the control variables in Equation (1), we follow Dimitrova (2017) and include deal characteristics such as *I (Cash Deal)*, an indicator variable equal to 1 if the medium of exchange is cash and 0 otherwise; *Relative Size*, the ratio of deal value to acquirer market value of equity; *MVE*, the SPAC's market value of equity as of the merger announcement (effective) date for announced (completed) deals; and *Time To Acquisition*, the number of days between the SPAC IPO and merger announcement. Given its skewness, we natural log adjust *MVE* in regression analyses. These aforementioned variables from Dimitrova (2017) were either shown or predicted to have an effect on the market reaction to the de-SPAC acquisition or the long-term market performance of the merged company. We control for firm age given its robust association with IPO returns (i.e., Loughran and Ritter 2002). Due to its skewness, we natural log adjust *Age* in regression analyses. We also control for *PIPE*, the fraction of the merged company owned by PIPE investors, to proxy for the sponsor's ability to raise external capital (Klausner et al. 2022), and *HHI*, the market concentration of the target firm's industry to approximate the proprietary costs of disclosure (Dambra, Field, and Gustafson 2015).

In addition, to these controls, we also control for variables that capture the target firm's historical performance and valuation: *Revenue$_{t-1}$*, the revenue of the target firm in the year prior to the merger; *Historical Revenue CAGR*, the compounded annual growth rate of target firm revenue computed using historical revenue data; and *Transaction Value to Revenue*, the ratio of deal transaction value to target firm revenue in the last year prior to the merger, to differentiate our measure of projected revenue from the target's historical revenue and growth.[22] We natural log adjust *Revenue$_{t-1}$*, *Historical Revenue CAGR*, and *Transaction Value to Revenue* in our regression analyses. For the event study tests on reactions to SPAC investor presentation filings (see Tables 5–7), we measure historical performance and *PIPE* using information disclosed in the investor presentation. In these specifications, we include (1) indicators for each historical revenue-based measure and *PIPE* equal to 1 if the variables can be computed using information disclosed in the investor presentation and 0 otherwise and (2) interaction with these indicators and continuous measure of these variables.[23]

As of the merger completion date, all SPACs have filed the target's historical financial statements in the merger proxy statement. Thus, in the tests where we focus on post-merger outcomes (see Tables 8–11), we control for the values of the historical performance measures and *PIPE* provided in or computed from the de-SPAC proxy statement.[24] We specify alternative versions of Equation (1) that include *Revenue CAGR* and each individual historical revenue measure across columns to examine whether *Revenue CAGR* is individually distinguishable from a given historical revenue measure, because these measures are highly correlated with one another.[25] Our final version of Equation (1) includes all historical revenue-based measures, along with *Revenue CAGR*. To control for unobservable heterogeneity across industries

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[20] There are eight firms in our sample of completed deals with 12 months of return data that delist within 12 months of their merger effective date. These firms are not removed from the sample, and we adjust their returns for the delisting following Beaver, McNichols, and Price (2007) and Shumway (1997).

[21] In Online Appendix, Alternative Measures of Long-Term Stock Performance, we deploy two alternative return measures, which provide similar inferences. *IPO Adjusted Return* is the raw buy-and-hold return adjusted for the return of an equal-weighted portfolio of all firms that IPO in the same year as the merger completion. *Russell-2000 Adjusted Return* is the raw buy-and-hold return adjusted for the return of the Russell 2000 index.

[22] When computing *Historical Revenue CAGR*, if the first disclosed year of revenue is equal to 0, we replace this value with 1, similar to our handling of zero-revenue observations when computing *Revenue CAGR* from projected revenue.

[23] This empirical approach prevents a loss in sample size when historical revenue measures are not disclosed in the investor presentation.

[24] Due to the nonconstant measurement period across observations in Table 11, we augment Equation (1) and control for *Time Since De-SPAC*, the natural log-adjusted number of months between the merger effective date and August 31, 2022, the end of the *I(Class Action)* data collection period. Results are similar when we exclude this control.

[25] In untabulated correlation analyses, *Historical Revenue CAGR* and *Transaction Value to Revenue* are negatively correlated with a Pearson correlation coefficient of -0.17 ($p < 0.01$). *Historical Revenue CAGR* and *Revenue$_{t-1}$* are positively correlated ($\rho = 0.14$, $p < 0.05$), and *Revenue$_{t-1}$* and *Transaction Value to Revenue* are negatively correlated ($\rho = -0.87$, $p < 0.01$).

and over time, we include Fama-French 12 industry- and year-fixed effects (ψ_i and ϕ_t, respectively). We Winsorize all continuous variables at 1 percent and 99 percent. Standard errors in all regressions are clustered at the year-quarter level.

Descriptive Statistics

Table 3, Panel A (Panel B) provides descriptive statistics for the 373 (300) de-SPAC transactions that provided multiple years of revenue forecasts and had merger announcement (completion) dates between January 1, 2010, and June 30, 2022. We present descriptive statistics using the raw, non-natural log-adjusted values for all variables that are natural log adjusted in regression analyses. The mean (median) market reaction to the investor presentation (*IP CAR*) is 4.8 percent (1.0 percent). The mean value of *Retail Imbalance* (*Large Imbalance*) is 0.077 (-0.092), reflective of net retail buying (institutional selling) in the investor presentation window. The average SPAC receives 242.95 Twitter mentions and 47.68 traditional media mentions over the same window. Given that historical financial statements are not disclosed until the merger proxy is filed, for the sample of announced deals, this information is collected from investor presentations filed at the merger announcement date.[26] Control variables for the sample of announced deals in Panel A reveal that 76.4 percent (59.2 percent) of deals include (multiple years of) historical revenue in their investor presentations (allowing us to compute a historical revenue growth rate), and 74.0 percent of deals report non-zero revenue in the year before merger announcement, allowing us to compute a *Transaction Value to Revenue* multiple.

TABLE 3

Summary Statistics

Panel A: Announced Deals Sample

Variables	n	Mean	Std. Dev.	p25	p50	p75
Outcome Variables:						
IP CAR	373	0.048	0.140	-0.009	0.010	0.038
Retail Imbalance	350	0.077	0.330	-0.078	0.082	0.270
Large Imbalance	350	-0.092	0.355	-0.319	-0.074	0.125
Social Media Mentions	373	242.952	382.784	51.000	102.000	227.000
Social Media Mentions – Revenue	373	0.490	1.030	0.000	0.000	1.000
Traditional Media Mentions	342	47.679	60.593	8.000	27.000	60.000
Independent Variables:						
Revenue CAGR	373	0.677	0.823	0.170	0.390	0.827
$I(Revenue_{t-1})$	373	0.764	0.425	1.000	1.000	1.000
$Revenue_{t-1}$	285	335.366	644.224	36.400	116.000	358.800
I(Historical Revenue CAGR)	373	0.592	0.492	0.000	1.000	1.000
Historical Revenue CAGR	221	0.225	0.310	0.037	0.137	0.330
I(Transaction Value to Revenue)	373	0.740	0.439	0.000	1.000	1.000
Transaction Value to Revenue	276	27.824	81.607	2.904	7.837	20.028
I(Cash Deal)	373	0.051	0.220	0.000	0.000	0.000
Relative Size	373	5.125	5.630	2.277	3.472	5.775
MVE	373	336.436	219.234	203.403	283.250	396.865
Time to Acquisition	373	303.348	189.679	154.000	243.000	435.000
Age	373	13.527	16.281	5.000	9.000	14.000
I(PIPE)	373	0.936	0.246	1.000	1.000	1.000
PIPE	349	0.100	0.087	0.040	0.090	0.140
HHI	373	0.078	0.098	0.033	0.038	0.072

(continued on next page)

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[26] Investor presentations are part of a regular 8-K rather than a Super 8-K. Although the target's investor presentation is typically disclosed at the SPAC merger announcement, the Super 8-K, which contains detailed financial statements and other information, is disclosed five months (on average) after the de-SPAC merger announcement. However, as we show in Figure 1, SPACs also file an S-4 or a DEFM14A, which usually comes out about 2.1 months after the merger announcement and includes all the information that would be required if the target company were to IPO.

TABLE 3 (continued)

Panel B: Completed Deals Sample

Variables	n	Mean	Std. Dev.	p25	p50	p75
Outcome Variables:						
Analyst Coverage	256	2.780	2.172	1.000	2.000	4.000
Forecast Bias	231	1.192	5.680	−0.054	0.046	0.348
Raw Return	206	−0.368	0.597	−0.756	−0.554	−0.151
Size and Industry Portfolio Adjusted Return	206	−0.469	0.548	−0.774	−0.534	−0.242
I(Class Action)	300	0.167	0.373	0.000	0.000	0.000
I(Class Action – Projections)	300	0.123	0.329	0.000	0.000	0.000
Independent Variables:						
Revenue$_{t-1}$	300	291.247	601.319	9.997	83.950	309.000
Historical Revenue CAGR	291	0.137	0.548	−0.012	0.063	0.258
Transaction Value to Revenue	266	2.855	2.040	1.362	2.335	3.722
I(Cash Deal)	300	0.037	0.188	0.000	0.000	0.000
Relative Size	300	4.983	5.198	2.272	3.477	5.777
MVE	300	787.075	991.198	242.784	426.925	893.210
Time to Acquisition	300	306.963	202.774	138.750	231.500	459.750
Age	300	13.959	16.949	5.000	9.000	14.000
PIPE	300	0.106	0.088	0.043	0.100	0.143
HHI	300	0.075	0.104	0.029	0.036	0.072
Time Since De-SPAC	300	21.440	21.156	10.000	14.000	22.000

Table 3 provides descriptive statistics for our sample of 373 de-SPAC merger announcements (300 completed de-SPAC mergers) with multiple years of revenue FLS between January 1, 2010, and June 30, 2022, in Panel A (Panel B). To execute our analysis of investor presentation window outcomes for our announced deals sample, we use the historical revenue and transaction multiple variables (i.e. *Revenue$_{t-1}$*, *Historical Revenue CAGR*, and *Transaction Value to Revenue*) from the investor presentation, because proxy statement disclosure occurs subsequent to the de-SPAC merger announcement. For our analysis of post-merger outcomes, we use historical revenue and transaction multiple variables disclosed in the proxy statement. In this table, we report the summary statistics of all variables that are natural log adjusted in our regression analyses using the unlogged values.
All variables are defined in Appendix A.

As of the merger announcement date, the average market value of equity for SPACs is $336.4 million. Figure 1 presents the decomposition of the typical SPAC timeline between SPAC IPO date and merger announcement date (10.2 months, on average), merger announcement date and proxy statement date (2.1 months, on average), and proxy statement and merger effective date (3.2 months, on average).

The long-run performance outcome measures computed for our sample of completed deals in Panel B show that SPAC firms, on average, underperform their benchmarks. Specifically, revenue forecasts are optimistically biased on average, with the mean (median) *Forecast Bias* equal to 1.19 (0.05), consistent with Blankespoor et al. (2022).[27] The mean (median) *Size and Industry Portfolio Adjusted Returns* is −46.9 percent (−53.4 percent).

To understand whether, and to what extent, our outcome and control variables vary between firms with high and low *Revenue CAGR*, we sort *Revenue CAGR* into quartiles (Even-Tov 2017). Table 4 reports descriptive statistics of SPAC, target characteristics, and outcome variables of interest by *Revenue CAGR* quartile for our samples of announced and completed deals in Panels A and B, respectively. Specifically, we examine whether the average outcomes and characteristics of our top-quartile-forecasted revenue growth firms (*High CAGR*) are statistically significantly different than those of our bottom-quartile-forecasted revenue growth firms (*Low CAGR*). Starting with our outcome variables, Table 4, Panel A shows that *High CAGR* SPACs generate significantly higher average *IP CAR* (7.8 percent) than *Low CAGR* SPACs (1.4 percent). Similarly, we observe that retail investors have higher net share purchases on average for *High CAGR* SPACs (*Retail Imbalance* = 0.124) than *Low CAGR* SPACs (*Retail Imbalance* = 0.016). By contrast, we find no differential trade imbalance for institutional investors. In terms of media coverage, *High CAGR* SPACs

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[27] The skewness in *Forecast Bias* suggests the presence of outliers. In untabulated analyses, as an alternative to Winsorizing, we modify our forecast bias regressions by removing influential observations with a Cook's (1977) distance larger than 4/(sample size), following Choi, Kim, Liu, and Simunic (2009). Our results are qualitatively similar in Table 9 when removing influential observations.

TABLE 4
Summary Statistics by *Revenue CAGR* Quartile

Panel A: Announced Deals Sample

	Quartile 1 Low CAGR (1)	Quartile 2 (2)	Quartile 3 (3)	Quartile 4 High CAGR (4)	Q4 − Q1 (5)
Outcome Variables:					
IP CAR	0.014	0.028	0.074	0.078	0.064***
Retail Imbalance	0.016	0.050	0.120	0.124	0.108**
Large Imbalance	−0.081	−0.140	−0.076	−0.070	0.011
Social Media Mentions	111.787	218.119	295.645	347.667	235.880***
Social Media Mentions − Revenue	0.170	0.409	0.570	0.828	0.658***
Traditional Media Mentions	65.062	43.884	36.929	44.680	−20.382*
Independent Variables:					
Revenue CAGR	0.088	0.264	0.560	1.803	1.715***
I(Revenue$_{t-1}$)	0.979	0.935	0.860	0.280	−0.699***
Revenue$_{t-1}$	720.335	352.832	228.508	34.366	−685.969***
I(Historical Revenue CAGR)	0.915	0.796	0.538	0.118	−0.797***
Historical Revenue CAGR	0.095	0.223	0.261	0.323	0.228***
I(Transaction Value to Revenue)	0.979	0.935	0.839	0.204	−0.775***
Transaction Value to Revenue	3.649	10.874	13.311	83.463	79.814***
I(Cash Deal)	0.074	0.065	0.054	0.011	−0.063**
Relative Size	4.664	5.891	4.921	5.031	0.367
MVE	374.790	305.914	334.600	330.029	−44.761
Time to Acquisition	374.346	300.639	269.720	267.925	−106.421***
Age	24.028	12.430	10.258	7.280	−16.748***
I(PIPE)	0.862	0.935	0.957	0.989	0.127***
PIPE	0.126	0.084	0.087	0.104	−0.022
HHI	0.066	0.089	0.073	0.084	0.018

Panel B: Completed Deals Sample

	Quartile 1 Low CAGR (1)	Quartile 2 (2)	Quartile 3 (3)	Quartile 4 High CAGR (4)	Q4 − Q1 (5)
Outcome Variables:					
Analyst Coverage	2.875	2.825	2.952	2.469	−0.406
Forecast Bias	0.259	0.246	0.442	3.866	3.607**
Raw Return	−0.088	−0.302	−0.527	−0.561	−0.473***
Size and Industry Portfolio Adjusted Return	−0.191	−0.533	−0.551	−0.606	−0.415***
I(Class Action)	0.093	0.080	0.213	0.280	0.187***
I(Class Action – Projections)	0.067	0.067	0.160	0.200	0.133**
Independent Variables:					
Revenue CAGR	0.076	0.235	0.569	1.973	1.897***
Revenue$_{t-1}$	669.762	329.624	160.836	4.764	−664.998***
Historical Revenue CAGR	0.096	0.182	0.136	0.133	0.037
Transaction Value to Revenue	3.737	11.520	50.432	1,553.238	1,549.501***
I(Cash Deal)	0.080	0.027	0.027	0.013	−0.067*
Relative Size	4.579	5.407	4.862	5.084	0.505
MVE	588.427	678.298	977.583	903.992	315.565**
Time to Acquisition	389.897	288.959	280.421	268.573	−121.324***

TABLE 4 (continued)

	Quartile 1 Low CAGR (1)	Quartile 2 (2)	Quartile 3 (3)	Quartile 4 High CAGR (4)	Q4 − Q1 (5)
Age	25.528	12.747	10.040	7.520	−18.008***
PIPE	0.114	0.093	0.106	0.111	−0.003
HHI	0.062	0.087	0.076	0.076	0.014
Time Since De-SPAC	35.640	22.187	13.933	13.160	−22.480***

***, **, * Denote significance at the 1 percent, 5 percent, and 10 percent levels for t-statistics using the difference in the value of each control variable between Quartile 4 and Quartile 1.

Table 4, Panel A (Panel B) provides mean values of outcome variables and control variables by *Revenue CAGR* quartile for our sample of 373 de-SPAC merger announcements (300 completed de-SPAC mergers) with multiple years of revenue FLS between January 1, 2010, and June 30, 2022. In this table, we report the summary statistics of all variables that are natural log adjusted in our regression analyses using the unlogged values. Columns (1)–(4) present the mean value of each variable for *Revenue CAGR* quartiles 1–4. Column (5) reports the difference in the mean value of each variable between Quartile 4 and Quartile 1.

All variables are defined in Appendix A.

received greater attention on Twitter (*Social Media Mentions* = 347.667) than *Low CAGR* SPACs (*Social Media Mentions* = 111.787) on average, but we observe a reverse relation in traditional media coverage (as shown in Panel A) and no difference in analyst coverage (as shown in Panel B). The larger social media response for high revenue growth firms, coupled with their greater appeal to retail investors, is consistent with nascent literature that retail investors learn about investment opportunities via social media (Rakowski et al. 2021; Blankespoor 2022).

Table 4, Panel B shows that, on average, *High CAGR* SPACs have more optimistic revenue forecasts (*Forecast Bias* = 3.866), perform worse (*Size and Industry Portfolio Adjusted Return* = −60.6 percent), and are more likely to be subject to a class action lawsuit (*I(Class Action)* = 0.280) than *Low CAGR* SPACs (*Forecast Bias* = 0.259, *Size and Industry Portfolio Adjusted Return* = −19.1 percent, *I(Class Action)* = 0.093). Collectively, Table 4 provides preliminary evidence suggesting that retail investors find SPAC revenue FLS informative. However, the fact that *High CAGR* SPACs are more likely to miss their financial projections, underperform their peers (at an order of magnitude beyond the reversal of the merger announcement returns), and be litigated against suggests that high revenue projection firms *may* mislead investors, especially retail investors.

Table 4 also highlights that *High CAGR* SPACs are fundamentally different. We observe an obvious trend across quartiles in historical revenue disclosure and firm age.[28] For example, in Panel A, we see that the likelihood of a *Low CAGR* SPAC providing historical revenue (*I(Revenue$_{t-1}$)*) is 97.9 percent, whereas it is only 28.0 percent for *High CAGR* SPACs, including zero-historical-revenue firms. Similarly, the average historical revenue reported in the investor presentations for our announced sample in Panel A (proxy statements for our completed sample in Panel B) for *Low CAGR* SPACs is $720.34 ($669.76) million compared with $34.37 ($4.76) million for *High CAGR* SPACs. Firm age shows similar fundamental differences across quartiles, with 24 (26) years as the average age of *Low CAGR* SPACs compared with seven (eight) years of *High CAGR* SPACs for the announced (completed) deal sample. Last, we find that firms with the most aggressive revenue projections also achieve the largest valuation multiples.

These descriptive statistics underline the need to control for historical revenue-based measures and firm age in our empirical analyses. However, they also show that historical revenue-based measures are inextricably linked to future revenue forecasts. Simply put, the high- and low-revenue-forecasting firms seem fundamentally different. Although we control for some of these characteristics, we caveat that our association-based tests do not allow for a causal explanation (i.e., that investor/media reactions are due to forecasted growth versus firm fundamentals). Based on concern that omitted variable biases may impact our results, we conduct subsequent empirical analyses where we calculate the impact threshold for a confounding variable (ITCV) following Larcker and Rusticus (2010). We discuss these analyses in Section V. Regardless, we urge readers to interpret our results carefully as we cannot fully ameliorate endogeneity concerns.

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[28] Along with the differences in age, we also observe that the average *High CAGR* SPAC projects 5.6 years of revenue compared with 2.9 years for the average *Low CAGR SPAC* firm (untabulated).

IV. RESULTS

Investor Reaction to Revenue Forecasts

To begin our multivariate analysis, we examine the association between stock market reactions and revenue forecasts. As seen in column (1) of Table 5, where we do not include any controls, the coefficient on *Revenue CAGR* (α_1) is significantly positive. The results remain qualitatively unchanged when we add merger-specific control variables and target firm characteristics in column (2). In column (3), we introduce (1) *I(Revenue$_{t-1}$)*, an indicator of whether the firm disclosed revenue for the fiscal year before the merger and (2) the interaction between this indicator and the *Revenue$_{t-1}$* measure. Similarly, in column (4) [5], we introduce (1) *I(Historical Revenue CAGR)* [*I(Transaction Value to Revenue)*], an indicator of whether the firm disclosed multiple years of [one-year of nonzero] historical revenue in their investor presentation and (2) the interaction between this indicator and the *Historical Revenue CAGR* [*Transaction Value to Revenue*]. In column (6), we control for all three historical revenue-based measures' indicators and the interaction between each measure's indicator and its respective historical revenue-based measure.[29] Columns (3)–(6) show a positive and statistically significant coefficient on *Revenue CAGR*, suggesting that forecasted revenue growth is incrementally informative to capital market participants beyond the existence and disclosure of historical revenue data. Column (6) implies that a 1 percent increase in *Revenue CAGR* is associated with a 2.9 bps increase in *IP CAR*.

Who Reacts to Revenue Forecasts?

The above findings reflect the value relevance of SPAC's revenue FLS to investors. Relatedly, regulators have voiced concern that they could mislead *unsophisticated* investors (Lee 2021). To explore this supposition, we examine whether *Revenue CAGR* is associated with the likelihood of retail and/or institutional investor purchase of SPAC shares during the five-day window surrounding the SPAC acquisition's announcement (and the related investor presentation).

In Table 6, Panel A, we find that *Revenue CAGR* is positively associated with net retail share purchases in the five-day investor presentation window. This evidence holds in a simple regression in column (1) as well as when we add merger-specific control variables and target firm characteristics in column (2) and when we introduce the historical revenue-based measures in columns (3)–(6). The coefficient in column (6) implies that a 1 percent increase in *Revenue CAGR* is associated with an increase in *Retail Imbalance* of 0.00063, corresponding to 0.8 percent of the mean value of *Retail Imbalance*. We find limited evidence of a relation between historical revenue-based measures and *Retail Imbalance* in columns (3)–(6).[30]

In Table 6, Panel B, we fail to observe a consistent relation between *Revenue CAGR* and institutional investor net share purchases. Only one column in Panel B shows a (marginally) statistically significant relation between *Large Imbalance* and forecasted growth. Once we control for historical revenue-based measures (columns (3)–(6)), the relation between forecasted revenue growth and institutional net purchases is no longer statistically significant.

To yield additional insight about capital market participants' reactions to information disclosed at a de-SPAC announcement, we examine the relation between media coverage in the five-day window surrounding the SPAC acquisition disclosure and *Revenue CAGR*. Table 7, Panel A shows that as *Revenue CAGR* projections increase, in most specifications, Twitter users are more likely to mention SPAC firms. Although the *Revenue CAGR* coefficient is positive in column (1), it is insignificant at conventional levels.[31,32] However, the relation becomes statistically significant in our specification in column (2), and when we control for historical revenue-based measures in columns (3)–(6). Approximating economic significance using a log-log interpretation, the coefficient in Panel A, column (6), implies that a 1 percent increase in the *Revenue CAGR* corresponds to a 0.2 percent increase in the number of tweets that mention the SPAC during the investor presentation five-day window. For our average SPAC (average *Social Media Mentions* = 243), this corresponds to an additional 0.5 (5) tweets for each 1 percent (10 percent) increase in *Revenue CAGR*. Our second social media measure, *Social Media Mentions – Revenue*, sums the number of tweets that mention the SPAC ticker and includes revenue words and terms synonymous with forecasting. In Table 7, Panel B, we observe a positive and

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[29] We include regressions controlling for our three historical revenue-based measures separately given their high multicollinearity. In column (6), when we control for all three historical revenue-based measures, we observe maximum variance inflation factor (VIF) scores for these measures ranging from 10 to 55. However, VIF scores for *Revenue CAGR* in column (6) remain at or below 4 for all results.

[30] Out of the 12 coefficients on the historical revenue-based variables and their interactions shown in columns (3)–(6), only one had a statistically significant association with *Retail Imbalance,* (*I(Transaction Value to Revenue)* in column (5)).

[31] We find that the coefficient on *Revenue CAGR* is positive and significant when we add *MVE* as a control to the univariate specification, suggesting that *Revenue CAGR*'s insignificance in column (1) may stem from the exclusion of *MVE*, a correlated omitted variable.

[32] We note that the relatively high R^2 of 0.559 in Table 7, Panel A, column (1) is driven by the inclusion of year fixed effects.

TABLE 5

Investor Presentation Stock Returns

	IP CAR					
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Revenue CAGR	0.022**	0.035***	0.029***	0.035***	0.032***	0.029***
	(2.363)	(2.977)	(2.818)	(3.018)	(2.963)	(2.951)
I(Revenue$_{t-1}$)			0.017			0.011
			(0.531)			(0.131)
I(Revenue$_{t-1}$) ∗ Revenue$_{t-1}$			−0.006			−0.018
			(−1.288)			(−1.275)
I(Historical Revenue CAGR)				−0.002		0.008
				(−0.077)		(0.310)
I(Historical Revenue CAGR) ∗ Historical Revenue CAGR				0.040		0.041
				(1.244)		(1.616)
I(Transaction Value to Revenue)					−0.012	0.084
					(−0.592)	(0.713)
I(Transaction Value to Revenue) ∗ Transaction Value to Revenue					0.002	−0.013
					(0.356)	(−0.909)
I(Cash Deal)		0.017	0.016	0.017	0.018	0.014
		(1.215)	(1.108)	(1.275)	(1.224)	(0.840)
Relative Size		0.000	0.000	0.000	−0.000	0.001
		(0.099)	(0.227)	(0.005)	(−0.009)	(0.509)
MVE		0.062***	0.065***	0.063***	0.062***	0.075***
		(2.879)	(3.126)	(2.972)	(2.927)	(2.970)
Time to Acquisition		−0.000*	−0.000*	−0.000*	−0.000*	−0.000**
		(−1.853)	(−1.881)	(−1.709)	(−1.813)	(−2.004)
Age		−0.001	−0.001	−0.0004	−0.001	−0.0003
		(−0.263)	(−0.110)	(−0.097)	(−0.203)	(−0.071)
I(PIPE)		−0.022	−0.023	−0.019	−0.022	−0.021
		(−1.535)	(−1.552)	(−1.333)	(−1.541)	(−1.432)
I(PIPE) ∗ PIPE		0.283**	0.285**	0.294**	0.284**	0.286**
		(2.303)	(2.416)	(2.343)	(2.275)	(2.278)
HHI		−0.110**	−0.101**	−0.102*	−0.110*	−0.088*
		(−2.022)	(−1.974)	(−1.832)	(−1.900)	(−1.773)
Year and Industry FEs	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R^2	0.039	0.127	0.124	0.125	0.122	0.120
Observations	373	373	373	373	373	373

***, **, * Denote significance at the 1 percent, 5 percent, and 10 percent levels for two-tailed tests, respectively; t-statistics in parentheses are based on standard errors clustered by year-quarter.

Table 5 reports the results of the market response to investor presentation filings for our sample of 373 de-SPAC merger announcements with multiple years of revenue FLS between January 1, 2010 and June 30, 2022. The table reports OLS regressions of the market-adjusted cumulative abnormal return over the five-day window surrounding the investor presentation filing date on *Revenue CAGR* and controls. For our historical revenue and transaction multiple variables (i.e. *Revenue$_{t-1}$*, *Historical Revenue CAGR*, and *Transaction Value to Revenue*), we use the historical revenue and transaction multiple data from the investor presentation because the proxy statement disclosure occurs subsequent to the de-SPAC merger announcement. Year and industry fixed effects are included.

All variables are defined in Appendix A.

statistically significant relation between *Revenue CAGR* and *Social Media Mentions – Revenue* across all columns. Although SPAC targets' historical and projected revenues are inextricably linked and difficult to empirically separate, our evidence on Twitter mentions of forecasted revenues provides some support that SPAC forecasted revenues are an

TABLE 6

Investor Trading around Investor Presentations

Panel A: *Revenue CAGR* and Retail Investor Trading

	Retail Imbalance					
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Revenue CAGR	0.028**	0.025*	0.062**	0.045***	0.066***	0.063**
	(2.132)	(1.684)	(2.560)	(2.741)	(2.611)	(2.470)
I(Revenue$_{t-1}$)			0.011			−0.016
			(0.242)			(−0.384)
*I(Revenue$_{t-1}$) * Revenue$_{t-1}$*			0.021			−0.018
			(1.603)			(−0.663)
I(Historical Revenue CAGR)				0.068		0.031
				(1.477)		(0.682)
*I(Historical Revenue CAGR) * Historical Revenue CAGR*				0.081		0.090
				(0.939)		(1.063)
I(Transaction Value to Revenue)					0.182*	0.268
					(1.772)	(1.267)
*I(Transaction Value to Revenue) * Transaction Value to Revenue*					−0.027	−0.040
					(−1.470)	(−1.347)
I(Cash Deal)		0.123	0.122	0.135	0.114	0.117
		(1.482)	(1.473)	(1.636)	(1.374)	(1.413)
Relative Size		0.001	0.001	0.001	0.002	0.003
		(0.186)	(0.164)	(0.256)	(0.634)	(0.865)
MVE		0.001	−0.002	0.005	0.015	0.027
		(0.017)	(−0.075)	(0.172)	(0.520)	(0.678)
Time to Acquisition		−0.000	−0.000	−0.000	−0.000	−0.000
		(−1.362)	(−1.296)	(−1.088)	(−1.416)	(−1.237)
Age		−0.031	−0.034	−0.032	−0.035	−0.034
		(−1.325)	(−1.408)	(−1.368)	(−1.479)	(−1.467)
I(PIPE)		0.101	0.104	0.116	0.099	0.108
		(0.740)	(0.756)	(0.833)	(0.720)	(0.771)
*I(PIPE) * PIPE*		0.263	0.273	0.296	0.259	0.277
		(1.083)	(1.200)	(1.273)	(1.191)	(1.282)
HHI		−0.111	−0.117	−0.086	−0.109	−0.082
		(−0.640)	(−0.676)	(−0.496)	(−0.637)	(−0.471)
Year and Industry FEs	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R^2	0.076	0.081	0.086	0.088	0.089	0.082
Observations	350	350	350	350	350	350

Panel B: *Revenue CAGR* and Institutional Investor Trading

	Large Imbalance					
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Revenue CAGR	0.014	0.030*	0.005	0.003	−0.007	−0.003
	(1.105)	(1.720)	(0.167)	(0.140)	(−0.283)	(−0.129)
I(Revenue$_{t-1}$)			0.031			−0.040
			(0.429)			(−0.366)
*I(Revenue$_{t-1}$) * Revenue$_{t-1}$*			−0.020			0.041
			(−1.577)			(1.304)

TABLE 6 (continued)

	Large Imbalance					
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
I(Historical Revenue CAGR)				−0.116***		−0.109**
				(−2.910)		(−2.104)
*I(Historical Revenue CAGR) * Historical Revenue CAGR*				0.056		0.021
				(0.890)		(0.356)
I(Transaction Value to Revenue)					−0.179**	−0.309
					(−2.365)	(−1.143)
*I(Transaction Value to Revenue) * Transaction Value to Revenue*					0.047***	0.071*
					(3.156)	(1.828)
I(Cash Deal)		−0.140**	−0.141**	−0.159***	−0.132**	−0.143**
		(−2.393)	(−2.360)	(−2.808)	(−2.163)	(−2.225)
Relative Size		0.007***	0.007***	0.006***	0.005**	0.003
		(3.181)	(3.707)	(3.000)	(1.982)	(0.981)
MVE		0.078**	0.084**	0.072**	0.065*	0.039
		(2.017)	(2.206)	(1.852)	(1.752)	(1.346)
Time to Acquisition		0.000	0.000	0.000	0.000	0.000
		(0.614)	(0.600)	(0.616)	(0.748)	(0.843)
Age		−0.014	−0.012	−0.008	−0.009	−0.004
		(−0.637)	(−0.562)	(−0.344)	(−0.440)	(−0.212)
I(PIPE)		0.042	0.040	0.036	0.047	0.044
		(0.458)	(0.447)	(0.390)	(0.525)	(0.475)
*I(PIPE) * PIPE*		0.321**	0.318**	0.315**	0.357**	0.363**
		(2.103)	(2.073)	(2.233)	(2.380)	(2.502)
HHI		−0.524*	−0.504*	−0.528**	−0.480*	−0.514*
		(−1.967)	(−1.779)	(−1.980)	(−1.794)	(−1.896)
Year and Industry FEs	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R^2	0.066	0.093	0.092	0.101	0.103	0.104
Observations	350	350	350	350	350	350

***, **, * Denote significance at the 1 percent, 5 percent, and 10 percent levels for two-tailed tests, respectively; t-statistics in parentheses are based on standard errors clustered by year-quarter.

Table 6 reports the results of retail and institutional trading during the five-day window surrounding the investor presentation filing date for our sample of 350 de-SPAC merger announcements with multiple years of revenue FLS and nonmissing TAQ data between January 1, 2010 and June 30, 2022. *Retail Imbalance (Large Imbalance)* is calculated as the daily average of the sum of retail (large) purchases less the sum of retail (large) sales scaled by the total retail (large) shares traded during the days [−2, +2] relative to the investor presentation filing date. Panel A reports OLS regressions of *Retail Imbalance* on *Revenue CAGR* and controls, and Panel B reports OLS regressions of *Large Imbalance* on *Revenue CAGR* and controls. For our historical revenue and transaction multiple variables (i.e. *Revenue$_{t-1}$*, *Historical Revenue CAGR*, and *Transaction Value to Revenue*), we use the historical revenue and transaction multiple data from the investor presentation because the proxy statement disclosure occurs subsequent to the de-SPAC merger announcement. Year and industry fixed effects are included.

All variables are defined in Appendix A.

important component of capital market participants' information sets.[33] We fail to observe similar evidence of a relation between *Revenue CAGR* and traditional media coverage in Table 7, Panel C.

Relatedly, we fail to find evidence of a positive relation between *Revenue CAGR* and analyst coverage in Table 8. In fact, the simple regression in column (1) shows some evidence that equity analysts *refrain* from covering SPACs that forecast high growth.[34] Although unsophisticated retail investors appear to be attracted to aggressive projections (or

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[33] This sentiment was echoed by those who attested to the utility of forward-looking information in the SPAC setting in several comment letters on the proposal to remove SPAC's Safe Harbor exception (e.g., Wilson 2022). See https://www.sec.gov/comments/s7-13-22/s71322-20121758-273885.htm

[34] When we add *MVE* and *Age* as controls to the univariate specification, we find that the coefficient on *Revenue CAGR* is insignificant, suggesting that the significance of *Revenue CAGR* in column (1) may stem from the exclusion of *MVE* and *Age*, both of which are correlated omitted variables.

TABLE 7
Social Media Mentions and Traditional Media Mentions

Panel A: *Revenue CAGR* and *Social Media Mentions*

	Social Media Mentions					
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Revenue CAGR	0.072	0.239***	0.222**	0.257***	0.243***	0.220**
	(1.118)	(3.423)	(2.516)	(3.329)	(2.919)	(2.474)
I(Revenue$_{t-1}$)			0.156			−0.077
			(0.748)			(−0.205)
*I(Revenue$_{t-1}$) * Revenue$_{t-1}$*			−0.031			−0.136
			(−0.783)			(−1.063)
I(Historical Revenue CAGR)				0.043		0.089
				(0.313)		(0.614)
*I(Historical Revenue CAGR) * Historical Revenue CAGR*				0.280		0.250
				(0.882)		(0.814)
I(Transaction Value to Revenue)					0.005	0.840
					(0.026)	(0.939)
*I(Transaction Value to Revenue) * Transaction Value to Revenue*					0.020	−0.089
					(0.377)	(−0.670)
I(Cash Deal)		0.128	0.121	0.138	0.128	0.113
		(0.550)	(0.515)	(0.575)	(0.529)	(0.420)
Relative Size		0.020**	0.022**	0.020**	0.020**	0.027**
		(2.165)	(2.089)	(2.048)	(2.085)	(2.128)
MVE		0.872***	0.891***	0.877***	0.874***	0.971***
		(5.477)	(5.578)	(5.483)	(5.567)	(8.231)
Time to Acquisition		0.000	0.000	0.000	0.000	0.000
		(0.536)	(0.555)	(0.807)	(0.597)	(0.646)
Age		0.017	0.019	0.020	0.017	0.019
		(0.321)	(0.381)	(0.361)	(0.342)	(0.350)
I(PIPE)		−0.093	−0.093	−0.069	−0.089	−0.079
		(−0.486)	(−0.477)	(−0.346)	(−0.458)	(−0.384)
*I(PIPE) * PIPE*		2.233***	2.252***	2.311***	2.272***	2.285***
		(3.833)	(3.889)	(3.713)	(3.790)	(3.845)
HHI		−1.168**	−1.101**	−1.104**	−1.120**	−0.968*
		(−2.352)	(−2.187)	(−2.178)	(−2.201)	(−1.789)
Year and Industry FEs	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R^2	0.559	0.680	0.679	0.680	0.678	0.678
Observations	373	373	373	373	373	373

Panel B: *Revenue CAGR* and *Social Media Mentions – Revenue*

	Social Media Mentions – Revenue					
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Revenue CAGR	0.055*	0.081**	0.082**	0.080**	0.068**	0.070**
	(1.832)	(2.347)	(2.219)	(2.587)	(2.161)	(2.192)
I(Revenue$_{t-1}$)			−0.070			−0.309***
			(−0.822)			(−4.075)
*I(Revenue$_{t-1}$) * Revenue$_{t-1}$*			0.010			0.025
			(0.531)			(0.549)
I(Historical Revenue CAGR)				−0.040		0.007
				(−0.895)		(0.145)

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TABLE 7 (continued)

	Social Media Mentions – Revenue					
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
*I(Historical Revenue CAGR) * Historical Revenue CAGR*				0.320*		0.291*
				(1.957)		(1.812)
I(Transaction Value to Revenue)					−0.064	0.001
					(−0.958)	(0.003)
*I(Transaction Value to Revenue) * Transaction Value to Revenue*					0.026	0.046
					(1.353)	(1.048)
I(Cash Deal)		0.040	0.044	0.038	0.046	0.066
		(0.793)	(0.853)	(0.873)	(0.866)	(1.309)
Relative Size		−0.002	−0.002	−0.003	−0.002	−0.005
		(−0.527)	(−0.748)	(−0.711)	(−0.692)	(−1.200)
MVE		0.175***	0.167***	0.176***	0.171***	0.154***
		(3.040)	(2.760)	(3.195)	(3.005)	(2.656)
Time to Acquisition		−0.000	−0.000	−0.000	−0.000	−0.000
		(−1.054)	(−1.070)	(−0.720)	(−0.961)	(−0.593)
Age		−0.018	−0.018	−0.009	−0.015	−0.009
		(−0.791)	(−0.746)	(−0.371)	(−0.693)	(−0.382)
I(PIPE)		−0.001	−0.001	0.022	0.002	0.026
		(−0.007)	(−0.015)	(0.301)	(0.027)	(0.346)
*I(PIPE) * PIPE*		0.258	0.249	0.336*	0.293	0.375**
		(1.345)	(1.312)	(1.914)	(1.455)	(2.303)
HHI		−0.434***	−0.462***	−0.374***	−0.397***	−0.381***
		(−3.273)	(−3.346)	(−3.017)	(−2.988)	(−2.668)
Year and Industry FEs	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R^2	0.137	0.174	0.170	0.183	0.172	0.184
Observations	373	373	373	373	373	373

Panel C: *Revenue CAGR* **and** *Traditional Media Mentions*

	Traditional Media Mentions					
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Revenue CAGR	−0.035	0.091	−0.039	0.081	−0.039	−0.050
	(−0.528)	(1.412)	(−0.369)	(1.040)	(−0.408)	(−0.444)
I(Revenue$_{t-1}$)			0.168			0.037
			(0.687)			(0.082)
*I(Revenue$_{t-1}$) * Revenue$_{t-1}$*			−0.103			−0.059
			(−1.505)			(−0.458)
I(Historical Revenue CAGR)				−0.123		0.137
				(−0.509)		(0.647)
*I(Historical Revenue CAGR) * Historical Revenue CAGR*				0.663***		0.623**
				(2.737)		(2.174)
I(Transaction Value to Revenue)					−0.608	−0.487
					(−1.631)	(−0.512)
*I(Transaction Value to Revenue) * Transaction Value to Revenue*					0.119*	0.078
					(1.700)	(0.640)
I(Cash Deal)		−0.029	−0.019	−0.053	0.023	0.036
		(−0.098)	(−0.060)	(−0.173)	(0.079)	(0.106)
Relative Size		0.022***	0.024***	0.019***	0.016**	0.016
		(3.030)	(3.033)	(2.697)	(2.503)	(1.452)

(continued on next page)

TABLE 7 (continued)

		Traditional Media Mentions				
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
MVE		0.414*	0.449**	0.413*	0.368	0.406*
		(1.781)	(2.045)	(1.803)	(1.589)	(1.858)
Time to Acquisition		0.001**	0.001*	0.001**	0.001**	0.001**
		(1.991)	(1.931)	(2.311)	(1.986)	(2.190)
Age		0.083	0.098	0.108	0.100	0.117
		(0.556)	(0.646)	(0.745)	(0.664)	(0.773)
I(PIPE)		−0.570*	−0.579*	−0.550*	−0.574*	−0.542*
		(−1.724)	(−1.737)	(−1.687)	(−1.745)	(−1.656)
I(PIPE) * PIPE		2.889**	2.911***	3.029***	3.006***	3.116***
		(2.561)	(2.703)	(2.772)	(2.774)	(2.965)
HHI		−0.740	−0.612	−0.600	−0.662	−0.493
		(−1.040)	(−0.955)	(−0.859)	(−1.005)	(−0.829)
Year and Industry FEs	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R^2	0.210	0.249	0.250	0.250	0.251	0.250
Observations	342	342	342	342	342	342

***, **, * Denote significance at the 1 percent, 5 percent, and 10 percent levels for two-tailed tests, respectively; t-statistics in parentheses are based on standard errors clustered by year-quarter.

Table 7 reports the results of the social media and traditional media responses to investor presentation filings. To examine social (traditional) media responses, we use our full sample of 373 (342) de-SPAC merger announcements with multiple years of revenue FLS between January 1, 2010, and June 30, 2022 (with Ravenpack coverage). *Social Media Mentions* is computed as the natural log-adjusted total tweets that mention the SPAC ticker over the five-day window surrounding the investor presentation filing date. *Social Media Mentions – Revenue* is the natural log-adjusted total tweets that mention that mention all of the following: (1) the SPAC ticker, (2) the word "revenue" or "sales," and (3) the word "forecast," "project," or "future" in the five days surrounding the investor presentation filing date. *Traditional Media Mentions* is computed as the natural log-adjusted count of traditional media articles about the SPAC, identified in Ravenpack. Due to the presence of zeroes, we add 1 to the count of mentions before natural log adjusting for each variable. Panel A (B) [C] reports OLS regressions of *Social Media Mentions* (*Social Media Mentions – Revenue*) [*Traditional Media Mentions*] on *Revenue CAGR* and controls. For our historical revenue and transaction multiple variables (i.e. *Revenue$_{t-1}$*, *Historical Revenue CAGR*, and *Transaction Value to Revenue*), we use the historical revenue and transaction multiple data from the investor presentation because the proxy statement disclosure occurs subsequent to the de-SPAC merger announcement. Year and industry fixed effects are included.

All variables are defined in Appendix A.

firms that issue aggressive projections), as documented in our *Retail Imbalance* and *Social Media Mentions* analyses, we do not find consistent evidence of a relation between revenue growth forecasts and sophisticated investors' purchasing activity, traditional media coverage, and analyst coverage. Collectively, we interpret these results to suggest that revenue forecasts attract differing levels of attention from sophisticated and unsophisticated capital market participants in the SPAC setting.

Long-Term Outcomes

Future Firm Performance

Our previous results suggest that market reactions are more pronounced for aggressive revenue projections and that retail investors, but not institutional investors (as proxied by larger trades), respond more favorably to their disclosure. Moreover, we find that SPACs with more aggressive revenue forecasts tend to receive greater attention on Twitter, but not via traditional media sources and equity analysts. However, the degree to which aggressive forecasts predict future SPAC performance (and thus, *ex post*, are more informative to investors) is an unanswered empirical question. This informs our second set of tests, which examine forecast bias and long-term stock returns. We begin by exploring whether aggressive revenue forecasts are biased. Out of the 300 observations in our sample of completed de-SPAC mergers with multiple years of revenue forecasts, we are able to collect actual revenue in the first fiscal year after merger completion for 231 observations.[35]

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[35] Since many of the transactions in our sample of completed deals were announced in 2021 and 2022 (61.1 percent), our sample for this analysis is more limited.

TABLE 8

Analyst Coverage

	Analyst Coverage					
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Revenue CAGR	−0.086***	−0.048	−0.041	−0.053	−0.100	−0.094
	(−3.617)	(−1.139)	(−0.545)	(−1.188)	(−1.553)	(−1.082)
$Revenue_{t-1}$			0.004			0.030
			(0.134)			(0.395)
Historical Revenue CAGR				0.058		0.075
				(1.133)		(1.439)
Transaction Value to Revenue					0.038*	0.061
					(1.768)	(1.175)
I(Cash Deal)		−0.360	−0.358	−0.303	−0.205	−0.170
		(−1.504)	(−1.461)	(−1.247)	(−0.849)	(−0.675)
Relative Size		−0.012	−0.012	−0.013	−0.019	−0.021
		(−0.747)	(−0.764)	(−0.794)	(−1.111)	(−1.241)
MVE		0.163**	0.163**	0.178***	0.170**	0.166*
		(2.342)	(2.267)	(2.687)	(2.412)	(1.888)
Time to Acquisition		−0.000	−0.000	−0.000	−0.000	−0.000
		(−0.859)	(−0.849)	(−0.687)	(−1.407)	(−1.002)
Age		0.128**	0.127**	0.094**	0.095**	0.095**
		(2.394)	(2.446)	(2.393)	(2.006)	(2.073)
PIPE		0.983**	0.989**	0.953**	0.921*	0.953*
		(2.169)	(2.100)	(2.027)	(1.719)	(1.721)
HHI		0.106	0.100	0.124	0.101	0.131
		(0.214)	(0.190)	(0.244)	(0.209)	(0.274)
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes
Industry FEs	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R^2	0.048	0.155	0.151	0.166	0.162	0.164
Observations	256	256	256	247	227	224

***, **, * Denote significance at the 1 percent, 5 percent, and 10 percent levels for two-tailed tests, respectively; t-statistics in parentheses are based on standard errors clustered by year-quarter.

Table 8 reports the results from the analysis of *Analyst Coverage* for our sample of 256 de-SPAC mergers with multiple years of revenue FLS completed between January 1, 2010 and June 30, 2022 with at least one annual earnings announcement post-merger effective date. *Analyst Coverage* is computed as the natural log-adjusted count of the number of analysts issuing forecasts for the post-acquisition firm in the first year after merger completion. Due to the presence of zeroes, we add 1 to the count of analysts before natural log adjusting. The table reports OLS regressions of *Analyst Coverage* on *Revenue CAGR* and controls. For our historical revenue and transaction multiple variables (i.e. $Revenue_{t-1}$, *Historical Revenue CAGR*, and *Transaction Value to Revenue*), we use the historical revenue and transaction multiple from the merger proxy statement. Year and industry fixed effects are included.

All variables are defined in Appendix A.

In Table 9, we examine whether *Revenue CAGR* has incremental predictive power for *Forecast Bias*. We find that more aggressive revenue forecasts are positively associated with *Forecast Bias* in a simple regression in column (1), in the multivariate regression in column (2), and when controlling for *Historical Revenue CAGR* in column (4). Notably, in column (3) [(5)], when we control for prior year revenue [the valuation multiple], and in column (6), where we include all three historical revenue-based measures, the relation between forecast bias and revenue forecast growth is subsumed. Although we observe mixed evidence that *forecasted* revenues are predictive of future operating underperformance, $Revenue_{t-1}$, *Historical Revenue CAGR*, and *Transaction Value to Revenue* appear to have some predictive capability to capture operating underperformance in columns (3), (5), and (6). These results suggest that the disclosure of historical revenues in investor presentations (even if zero) may be useful to investors.

TABLE 9

Revenue Forecast Bias

	Forecast Bias					
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Revenue CAGR	1.426***	1.121**	0.072	0.498***	−0.031	−0.517
	(2.773)	(2.319)	(0.091)	(2.787)	(−0.043)	(−1.523)
Revenue$_{t-1}$			−0.752**			0.389
			(−2.006)			(1.172)
Historical Revenue CAGR				0.295		0.455**
				(1.529)		(2.214)
Transaction Value to Revenue					0.738***	1.085***
					(3.730)	(2.988)
I(Cash Deal)		−0.377	−0.734	−0.770	0.332	0.066
		(−0.493)	(−0.777)	(−1.207)	(0.582)	(0.103)
Relative Size		−0.037	−0.013	−0.008	−0.064	−0.091**
		(−0.517)	(−0.197)	(−0.205)	(−1.026)	(−2.108)
MVE		−0.507	−0.398	−0.079	−0.648	−0.414
		(−0.974)	(−0.782)	(−0.208)	(−1.308)	(−1.116)
Time to Acquisition		−0.003	−0.003	0.000	−0.001	0.001
		(−1.162)	(−1.006)	(0.195)	(−0.428)	(0.759)
Age		−0.796**	−0.725**	−0.491	−0.600**	−0.475*
		(−2.385)	(−2.374)	(−1.648)	(−2.235)	(−1.855)
PIPE		0.301	0.023	2.610**	2.726	3.479**
		(0.144)	(0.009)	(2.555)	(1.648)	(2.425)
HHI		1.013	2.006	2.991	4.535	6.241**
		(0.284)	(0.578)	(1.207)	(1.129)	(2.107)
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes
Industry FEs	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R^2	−0.004	−0.010	0.013	−0.046	0.032	0.023
Observations	231	231	231	225	221	218

***, **, * Denote significance at the 1 percent, 5 percent, and 10 levels for two-tailed tests, respectively; t-statistics in parentheses are based on standard errors clustered by year-quarter.

Table 9 reports the results from the analysis of forecast bias for our sample of 231 de-SPAC mergers completed between January 1, 2010 and June 30, 2022 with multiple years of revenue FLS and nonmissing *Forecast Bias* in the first fiscal year after merger completion. *Forecast Bias* is computed as the difference between forecasted revenue and actual revenue, scaled by actual revenue in the first fiscal year after merger completion. The table reports OLS regressions of *Forecast Bias* on *Revenue CAGR* and controls. For our historical revenue and transaction multiple variables (i.e. *Revenue$_{t-1}$*, *Historical Revenue CAGR*, and *Transaction Value to Revenue*), we use the historical revenue and transaction multiple from the merger proxy statement. Year and industry fixed effects are included.

All variables are defined in Appendix A.

Next, we examine whether aggressive revenue projections are predictive of future stock performance. We use two separate approaches to measure long-run stock return performance following the merger effective date.[36] We examine *Raw Returns* computed as the raw buy-and-hold return over the 12-month horizon following the merger completion date and *Size and Industry Portfolio Adjusted Returns* computed by adjusting the raw buy-and-hold return over the same 12-month window for the return of an equal-weighted portfolio of 20 firms that were publicly traded for at least five years in the same two-digit SIC industry with the closest size (following Dimitrova 2017). Table 10, Panels A and B present the results from estimating Equation (1) for *Raw Return* and *Size and Industry Portfolio Adjusted Return*, respectively.

We find that more aggressive revenue growth forecasts are negatively associated with both *Raw Returns* and *Size and Industry Portfolio Adjusted Returns* 12 months post-merger completion date in a simple regression in column (1), in

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[36] We collect returns from *CRSP* through August 2022 to increase our long-term sample.

TABLE 10
Long-Term Stock Performance

Panel A: *Revenue CAGR* and Raw Returns

	Raw Return					
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Revenue CAGR	−0.138***	−0.101***	−0.140***	−0.097***	−0.130**	−0.175***
	(−5.388)	(−3.313)	(−2.886)	(−2.737)	(−2.101)	(−3.171)
Revenue$_{t-1}$			−0.027			−0.094
			(−1.266)			(−1.602)
Historical Revenue CAGR				0.069*		0.073*
				(1.860)		(1.892)
Transaction Value to Revenue					0.018	−0.044
					(0.563)	(−0.696)
I(Cash Deal)		−0.140	−0.144	−0.238	−0.166	−0.318**
		(−0.744)	(−0.747)	(−1.326)	(−0.890)	(−2.427)
Relative Size		−0.002	−0.002	−0.002	−0.003	0.003
		(−0.274)	(−0.263)	(−0.210)	(−0.443)	(0.434)
MVE		0.048	0.051	0.047	0.055	0.083
		(1.121)	(1.226)	(1.065)	(1.092)	(1.427)
Time to Acquisition		−0.000	−0.000	−0.000	−0.000	−0.000
		(−1.215)	(−1.178)	(−1.338)	(−1.213)	(−1.468)
Age		0.088	0.089	0.084	0.076	0.072
		(1.392)	(1.403)	(1.202)	(1.040)	(0.951)
PIPE		0.554	0.519	0.568*	0.442	0.380
		(1.473)	(1.306)	(1.685)	(0.917)	(0.771)
HHI		−0.485	−0.439	−0.395	−0.454	−0.271
		(−0.956)	(−0.861)	(−0.727)	(−0.769)	(−0.445)
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes
Industry FEs	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R^2	0.175	0.185	0.183	0.187	0.168	0.175
Observations	206	206	206	198	184	181

Panel B: *Revenue CAGR* and Market Adjusted Returns

	Size and Industry Portfolio Adjusted Return					
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Revenue CAGR	−0.124***	−0.086**	−0.119**	−0.089**	−0.125**	−0.142**
	(−5.079)	(−2.574)	(−2.259)	(−2.572)	(−2.112)	(−2.320)
Revenue$_{t-1}$			−0.022			−0.008
			(−1.085)			(−0.123)
Historical Revenue CAGR				0.050**		0.061**
				(2.349)		(2.578)
Transaction Value to Revenue					0.033	0.033
					(1.144)	(0.531)
I(Cash Deal)		−0.359*	−0.362*	−0.489**	−0.398**	−0.508***
		(−1.878)	(−1.870)	(−2.565)	(−2.085)	(−3.212)
Relative Size		−0.006	−0.006	−0.005	−0.008	−0.008
		(−0.783)	(−0.766)	(−0.558)	(−1.070)	(−1.010)
MVE		0.082***	0.085***	0.088***	0.084**	0.085*
		(2.772)	(2.825)	(3.070)	(2.513)	(1.841)

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TABLE 10 (continued)

	Size and Industry Portfolio Adjusted Return					
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Time to Acquisition		−0.000	−0.000	−0.000	−0.000	−0.000
		(−1.388)	(−1.359)	(−1.414)	(−1.321)	(−1.264)
Age		0.084	0.084	0.086	0.085	0.086
		(1.467)	(1.483)	(1.354)	(1.363)	(1.283)
PIPE		0.625	0.595	0.602	0.664	0.632
		(1.323)	(1.216)	(1.304)	(1.075)	(1.015)
HHI		−0.690*	−0.652*	−0.565	−0.434	−0.266
		(−1.775)	(−1.748)	(−1.449)	(−0.995)	(−0.621)
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes
Industry FEs	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R^2	0.084	0.147	0.145	0.141	0.154	0.144
Observations	206	206	206	198	184	181

***, **, * Denote significance at the 1 percent, 5 percent, and 10 percent levels for two-tailed tests, respectively; t-statistics in parentheses are based on standard errors clustered by year-quarter.

Table 10 reports the analysis of long-run performance for our sample of 206 completed de-SPAC mergers with multiple years of revenue FLS between January 1, 2010 and June 30, 2022, and 12 months of return data available post-merger date. We compute two measures of long-run performance at a 12-month horizon post-merger effective date: (1) raw buy-and-hold returns and (2) raw buy-and-hold returns adjusted for the buy-and-hold return of an equal-weighted portfolio of 20 mature firms in the same two-digit SIC code industry with the closest size. Panel A reports OLS regressions of *Raw Return* on *Revenue CAGR* and controls. Panel B reports OLS regressions of *Size and Industry Portfolio Adjusted Return* on *Revenue CAGR* and controls. For our historical revenue and transaction multiple variables (i.e. *Revenue$_{t-1}$*, *Historical Revenue CAGR*, and *Transaction Value to Revenue*), we use the historical revenue and transaction multiple from the merger proxy statement. Year fixed effects are included.

All variables are defined in Appendix A.

the multivariate regression in column (2), and when controlling for historical revenue-based measures in columns (3)–(6). In terms of economic magnitude, the coefficient in column (6) of Panel A (Panel B) implies that a 1 percent increase in *Revenue CAGR* is associated with a 17.5-bps (14.2-bps) lower 12-month *Raw Return* (*Size and Industry Portfolio Adjusted Return*).[37] Our evidence in Table 10 suggests that *Revenue CAGR*s appear to have some capacity to predict underperformance in SPAC returns 12 months after the SPAC merger's completion, even when controlling for the target's historical revenue growth and performance.

Litigation Risk

Our final tests explore whether *Revenue CAGR* forecasts are associated with subsequent class action litigation. Although practitioners assume that FLS are protected under Safe Harbor, this supposition has been questioned by the SEC and is therefore an unanswered empirical question (Coates 2021, 2022). In Table 11, Panel A, we examine *I(Class Action)*, an indicator equal to 1 if the merged company is subject to a class action lawsuit with at least one allegation of materially false or misleading statements following its merger completion and 0 otherwise, as the dependent variable.[38] Given the nonconstant measurement window for a subsequent class action lawsuit from the merger effective date to the end of our sample selection collection period, August 31, 2022, we augment Equation (1) by adding *Time Since De-SPAC* as a control variable, which we measure using the natural log-adjusted number of months between the merger effective date and August 31, 2022.[39] We find evidence that more aggressive *Revenue CAGR*s are positively associated

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[37] In the Online Appendix, Alternative Measures of Long-Term Stock Performance, we find similar results for *IPO Adjusted Return* in Panel A (except for column (5)), computed by adjusting raw buy-and-hold returns for the return of an equal-weighted portfolio of all firms that IPO in the same year as the merger completion, and *Russell-2000 Adjusted Return* in Panel B, computed by adjusting raw buy-and-hold returns for the return of the Russell 2000 index (both following Dimitrova 2017). Descriptive statistics for the alternative return measures used in Online Appendix, Alternative Measures of Long-Term Stock Performance, are available upon request.

[38] We collect data on class action lawsuits through August 31, 2022.

[39] Our results are qualitatively similar, albeit statistically weaker, if we restrict the measurement of the *I(Class Action)* window to 12 months following the de-SPAC acquisition. Specifically, we observe a positive and statistically significant relation between *Revenue CAGR* and *I(Class Action)* in columns (1), (2), (4), and (6), where the coefficients in columns (3) and (5) were positive but not statistically significant at conventional levels (t-statistic = 1.53 and 1.24, respectively).

TABLE 11

Class Action Lawsuits

Panel A: *Revenue CAGR* and Class Action Propensity

	I(Class Action)					
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Revenue CAGR	0.070***	0.071***	0.065**	0.075***	0.054**	0.089***
	(4.692)	(3.403)	(2.125)	(3.432)	(2.067)	(2.616)
Revenue$_{t-1}$			−0.004			0.056*
			(−0.301)			(1.740)
Historical Revenue CAGR				−0.028		−0.018
				(−0.828)		(−0.512)
Transaction Value to Revenue					0.007	0.043*
					(0.532)	(1.718)
I(Cash Deal)		−0.174**	−0.176**	−0.108**	−0.178*	−0.067
		(−2.031)	(−2.078)	(−2.100)	(−1.699)	(−1.011)
Relative Size		0.006	0.006	0.007	0.003	−0.001
		(1.190)	(1.245)	(1.306)	(0.560)	(−0.088)
MVE		0.042	0.043	0.046*	0.036	0.021
		(1.567)	(1.624)	(1.876)	(1.128)	(0.842)
Time to Acquisition		−0.000	−0.000	−0.000	0.000	0.000
		(−0.566)	(−0.564)	(−0.381)	(0.085)	(0.494)
Age		−0.028	−0.028	−0.028	−0.012	−0.011
		(−1.039)	(−1.014)	(−1.025)	(−0.342)	(−0.329)
PIPE		0.132	0.127	0.183	0.162	0.240
		(0.653)	(0.630)	(0.824)	(0.792)	(1.176)
HHI		−0.019	−0.013	−0.067	−0.199	−0.275
		(−0.058)	(−0.041)	(−0.207)	(−0.841)	(−1.189)
Time Since De-SPAC		0.166*	0.165*	0.169*	0.118*	0.128*
		(1.721)	(1.679)	(1.807)	(1.749)	(1.903)
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes
Industry FEs	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R^2	0.071	0.091	0.088	0.102	0.053	0.079
Observations	300	300	300	291	266	263

Panel B: *Revenue CAGR* and Projection-Related Class Action Propensity

	I(Class Action – Projections)					
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Revenue CAGR	0.075***	0.078***	0.079**	0.083***	0.060*	0.105***
	(4.785)	(3.889)	(2.177)	(3.935)	(1.902)	(2.730)
Revenue$_{t-1}$			0.001			0.081**
			(0.044)			(2.546)
Historical Revenue CAGR				−0.027		−0.015
				(−0.800)		(−0.413)
Transaction Value to Revenue					0.013	0.067**
					(0.672)	(2.455)
I(Cash Deal)		−0.195**	−0.194**	−0.132**	−0.194	−0.067
		(−2.150)	(−2.212)	(−2.263)	(−1.639)	(−0.930)
Relative Size		0.004	0.004	0.005	0.001	−0.005
		(0.787)	(0.842)	(0.907)	(0.189)	(−0.672)

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TABLE 11 (continued)

		I(Class Action – Projections)				
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
MVE		0.049**	0.049**	0.053***	0.045*	0.021
		(2.374)	(2.382)	(2.832)	(1.763)	(0.991)
Time to Acquisition		−0.000	−0.000	−0.000	−0.000	0.000
		(−0.884)	(−0.886)	(−0.664)	(−0.197)	(0.445)
Age		−0.016	−0.016	−0.016	−0.0002	0.0002
		(−0.590)	(−0.596)	(−0.543)	(−0.006)	(0.005)
PIPE		0.116	0.117	0.171	0.185	0.268
		(0.584)	(0.588)	(0.785)	(0.897)	(1.267)
HHI		−0.053	−0.054	−0.103	−0.236	−0.317
		(−0.156)	(−0.161)	(−0.304)	(−0.938)	(−1.296)
Time Since De-SPAC		0.139	0.139	0.142	0.090	0.104*
		(1.533)	(1.489)	(1.615)	(1.477)	(1.702)
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes
Industry FEs	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R^2	0.083	0.099	0.096	0.107	0.069	0.100
Observations	300	300	300	291	266	263

***, **, * Denote significance at the 1 percent, 5 percent, and 10 percent levels for two-tailed tests, respectively; t-statistics in parentheses are based on standard errors clustered by year-quarter.

Table 11 reports the results from the analysis of class action lawsuits for our sample of 300 de-SPAC mergers completed between January 1, 2010 and June 30, 2022, with multiple years of revenue FLS. We create two measures of class action litigation. *I(Class Action)* is an indicator equal to 1 if the firm received a class action lawsuit with at least one allegation of materially false or misleading statements post-merger effective date through August 31, 2022, and 0 otherwise. *I(Class Action – Projections)* is an indicator equal to 1 if the firm received a class action lawsuit with at least one allegation of materially false or misleading statements specifically related to future financial metrics or prospects post-merger effective date through August 31, 2022, and 0 otherwise. Panel A reports OLS regressions of *I(Class Action)* on *Revenue CAGR* and controls. Panel B reports OLS regressions of *I(Class Action – Projections)* on *Revenue CAGR* and controls. For our historical revenue and transaction multiple variables (i.e. *Revenue$_{t-1}$*, *Historical Revenue CAGR*, and *Transaction Value to Revenue*), we use the historical revenue and transaction multiple from the merger proxy statement. Year and industry fixed effects are included.

All variables are defined in Appendix A.

with subsequent class action lawsuits in a simple regression in column (1); when controlling for SPAC characteristics, target characteristics, and time since de-SPAC acquisition in column (2); when controlling for historical revenue-based measures in columns (3)–(5); and when controlling for all historical revenue-based measures simultaneously in column (6). To provide further evidence that the incidence of class action lawsuits is linked to aggressive forecasts, we further categorize the class action lawsuits in our sample. In Table 11, Panel B, we use our projection-specific measure of class action lawsuits, *I(Class Action – Projections)*. Our results examining the propensity of class action lawsuits that we identify as projection specific in Panel B are consistent with our findings in Panel A, providing further evidence that aggressive projections are associated with subsequent litigation.

Although SPAC firms and their targets have used public offerings to provide FLS (and communicate their story), our results provide evidence that such forecasts (disclosed at the de-SPAC merger announcement) may predict which firms will be targeted by subsequent class action litigation. Although many of these cases are not yet settled, the association between forecasted growth and impending litigation contradicts existing arguments that SPAC regulatory loopholes permit a "license to lie."[40] Coupled with our evidence on the appeal of high revenue growth forecasts to retail investors and their generation of greater social media attention, this finding suggests that such forecasts may not be fully understood by unsophisticated capital market participants following a deal's announcement.

V. CONCLUSION

We document a strong association between the revenue FLS provided in SPAC acquisitions and attention from capital market participants, especially retail investors and social media. We also provide evidence that a high *Revenue*

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[40] Although fairness opinions (FOs) are intended to shield acquirers from litigation, we find that *High CAGR* SPACs are less likely to provide FOs on the acquisition in the SPAC setting than *Low CAGR* SPACs (untabulated).

CAGR is predictive of future underperformance and class action litigation. Although we find that market reactions, retail investor trading activity, and social media coverage are positively related to revenue FLS, we observe weaker and inconsistent relations with historical revenue information (and its inclusion in the investor presentation).

Given its objective to protect Main Street investors (Even-Tov, Patatoukas, and Yoon 2022), our evidence on the impact of FLS on retail investors warrants the SEC's interest. Our study is timely given recent regulatory proposals to (1) exclude SPACs from Safe Harbor for FLS, (2) bar advisors from marketing SPACs to retail investors, and (3) increase disclosures surrounding projections used in de-SPAC transactions (Flook 2021; SEC 2022). Our evidence shows that revenue FLS are predictive of underperformance in SPAC returns following merger completion. Pairing this empirical association with our evidence that firms with high revenue growth forecasts draw greater social media attention and appeal more to retail investors suggests that they may be misled by SPAC disclosures. This scenario would corroborate the SEC's concerns about the effectiveness of disclosures provided in de-SPAC merger transactions and the potential conflict of interest between sponsors, who benefit from its completion, and retail investors (SEC 2022).

We issue an important caveat around our findings. We cannot be certain that we have identified and included all determinants that could be correlated with investors' responses and long-term SPAC outcomes as a function of revenue projections. For example, it is possible that retail investors are attracted to lottery-type firms (e.g., Barberis and Huang 2008; Han and Kumar 2013; Kumar 2009) and that these firms provide forward-looking aggressive revenue forecasts that are but one component of investors' information sets. We partially address the concern of correlated omitted variables (OVs) by calculating the impact threshold for a confounding variable (ITCV) based on Larcker and Rusticus (2010).[41] Although we cannot rule out the possibility that an OV influences our other results, the ITCV analysis suggests that the impact of such a variable would need to be rather large in magnitude to overturn our findings. Regardless, our empirical findings should be interpreted with caution.

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[41] The ITCV indicates how large the impact of an OV would need to be relative to the most impactful control variables to render the coefficient on *Revenue CAGR* insignificant ($p > 0.10$). Focusing on our results that are robust to the inclusion of all historical revenue controls, we find (untabulated) that an OV would need to have least 2.85 (*IP CAR*), 2.58 (*Retail Imbalance*), 3.13 (*Social Media Mentions*), 3.44 (*Social Media Mentions – Revenue*), 7.53 (*Raw Return*), 2.0 (*Size and Industry Portfolio Adjusted Return*), and 4.19 (*I(Class Action)*) times the impact of the control variable with the largest impact on the *Revenue CAGR* coefficient to convert it from statistically significant to insignificant.

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APPENDIX A

Variable Definitions

Variables	Definition
Dependent Variables	
IP CAR	Cumulative market-adjusted return in the five-day window [−2, +2] around the investor presentation filing date (IP date). (Source: CRSP)
Retail Imbalance	The daily average of the sum of retail purchases less the sum of retail sales scaled by the total retail shares traded during the days [−2, +2] relative to the IP date. Retail trades are identified following the methodology in Boehmer et al. (2021). (Source: TAQ)
Large Imbalance	The daily average of the sum of large purchases less the sum of large sales scaled by the total large shares traded during the days [−2, +2] relative to the IP date. Large trades are identified as trades over $50,000. (Source: TAQ)
Social Media Mentions	The total number of tweets that mention the SPAC ticker during the five-day window [−2, +2] around the IP date. In regression analysis, the number of mentions is natural log adjusted. Due to the presence of zeroes, 1 is added to the number of mentions before log adjusting. (Source: Twitter API)
Social Media Mentions – Revenue	The total number of tweets that mention all of the following: (1) the SPAC ticker, (2) the words "revenue" or "sales", and (3) the words "forecast," "project," or "future" in the five days surrounding the investor presentation filing date. In regression analysis, the number of mentions is natural log adjusted. Due to the presence of zeroes, 1 is added to the number of mentions before natural log adjusting. (Source: Twitter API)
Traditional Media Mentions	The total number of news articles identified by Ravenpack as having a relevance score equal to 100 during the five-day window [−2, +2] around the investor IP date. In regression analysis, the number of mentions is natural log adjusted. Due to the presence of zeroes, 1 is added to the number of mentions before natural log adjusting. (Source: Ravenpack)
Analyst Coverage	The number of analysts who issue an annual earnings forecast for the first fiscal year after merger completion. In regression analysis, the number of total analysts is natural log adjusted. Due to the presence of zeroes, 1 is added to the number of analysts before natural log adjusting. (Source: I/B/E/S)
I(Class Action)	An indicator equal to 1 if a class action lawsuit with at least one allegation of materially false or misleading statements is filed against the de-SPAC firm post-merger completion. (Source: SCAS)
I(Class Action – Projections)	An indicator equal to 1 for deals that satisfy the following conditions: (1) the SPAC was the subject of a class action lawsuit with at least one allegation of materially false or misleading statements, and (2) allegations in the class action lawsuit mention specific future financial metrics or refer to "future financial prospects." (Source: SCAS)
Forecast Bias	The difference between forecasted revenue and actual revenue scaled by actual revenue in the first fiscal year after merger completion. (Source: Compustat)
Raw Return	Buy-and-hold return computed at a 12-month horizon post-merger effective date. (Source: CRSP)
Size and Industry Portfolio Adjusted Return	Buy-and-hold return adjusted for the buy-and-hold return of an equal-weighted portfolio of the 20 firms in the same two-digit SIC code industry as the SPAC target with the closest size that were traded for at least five years, computed at a 12-month horizon post-merger effective date. (Source: CRSP)
SPAC Characteristics	
Revenue CAGR	*Revenue CAGR* is computed by applying Equation (2) to target revenue projections disclosed in investor presentations. In regression analysis, this value is natural log adjusted. (Source: Investor presentation)
I(Revenue$_{t-1}$)	An indicator equal to 1 if the target's total revenue in the year before the de-SPAC merger is disclosed in the investor presentation and 0 otherwise. (Source: Investor presentation)
Revenue$_{t-1}$	The total revenue of the de-SPAC target in the year before the de-SPAC merger. In regression analysis, the natural log-adjusted value is used. In investor presentation event study analyses, *Revenue$_{t-1}$* is taken from information disclosed in the investor presentation. In post-merger outcome analyses, *Revenue$_{t-1}$* is taken from information disclosed in the merger proxy statement. In regression analysis, this value is natural log adjusted. (Source: Investor presentation, merger proxy)

APPENDIX A (continued)

Variables	Definition
I(Historical Revenue CAGR)	An indicator equal to 1 if *Historical Revenue CAGR* can be computed from information released in the investor presentation and 0 otherwise. (Source: Investor presentation)
Historical Revenue CAGR	*Historical Revenue CAGR* is computed by applying Equation (2) to target historical revenue, ending one year before the merger. In investor presentation event study analyses, *Historical Revenue CAGR* is computed using information disclosed in the investor presentation. In post-merger outcome analyses, *Historical Revenue CAGR* is computed using information disclosed in the merger proxy statement. In regression analysis, this value is natural log adjusted. Due to the presence of negative values, 1 is added to the value before natural log adjusting. (Source: Investor presentation, merger proxy)
I(Transaction Value to Revenue)	An indicator equal to 1 if *Transaction Value to Revenue* can be computed from information released in the investor presentation and 0 otherwise. (Source: Investor presentation)
Transaction Value to Revenue	The ratio of the de-SPAC transaction value to the target's total revenue in the year before the de-SPAC merger. In investor presentation event study analyses, *Transaction Value to Revenue* is computed using information disclosed in the investor presentation. In post-merger outcome analyses, *Transaction Value to Revenue* is computed using information disclosed in the merger proxy statement. In regression analysis, this value is natural log adjusted. (Source: Investor presentation, merger proxy)
I(Cash Deal)	An indicator variable equal to 1 if the medium of exchange is cash and 0 otherwise. (Source: SDC)
Relative Size	The transaction value as a fraction of the market capitalization of the acquirer. (Source: SDC)
MVE	The market value of a SPAC's equity as of the de-SPAC merger announcement date. In regression analysis, the natural log-adjusted value is used. For investor presentation event study analyses, we measure MVE as of investor presentation filing date. For post-merger outcome analyses, we measure MVE as of merger effective date. (Source: CRSP)
Time To Acquisition	The number of days between the SPAC IPO and the merger announcement. (Source: SDC)
Age	The age of the de-SPAC target in years as of the merger announcement date. In regression analysis, the natural log-adjusted value is used. (Source: Company websites)
I(PIPE)	An indicator equal to 1 if the fraction of the firm owned by PIPE investors immediately after the acquisition is disclosed in the investor presentation and 0 otherwise. (Source: Investor presentation)
PIPE	Fraction of the firm held by PIPE investors immediately after the acquisition. In investor presentation event study analyses, *PIPE* is taken from information disclosed in the investor presentation. In post-merger outcome analyses, *PIPE* is taken from information disclosed in the merger proxy statement. (Source: Investor presentation, merger proxy)
HHI	The market concentration of the target firm's industry measured using the Herfindahl-Hirschman Index. Specifically, we sum the squared market concentration of all firms in the target's two-digit SIC industry, where market concentration is computed as firm annual sales divided by total industry annual sales. For investor presentation event study analyses, we measure HHI as of the investor presentation filing date. For post-merger outcome analyses, we measure HHI as of the merger effective date. (Source: Compustat)
Time Since De-SPAC	The number of months between the merger effective date and August 31, 2022, the end of the *I(Class Action)* data collection period. In regression analyses, the natural log-adjusted value is used. (Source: SDC)