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Corporate socio-political activism and retail investors: Evidence from the Black Lives Matter campaign

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ABSTRACT

This study investigates retail investor responses to corporate engagement in corporate socio-political activism (CSA). Using manually collected evidence of companies' support for the Black Lives Matter (BLM) campaign, we find that speaking up in support of BLM attracts retail investor attention. However, it influences their investment decisions only if speaking up is backed up by a monetary donation to BLM-related causes on the same day. This effect is observed for companies that have black directors on their board and companies headquartered in Democrat-leaning states. There is no corresponding increase in firm value. Our results suggest that retail investor preferences for companies that engage in CSA are likely guided by moral sentiment.

1. Introduction

There is increasing pressure on companies to communicate their stance on social and political issues – a so-called “corporate socio-political activism” (CSA) phenomenon. A recent study shows that 64% of global consumers buy or boycott a brand based on its stand on societal issues (Edelman Earned Brand, 2018). At the same time, CSA is rather polarizing, concerning issues with high publicity and partisanship (Bhagwat et al., 2020), unlike the related but better-studied concept of corporate social responsibility (CSR), which involves higher societal consensus. As a result, ‘taking sides’ on these issues risks not only a company’s image or reputation but also alienating a large group of corporate stakeholders who disagree with the company’s stance. Indeed, a recent study by Bhagwat et al. (2020) shows that companies that engage in CSA experience a decrease in market value. Further evidence by Elfenbein et al. (2019) suggests that unverifiable charity promises are considered ‘cheap talk’, negatively affecting sales. In light of these findings and the

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apparently conflicting views on CSA, in this paper, we explore how retail investors react to companies' engagement in CSA.

Understanding retail investor preferences and motives has been of both practical and academic interest for quite some time, but some recent events have necessitated a deeper exploration of these issues. In particular, the 'meme-stock frenzy' has shown clearly that large numbers of (coordinating) retail investors, driven partly by idealistic and moral values, can cause significant price distortions.¹

Unlike institutional investors, whose investments are bound by contractual and collective responsibilities, retail investors have total decision-making freedom. If retail investors were rational, as suggested by some academic studies (see, e.g., [Kaniel et al., 2012](#); [Wang and Zhang, 2015](#)), one would expect to observe a negative response from them to CSA, given its negative impact on a firm's value overall. However, retail investors have also been shown to be irrational, and their trades are motivated by sentiment rather than fundamentals.² Earlier experimental studies have found that retail investors have a taste for CSR ([Hartzmark and Sussman, 2019](#); [Friedman and Heinle, 2016](#); [Cheng et al., 2015](#)). Further, using social identity theory and an experimental setting, [Durney et al. \(2020\)](#) show that retail investors' investment decisions are influenced by the alignment between the company CEOs and their own stance on a social matter. This implies that retail investors might respond favorably to CSA in certain circumstances. Given these potentially contradicting outcomes, our study aims to shed light on whether, and under what conditions, retail investors value CSA.

Our empirical setting is based on the Black Lives Matter (henceforth BLM) protests that erupted across the US and the rest of the world after the death of George Floyd at the hands of the police in Minneapolis on the 25th of May 2020. This setting is suitable for our study for several reasons. First, it was the first time that the corporate response to social injustices was widespread – more than half of the S&P 500 companies have expressed their support for the movement in one way or another. Second, all these responses happened within a relatively short period, making them easy to identify. Third, BLM is a perfect example of a controversial social issue on which society is sharply polarized.³ All these factors allow us to be the first to conduct an empirical study and quantitatively measure how retail investors respond to corporations supporting a single controversial issue - the BLM movement.⁴

Our preliminary analysis suggests that companies with black directors and more female directors on the board are more likely to speak up, suggesting the importance of racial and gender diversity of the board of directors in CSA engagement. In addition, both board independence and board size are positively related to companies' engagement in CSA. Finally, the political inclination of companies also seems to be relevant, with companies that donate more to the Democratic party and companies headquartered in states where the governor is a Democrat being more likely to speak up.

To investigate retail investor appetite for CSA, we first examine the abnormal Google search frequency, commonly considered as a proxy for retail investor attention (see, e.g., [Da et al., 2011](#); [Drake et al., 2012](#)), on days of the BLM support announcements. We show that the search frequency increased for companies on the day when they spoke up. The results suggest that speaking up in support of BLM did not go unnoticed by investors; however, we still need to establish whether this led to an investment in these companies.

To carry out further investigation, we use a dataset from Robintrack that contains data on users' stock holdings from the popular US-based retail investment platform Robinhood.⁵ First, there are no statistically significant changes in the number of retail investors holding a stock on the days that companies only spoke up in support of BLM or only announced a monetary donation to BLM after previously speaking up. However, relative to the aforementioned groups, there was a significant increase in the number of retail investors holding stocks in the company when they *simultaneously* spoke up and announced a monetary donation to BLM on the same day. The results suggest that retail investors only value strong CSA commitments but not 'cheap talks', complementing the findings of [Elfenbein et al. \(2019\)](#) and [Durney et al. \(2020\)](#).

A natural question to ask is whether the retail investors' reaction is influenced by rationality. If that were the case, one would expect to observe an increase in firm value around CSA engagements. However, in line with [Bhagwat et al. \(2020\)](#), we find a decrease in the abnormal market value of firms that simultaneously spoke up and donated. Therefore, it seems that retail investors' investment decisions are not in line with the general investor consensus and are more likely to be guided by sentiment, rather than by fundamentals.

To provide further insight into the nuances of the effect of CSA on retail investor investment decisions, we carry out subsample tests. We find that retail investors' interest increases for companies that speak up and donate to BLM at the same time only if these companies had, at the time of speaking up, a black director on board. This suggests that retail investors are more likely to be persuaded

¹ In January 2021, several stocks, such as GameStop, AMC, and Bed, Bath and Beyond, experienced an extraordinary influx of retail investor attention. One of the motivations behind investors' actions was to punish 'greedy' hedge funds who took large short positions on these stocks. These retail investors were primarily coordinated via the "WallStreetBets" subreddit (<https://www.reddit.com/r/wallstreetbets/>) which led to very large stock price fluctuations. It is widely accepted that this unusual activity was driven by irrationality, specifically, herding (<https://www.ft.com/content/971df303-726a-4bdf-93eb-9a9e848f7109>).

² See e.g. [Lee et al. \(1991\)](#), [Bodurtha et al. \(1995\)](#), [Neal and Wheatley \(1998\)](#), [Gemmill and Thomas \(2002\)](#), [Burch et al. \(2003\)](#) and [Baker and Wurgler, 2006](#).

³ A 2020 survey by Pew Research Center has suggested that the support for the movement among US adults was 55% (<https://www.pewresearch.org/fact-tank/2020/09/16/support-for-black-lives-matter-has-decreased-since-june-but-remains-strong-among-black-americans/>).

⁴ [Bhagwat et al. \(2020\)](#) also measure the effects of controversial stance taking on investor preferences (firm value), but they have companies speaking up on different types of controversial issues (government scope, racial discrimination, gender equality, sexual orientation equality and others), scattered across several years.

⁵ <https://robintrack.net/>

by the gesture if a company already has achieved a certain level of board racial diversity, i.e., speaking up is perceived to be credible.⁶

It is possible that retail investors prefer companies that speak up in support of and donate to BLM because the companies' moral stance resonates with their own. According to the social identity theory, when companies speak up on a social issue, they are classified by investors as being part of their "in-group" if their views align, or part of their "out-group" if their views do not align (Tajfel et al., 1979; Tajfel, 1982; Crocker et al., 1987; Brewer, 1999; Zhong et al., 2008; Fu et al., 2012; Durney et al., 2020). These perceptions are important as in-group members tend to be viewed in a positive light, leading to positive affect, with the opposite result for out-group members (Ma-Kellams et al., 2011; Iyengar et al., 2012).

Alternatively, the increase in retail investor interest could be driven by a well-documented attention bias (Barber and Odean, 2008; Seasholes and Wu, 2007). Barber and Odean (2008) show that retail investors tend to buy stocks that grab their attention, e.g., those that feature heavily in the media, experience high abnormal trading volume, or have extreme stock returns. In light of these findings, it is possible that the results that we observe are due to the high visibility of certain companies in the news and online, and are not directly related to companies' engagement in CSA.

In an attempt to disentangle the attention bias from moral preferences, we first use subsample tests based on the companies' online visibility. If the attention bias were behind the results, we would expect the increase in holdings to be stronger for companies with high online visibility. We find the opposite, with less visible companies experiencing a higher influx of retail investors. These results lend some support to the moral alignment explanation.

To formally investigate the moral sentiment angle, we adopt the approach of Pan et al. (2022) by using the local norms to gauge retail investor preference toward social justice and fairness. We assume that retail investors based in states with Democrat-leaning voters are more liberal and, therefore, more likely to support BLM. Because of this and the well-documented local bias among investors,⁷ we would expect a stronger influx of retail investors in firms headquartered in states run by a Democratic governor or states where the majority of the population voted for a Democratic presidential candidate. Our results bear this out, showing an increase in retail investor interest for firms that simultaneously spoke up and donated only if they are headquartered in Democrat-leaning states.

In order to test the robustness of our findings, we conduct two tests. First, we repeat all our regressions with a two-day cumulative change in retail investor holding instead of a one-day effect used in the main analysis. Second, we change how we define our main independent variables so that speaking up only and speaking up with donations are used as separate events in the analysis. Our results are robust to both of these alternative tests.

Our study contributes to the growing literature on corporate social activism and retail investors in two different ways. First, it contributes to the emerging literature on CSA by being the first to provide empirical evidence on how retail investors, increasingly important participants of capital markets, value CSA. Our results suggest that 'cheap talk' is irrelevant, and that only a solid and serious commitment is valued by retail investors. This complements the findings of Elfenbein et al. (2019) regarding the irrelevance of 'cheap talk' to market outcomes. This provides valuable guidance for corporate social engagement and corporate disclosure practices. This can also be considered by integrated reporting standard setters going forward regarding the relevance of corporate non-financial information communications.

Second, our paper contributes to the literature on retail investor behavior (Lee et al., 1991; Bodurtha Jr et al., 1995; Neal and Wheatley, 1998; Gemmill and Thomas, 2002; Burch et al., 2003; Baker and Wurgler, 2006; Durney et al., 2020). We provide novel empirical evidence not only on retail investor taste for CSA but also on the influence of moral sentiment on retail investors' portfolio allocation decisions. These are valuable insights for corporate decision-makers in finding a delicate balance between profit maximization and moral values in modern society.

The rest of this paper is structured as follows. Section 2 provides institutional background on the BLM movement and the events in Minneapolis in 2020. Section 3 discusses prior literature and our hypotheses. Section 4 outlines our data collection and sample construction. Section 5 presents analyses of corporate CSA engagement. Section 6 details analysis of investor reactions. Finally, Section 7 concludes the paper.

2. The death of George Floyd and the BLM movement

On May 25, 2020, George Floyd, an African American man, was killed during an arrest in Minneapolis, USA, by a white police officer, Derek Chauvin. After this incident, protests and demonstrations against police violence toward black people rapidly spread across the United States and internationally. These protests were organized mainly by Black Lives Matter (BLM) – a movement advocating for non-violent civil disobedience in protest against incidents of police brutality against African-American people.

Fig. 1 depicts the Google search frequency for the term "Black Lives Matter" in the US. Interest in the topic picked up quickly after George Floyd's death and peaked on the 2nd of June 2020, designated by the protestors as "Blackout Tuesday" – a collective response to racism and police brutality. Many companies participated by pausing their social media activity and business operations. Several days later, there was another smaller peak on the 6th of June, and after that, the search frequency decreased gradually and reached a quarter of its earlier peak value around the 15th of June.

⁶ An anecdotal example of such reasoning can be found in an article in the Financial Times – "A more stinging criticism is levelled at companies with overwhelmingly white leadership. When Saatchi & Saatchi posted on Instagram under a "Black Lives Matter" headline, the first commenter pointed out: "As seen on your website, there are no Black people on your top leadership team. Change comes from within — start there." <https://www.ft.com/content/6bd46c48-ee90-42b8-af70-78d949025c1d>

⁷ See e.g. Coval and Moskowitz (1999), Ivkovic and Weisbenner (2005) and Chi and Shantikumar (2017).

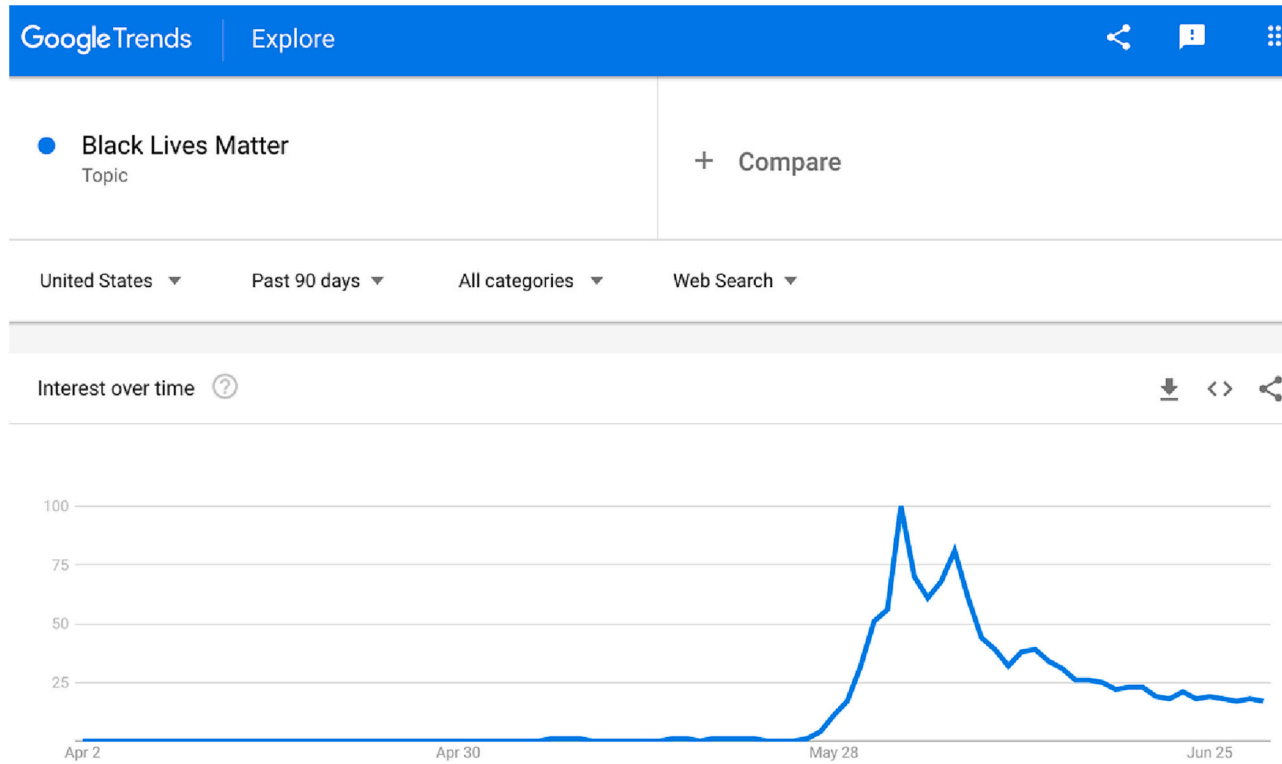


Fig. 1. Google search frequency for the term “Black Lives Matter”.

This figure shows Google search frequency for the term “Black Lives Matter” between the the 1st of April and the 1st of July 2020. The frequency of 100 corresponds to the highest search frequency in the given period, which occurred on the 2nd of June 2020, and frequencies on all other days are scaled with respect to that.

The aftermath of the events in Minneapolis is broadly seen as the first time corporations took a stance against injustice and social issues *en masse*. Therefore, this setting provides a unique opportunity to test whether investors attach any value to these public messages and actions of support.

3. Prior literature and hypothesis development

CSA has become an increasingly popular phenomenon in recent years. A survey by the [Global Strategy Group \(2016\)](#) of 1056 consumers found that 81% believe that companies should take action to address important societal issues.⁸ On the one hand, companies could shape public opinion and increase purchasing intent through CSA ([Chatterji and Toffel, 2019](#)). On the other hand, companies risk demotivating employees and alienating customers who disagree with the stance ([Burbano, 2021](#); [Dodd and Supa, 2014](#)).

Given these uncertain economic outcomes, a natural question to ask is how CSA engagement affects investors' investment decisions. A study by [Bhagwat et al. \(2020\)](#), which employs 293 CSA events associated with different socio-political issues such as gun control, racism, LGBT, and others, shows that investors consider CSA as a signal of misallocation of resources away from the profit-maximizing goal and toward a risky activity, resulting in a decrease in firm value. This decrease is more pronounced when the company's stance differs from stakeholders' values and brand image. However, this study does not account for investor heterogeneity. Institutional investors and retail investors are known to be different.

Recent developments in financial markets provide retail investors with easier access to financial and non-financial information and access to low-to-free commission trading platforms. These, coupled with the advent of the Covid-19 pandemic, have made retail investors more active and vital players in the capital market.⁹ [Fig. 2](#) shows that the number of retail investors holding stocks in US-listed companies on the Robinhood trading platform increased more than two-fold after the introduction of a nationwide lockdown in the US.

Despite being a significant player in the market, many studies suggest that retail investors' trades are often irrational and not necessarily motivated by fundamentals.¹⁰ Therefore, despite the evidence of the possible negative impact of CSA on firm value, there is still a possibility that retail investors would react in favor of such engagements.

While some experimental studies suggest that retail investors have preferences for more unambiguously positive CSR activities,¹¹ empirical evidence from [Moss et al. \(2020\)](#) shows different results - retail investors do not respond to CSR disclosures. Furthermore, if taking a stand is perceived as ingenuine, retail investors might react negatively to speaking up, the same way as buyers would avoid cheap talk listings on eBay, where donation promises are unverifiable, as found in [Elfenbein et al. \(2019\)](#). Therefore, it might require more substantial commitments and more credible actions from companies in support of the BLM movement to influence retail investor decisions. To shed light on how retail investors value CSA, we propose and test the first hypothesis:

H1. Retail investors react positively to CSA, conditional on the credibility of the commitment.

As discussed earlier, findings in the literature suggest that retail investor trades are motivated by sentiment rather than fundamentals. Retail investors tend to choose from the subset of stocks that catch their attention because their limited time and resources prevent them from considering all available information.¹² In addition, the experimental findings of [Durney et al. \(2020\)](#), using insights from social identity theory, show that retail investors buy more (less) stocks when their views align (misalign) with the company CEO's activism. Therefore, in the case of CSA, retail investors' reactions could be influenced by moral sentiment rather than by attention bias. To understand what influences retail investors' decisions, we propose and test the second hypothesis:

H2. Retail investor reaction to CSA is driven by moral sentiment rather than fundamentals or attention bias.

4. Sample and data collection

Our sample includes all the S&P 500 index constituent companies as of the beginning of May 2020 – the month when the BLM protests started following the death of George Floyd. In our setting, the event days are clustered in a short period between the 28th of May and the 18th of June. Furthermore, some companies made donation announcements days after their first BLM speaking up. Therefore, to ensure a sufficient control sample and to account for lagged donation announcements, we include two weeks before the first speaking up (28th of May) and after the last speaking up (18th of June). As a result, our final sample period is from the 14th of May 2020 to the 30th of June 2020 for all companies.¹³ After excluding companies with missing data and companies with confounding events during the sample period, our final sample includes 462 companies.¹⁴

⁸ https://live-gsg-new.pantheonsite.io/wp-content/uploads/2012/07/112016_BusinessPolitics_forward.pdf

⁹ In the United States, as of October 2019, domestic households owned approximately 37.6% of US equities (<https://www.sifma.org/resources/research/who-owns-stocks-in-america/>)

¹⁰ [Lee et al. \(1991\)](#); [Bodurtha et al. \(1995\)](#); [Neal and Wheatley \(1998\)](#); [Gemmill and Thomas \(2002\)](#); [Burch et al. \(2003\)](#); [Baker and Wurgler \(2006\)](#).

¹¹ See e.g. [Hartzmark and Sussman \(2019\)](#), [Friedman and Heinle \(2016\)](#), [Cheng et al. \(2015\)](#).

¹² [Barber and Odean \(2008\)](#); [Seasholes and Wu \(2008\)](#); [Barber et al. \(2022\)](#).

¹³ Both speak-up and non-speak-up companies have the same number of firm-day observations to avoid over-representation.

¹⁴ We remove the companies that had confounding corporate events (earnings, dividends, or merger and acquisition announcements) during the three working days either side of the first speaking-up date, i.e., (-3;3) window.

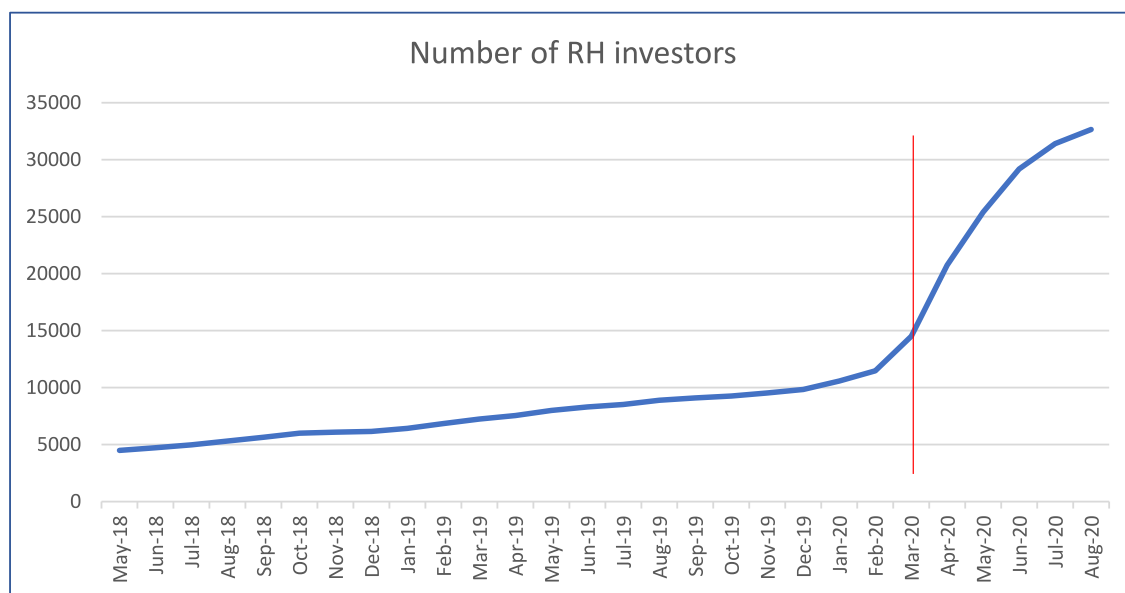


Fig. 2. Robinhood investor timeline.

This figure shows the total number of accounts that invest in stocks on the Robinhood trading platform (RH) between May 2018, when the data coverage by Robintrack starts, and August 2020. The red line indicates the beginning of the Covid-19 related lockdown in the US. (For interpretation of the references to colour in this figure legend, the reader is referred to the web version of this article.)

4.1. Corporate responses to the BLM protests

In order to identify companies' responses to the BLM protests, we manually checked through companies' corporate websites, as well as their official Twitter, Facebook, LinkedIn, and Instagram accounts for any posts, tweets, and news releases that mentioned the death of George Floyd or taking a stance against racism as a response to the events in Minneapolis.

There were several ways in which companies communicated their position on these issues. Some companies or one of the companies' senior executives showed their support for the African-American community by making a social media post on behalf of the company. Fig. 3 provides some examples. For instance, the following is an excerpt from a caption to a Delta Airlines' Instagram post on the 1st of June 2020¹⁵:

"...The lives of our Black employees, customers and community partners matter. We will use whatever means we have to ensure that the world we see now, tomorrow and in the future is a world that is just."¹⁶

Others did not issue a statement but instead took part in the so-called "Blackout Tuesday" – by posting a picture of a black square on Tuesday, the 2nd of June, as a sign of solidarity with the African-American community (see Hasbro post in Fig. 3). These social support cases, i.e., tweets, posts, and participation in the "Blackout Tuesday" are classified as "speaking up".

Finally, some companies announced that they would donate to one of the organizations supporting the African-American community, such as the NAACP Legal Defense Fund and the National Urban League (see, e.g., the Walt Disney company post in Fig. 3). We manually collected data on these donation commitments.

4.2. Retail investor data

Google search frequency of a company's official ticker is considered as a proxy for retail investor attention to a particular stock (Da et al., 2011). Therefore, to test whether speaking up attracts retail investor attention, we first obtain daily Google search frequency for tickers of companies in our sample from Google Trends. We then estimate the daily abnormal Google search frequency ($AbSVI$) for each stock as in Da et al. (2011), which equals the log of search interest of the ticker on the day minus the log of the mean of searches of the same ticker on the same weekday during the previous eight weeks.

To further investigate retail investor reaction to CSA, we rely on the data on retail investor holdings from the Robinhood trading platform obtained through Robintrack. This independent website stores and shares the data on individual holdings.¹⁷

For each stock traded on Robinhood, Robintrack reports the number of subscribers holding the stock hourly. Since our analysis is on

¹⁵ See Figure 3 for the full quote.

¹⁶ <https://www.instagram.com/p/CA6JPRdFmJe/>

¹⁷ Robinhood is an online broker that enables individuals to buy stocks and other financial instruments through its website or mobile app.



Fig. 3. Examples of companies' support for the African American community and the BLM movement on their social media accounts. This figure shows some screenshots from companies' social media (Twitter and Instagram) accounts.

a daily level, we only keep the first observation after major US exchanges close (4:00 pm EST) as the end-of-the-day holding. Our primary dependent variable is the one-day adjusted change in the number of retail investors holding a stock. We first estimate the one-day change in the number of individuals holding a stock from day $t-1$ to t . These changes in retail investors' holdings are then adjusted for the underlying aggregate growth in the number of Robinhood investors, defined as the proportion of Robinhood investors holding the stock at the end of day $t-1$ multiplied by the one-day change in the aggregate number of Robinhood investors reported across all

stocks from the end of day $t-1$ to the end of day t , as shown in the equation below:

$$AbRI[t]_{i,t} = \frac{RI_{i,t} - RI_{i,t-1}}{RI_{i,t-1}} - \frac{RI_{i,t-1}}{Robinhood_{t-1}} * \frac{Robinhood_t - Robinhood_{t-1}}{Robinhood_{t-1}} \quad (1)$$

where $AbRI[t]_{i,t}$ denotes adjusted abnormal changes in the number of retail investors holding stock i in a one-day window, while $RI_{i,t}$ and $RI_{i,t-1}$ denote the number of retail investors holding stock i at the end of day t and day $t-1$, respectively. $Robinhood_t$ and $Robinhood_{t-1}$ denote the aggregate number of Robinhood investors reported across all stocks at the end of day t and day $t-1$, respectively.

Note that this variable reflects the change in the number of investors holding a stock rather than the change in the *number of stocks* held by retail investors. However, one would expect the two measures to be positively correlated. Despite this, in the interests of prudence, in our analyses, we use the term ‘retail investor interest’ rather than ‘retail ownership’ to denote the change in the number of retail accounts holding the stock.

4.3. Abnormal return data

In order to measure the stock price response to the firms’ public support for the BLM movement, we calculate abnormal daily stock returns. The abnormal return for company i and day t is calculated as:

$$AbRet_{i,t} = r_{i,t} - a_i - b_i * r_{m,t} \quad (2)$$

where a_i and b_i are estimated as parameters of the market model (MacKinlay, 1997) using an estimation period of 255 trading days ending 21 trading days before the beginning of our event window, $r_{i,t}$ is stock return of firm i on day t , and $r_{m,t}$ is the value-weighted return of the CRSP index on day t .

4.4. Firm characteristics

To investigate the determinants of speaking up and donation, we employ a set of variables that capture firm characteristics such as the characteristics of the board of directors, ESG, firms’ political leaning, institutional ownership, industry, and other firm characteristics.

4.4.1. Characteristics of the board of directors

We expect the decision to support BLM to correlate with the racial diversity of the companies’ boards. We obtain the identities of all black directors on S&P 500 boards from Black Enterprise – a business information resource for African-American entrepreneurs and African-American-owned businesses.¹⁸ The names of all black directors were manually matched with director information from BoardEx. We also include board size, board independence, and board gender diversity in our analysis.¹⁹ In addition, to control for CEO demographics that might be correlated with a company’s decision to speak up, we also include CEOs’ age and gender.

4.4.2. Corporate social responsibility

Since one would expect speaking up to be correlated with other related measures of corporate social responsibility, we include the environmental, social, and governance (ESG) score in the speaking up determinants test.²⁰

4.4.3. Institutional ownership

It is unclear if institutional investors also have preferences regarding companies’ speaking up and donating. We, therefore, include companies’ institutional ownership in the determinants test, which is measured as a proportion of companies’ outstanding shares owned by institutions.

4.4.4. Political activities

To gauge the influence of a firm’s political inclinations on CSA engagement, we use political activities as proxies for companies’ political leaning, including political donations (*Political donation*) and whether the state in which the company is headquartered is governed by a Democrat (*HQ state politics*).

4.4.5. Online visibility

Earlier studies have shown a positive relationship between companies’ online visibility, particularly the number of followers or the

¹⁸ Black Enterprise annually issues its Registry of Corporate Directors, in which they identify the African-Americans who serve on the boards of the S&P 500 companies (<https://www.blackenterprise.com/lists/2019beregistry/>). The particular issue of the registry that we use in our analysis is the 2019 edition, issued in October of that year, as this is the last edition before the events in Minneapolis.

¹⁹ Previous studies show a positive influence of board size, board independence, and female board representation on corporate social responsibility (Bear et al., 2010; Endrikat et al., 2021; Harjoto et al., 2015).

²⁰ The result is similar when we include in our analysis a component of the ESG score that only accounts for companies’ social activities (the ‘‘S’’ in ESG).

company's presence on Twitter, and their CSR rating (Lee et al., 2013; Balasubramanian et al., 2021). Therefore, it is also possible that a company's decision to speak up is influenced by how many followers they have on Twitter. To control for this, we include the log of the number of Twitter followers of the main corporate Twitter account.

4.4.6. Black labor force

Companies' decision to speak up could also be influenced by the fraction of the company's African-American labor force. We do not have access to company-level labor force data, so we approximate it by the proportion of the African-American labor force (as of 2019) in the state where the company is headquartered.

4.4.7. High-tech

Manjoo (2017) suggests that companies in high-tech industries tend to engage in more activities that are deemed liberal. Therefore, we also include a dummy variable for companies in high-tech industries.

Finally, we employ other firm-level variables in our analysis to account for a firm's financial distress, profitability, and growth, such as firm size, leverage, return on equity, and market-to-book ratio. Appendix A1 provides the definitions of all variables and sources of information used in this paper.

5. Analyses of corporate engagement in CSA

5.1. Corporate support for BLM

Table 1 presents the summary of corporate responses to BLM. Panel A of Table 1 shows the distribution of companies that spoke up and/or donated and companies with black directors across industries.

Overall, 292 (63%) of our sample companies spoke up. Consumer discretionary is the industry with the highest number of companies that spoke up (58). The industry with the highest fraction of participating companies is telecoms, where all 11 companies spoke up. On the other hand, the industry with the lowest number and proportion of companies speaking up is the energy industry, with only 3 out of 27 companies speaking up.

Industries with the highest proportion of donating companies are consumer staples and telecoms (53% and 44%, respectively). Overall, 119 (26%) companies in our sample have donated money to BLM-related causes. We also note that 59% of the sample have at least one black director. Utilities is the industry with the highest proportion of companies with black directors, at 90%. The lowest proportion is observed in the technology industry.

Panel B reports the ten largest companies in terms of market value, for which we could not find evidence of public support for the BLM movement. Energy giant Exxon Mobil leads this list. The companies with the earliest identifiable public reactions in our sample were Microsoft, Apple, and JP Morgan Chase, all of which issued a statement on the 28th of May, just three days after the death of George Floyd, as shown in Panel C of Table 1.

Panel D of Table 1 shows the distribution of the first speaking-up occasions for our sample companies across time. Starting on the 28th of May, there was a daily increase in the number of new companies declaring their support for the BLM protests, which peaked on the 2nd of June, the "Blackout Tuesday". We limit the declaration of support period for the main tests in our study to the 18th of June for two reasons. First, there are very few new statements after this date (12), which are spread out all the way until the 19th of November 2020. Second, we would like to avoid the possible effect of the 19th of June, as this date is known as "Juneteenth" - a holiday celebrating the end of slavery in the US, since usually on this date, many companies make posts on their social media accounts.

Finally, Panel E lists the biggest donors. Fifth Third Bank, PNC Financial, and Bank of America pledged to invest at least \$1 billion each. Note that these are not always made directly and in full to a charity or an organization, but rather are being pledged to be spent on 'developing the community'.

5.2. Summary statistics and correlation analysis

Table 2 reports summary statistics for all firm characteristics used to predict the probabilities of speaking up and donating in our analysis and their correlation matrix. All continuous variables used in this paper are winsorized at 1% and 99%. Significantly more companies that spoke up have at least one black director on their boards as opposed to those that did not (71% vs. 37%). This is not surprising since one would expect companies with more diverse boards to be more likely to speak up on diversity, which was the central theme of the BLM protests. However, this does not apply to the energy industry, where 11 companies have black directors, but only three companies spoke up in support of BLM.

Further, companies that spoke up also have a significantly higher proportion of female directors as another diversity indicator, although this difference is only four percentage points (29% vs. 25%). Companies that spoke up also have bigger and more independent boards, potentially being governed better. However, there are no differences in terms of CEO gender or age.

The average company in our sample is worth about \$41 billion, and companies that spoke up are about twice the size of those that did not (\$50 bln vs. \$24 bln). This is perhaps due to the public pressure that is felt more by the larger companies. The speak-up group, in general, has a higher leverage level than the non-speak-up group, while the differences in terms of return on assets and market-to-book ratio between the two groups are insignificant.

As expected, ESG and social scores are significantly higher for the speak-up group, perhaps due to the pressure derived from a "good" reputation. Institutional ownership is higher in companies that do not speak up. Contrary to the aforementioned popular belief,

Table 1
Summary of corporate responses to the BLM activism.

Panel A. Distribution of companies that speak up and those with black directors on board across industries				
Industry	Number and fraction of companies			
	Total	Speak up	Donate	Black director
Basic Materials	17	10 <i>0.59</i>	1 <i>0.06</i>	11 <i>0.65</i>
Consumer Discretionary	79	58 <i>0.73</i>	30 <i>0.38</i>	51 <i>0.65</i>
Consumer Staples	30	26 <i>0.87</i>	16 <i>0.53</i>	19 <i>0.63</i>
Energy	27	3 <i>0.11</i>	0 <i>0</i>	11 <i>0.41</i>
Financials	58	46 <i>0.79</i>	20 <i>0.34</i>	46 <i>0.79</i>
Health Care	51	29 <i>0.57</i>	9 <i>0.18</i>	29 <i>0.57</i>
Industrials	82	45 <i>0.55</i>	13 <i>0.16</i>	49 <i>0.6</i>
Real Estate	31	12 <i>0.39</i>	3 <i>0.1</i>	11 <i>0.35</i>
Technology	50	32 <i>0.64</i>	19 <i>0.38</i>	15 <i>0.30</i>
Telecommunications	9	9 <i>1</i>	4 <i>0.44</i>	4 <i>0.44</i>
Utilities	28	22 <i>0.79</i>	4 <i>0.14</i>	25 <i>0.89</i>
Total	462	292 <i>0.63</i>	119 <i>0.26</i>	271 <i>0.59</i>

Panel B. 10 largest companies by market capitalization that have not publicly released a statement of support for the BLM movement		
Company name	Industry	Market value (\$bil)
Exxon Mobil	Energy	182
Nvidia	Technology	174
Oracle	Technology	163
Costco	Consumer Discretionary	133
Philip Morris	Consumer Staples	114
Nextera Energy	Utilities	111
Lockheed Martin	Industrials	108
Broadcom	Technology	104
American Tower	Real Estate	104
Linde	Basic Materials	95

Panel C. First companies to publicly speak out in support of the BLM movement in the aftermath of the death of George Floyd		
Company name	Industry	Speaking up date
JP Morgan Chase	Financials	28/05
Apple	Technology	28/05
Microsoft	Technology	28/05
Wells Fargo	Financials	29/05
Target	Consumer Discretionary	29/05
Delta	Consumer Discretionary	29/05
Ecolab	Basic Materials	29/05
CBRE Group	Real Estate	29/05
Citigroup	Financials	29/05
Procter & Gamble	Consumer Staples	29/05
Cardinal Health	Health Care	29/05
Nike	Consumer Discretionary	29/05
CH Robinson	Industrials	29/05
Medtronic	Health Care	29/05
The Travelers Co.	Financials	29/05

Panel D. Distribution of companies that spoke up by their first public speaking-up date and their average market value	
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(continued on next page)

Table 1 (continued)

Panel D. Distribution of companies that spoke up by their first public speaking-up date and their average market value		
Speaking up date	N	Avg market value (\$bln)
28/05	3	954
29/05	12	76
30/05	16	94
31/05	19	114
1/06	59	50
2/06	61	36
3/06	52	43
4/06	12	40
5/06	23	40
6/06	4	22
7/06	8	32
9/06	5	19
10/06	3	9
11/06	4	42
12/06	2	50
16/06	4	46
17/06	1	17
18/06	4	46

Panel E. Biggest donors to the causes of social justice in the aftermath of the death of George Floyd. Donation figures are in \$million			
Company name	Industry	Donation	Date
Fifth Third Bank	Financials	2800	05/06
PNC Fin Services	Financials	1000	18/06
Bank of America	Financials	1000	02/06
Paypal	Industrials	530	11/06
PepsiCo	Consumer Staples	400	16/06
Apple	Technology	100	11/06
Anthem	Health Care	50	08/06
Nike	Consumer Discretionary	40	05/06
Eli Lilly &Co	Health Care	25	13/06
Boeing	Industrials	25	10/06
Northern Trust	Financials	20	15/06
US Bancorp	Financials	15	05/06
Humana	Health Care	12	03/06

This table presents the summary of corporate responses to the BLM activism. Panel A reports the distribution of all sample companies across broad Industry Classification Benchmark (ICB) industries. Additionally, it shows both the total numbers and percentages of companies that show support for the BLM movement and companies that have black directors on board by industry. Panel B reports the names, industries, and market capitalizations (as of May 1st, 2020) of the ten biggest companies for whom we find no evidence of support for BLM. Market capitalizations in this panel are measured as of May 1, 2020. Panel C lists the companies that were the earliest to show support for BLM on their social media accounts or corporate websites. This panel reports the names, industries, and the earliest identified speaking-up date. Only companies that spoke up on May 28th and 29th, 2020, are included in this panel. Panel D reports the distribution of companies by speaking-up date. It also shows the average market capitalization of companies that spoke up on a given date. Panel E lists the companies that donated the most to BLM-related causes during our sample period.

preliminary results in Table 2 show that high-tech companies are not more likely to speak up than others.

Companies that spoke up are also more likely to be more Democratic, both in terms of their political donations and headquarter politics. This aligns with expectations, as more liberal companies are more likely to support a liberal cause. Companies that spoke up are also more visible online, measured by the number of Twitter followers. Interestingly, being headquartered in a state with a high African-American labor force is not associated with speaking up in any way.

Panel B of Table 2 reports the correlation matrix for our variables. The variables which are most highly correlated with the speaking up and BLM donation variables are the *Black director* and *ESG score* variables. This is expected since companies with black directors and those with high ESG scores would be more likely to support a social movement such as BLM, as discussed earlier in the paper.

5.3. Determinants of speaking up

To further our understanding of the determinants of speaking up, we carry out a probit regression of the speaking up and BLM donation dummies on our variables of interest, as in the equations below:

$$Pr(\text{Speak up}_i = 1) = \Phi(\theta X_i) \quad (3)$$

$$Pr(\text{BLM Donation}_i = 1) = \Phi(\theta X_i) \quad (4)$$

Table 2
Summary statistics of speak-up vs. non-speak-up companies and correlation matrix.

Panel A: Summary statistics							
Variables	N	Mean	N(SU)	Mean(SU)	N(NSU)	Mean(NSU)	p-value
Black director	462	0.59	292	0.71	170	0.37	0.000***
% female directors	462	0.27	292	0.29	170	0.25	0.000***
% independent directors	462	0.84	292	0.86	170	0.82	0.000***
Board size	462	11.14	292	11.57	170	10.41	0.000***
CEO age	462	59.23	292	58.86	170	59.87	0.126
Female CEO	462	0.06	292	0.05	170	0.06	0.669
Size	462	40,663.11	292	50,402.82	170	23,933.72	0.000***
Leverage	462	46.88	292	49.84	170	41.79	0.003***
ROA	462	8.15	292	8.01	170	8.40	0.564
MTB ratio	462	1.63	292	0.39	170	3.77	0.242
ESG score	462	59.31	292	62.74	170	53.43	0.000***
Social score	462	62.06	292	65.89	170	55.47	0.000***
Institutional ownership	462	0.81	292	0.80	170	0.83	0.021**
Political donations	462	-0.11	292	-0.05	170	-0.22	0.000***
Online visibility	462	2.81	292	3.82	170	1.09	0.000***
HQ state politics	462	0.65	292	0.71	170	0.54	0.000***
High black workforce	462	0.71	292	0.71	170	0.71	0.886
High-tech	462	0.15	292	0.13	170	0.18	0.191

Panel B: correlation coefficient matrix																			
Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Speak up	1																		
BLM donation	0.45	1																	
Black director	0.33	0.22	1																
% female directors	0.24	0.19	0.18	1															
% independent directors	0.25	0.12	0.25	0.16	1														
Board size	0.27	0.19	0.37	0.05	0.15	1													
CEO age	-0.07	-0.06	-0.01	-0.04	-0.07	0.02	1												
Female CEO	-0.02	0.04	0.02	0.22	0	0.07	-0.11	1											
Log size	0.21	0.36	0.23	0.14	0.16	0.25	-0.02	0.02	1										
Leverage	0.14	0.18	0.15	0.1	0.12	0.1	0.02	-0.02	0.09	1									
ROA	-0.03	0.09	-0.06	0.02	-0.08	-0.16	-0.06	0.02	0.24	0.05	1								
ESG score	0.27	0.26	0.22	0.3	0.31	0.19	-0.07	0.1	0.34	0.17	0	1							
MTB ratio	-0.05	0.05	0.02	-0.03	-0.06	-0.02	0.02	0.04	0.07	-0.24	0	0.01	1						
Institutional ownership	-0.11	-0.23	-0.11	0.01	0.2	-0.2	-0.06	-0.05	-0.28	-0.03	0	-0.15	-0.06	1					
Political donations	0.21	0.12	-0.05	0.11	-0.08	-0.06	-0.11	-0.02	0.05	-0.06	0.14	0.04	-0.12	0.05	1				
Online visibility	0.43	0.36	0.23	0.18	0.07	0.23	-0.1	0.07	0.37	0.08	0.09	0.24	-0.02	-0.37	0.12	1			
HQ state politics	0.17	0.14	0	0.1	-0.06	0.07	-0.09	0.07	0.16	-0.02	0.13	0.12	0.03	0.01	0.19	0.17	1		
High black workforce	-0.01	-0.07	0.15	-0.1	0.12	0.14	0.13	0	-0.14	0.14	-0.16	-0.02	0.03	-0.01	-0.15	-0.15	-0.32	1	
High-tech	-0.06	-0.01	-0.14	0.02	0.05	-0.17	-0.12	0	0.2	-0.06	0.23	0.09	-0.01	0.05	0.07	0.03	0.05	-0.18	1

Panel A of this table reports the number of observations, unconditional mean, and the number of observations and means conditional on the company's speaking up status, where SU denotes the speak up group and NSU denotes the non-speak up group. In addition, it reports the *p*-values from *t*-tests for differences (with different variances) between the two groups of companies. All continuous variables are winsorized at 1% and 99%. In this panel, for meaningful interpretation, *Size* is presented in dollar terms (\$million) before taking the natural logarithm.

Panel B of this table reports the matrix of pairwise correlations between the variables used to predict the likelihood of speaking up and of donation commitment. The numbers in bold denote statistical significance at the 5% level. Variable definitions are in Appendix A1.

Table 3
Probit regressions on determinants of speaking up.

Variables	(1) Speak up	(2) BLM Donation
Black director	0.169*** (2.965)	0.071 (1.577)
% female directors	1.055*** (3.027)	0.358 (1.296)
% independent directors	1.047*** (2.949)	0.411 (1.470)
Board size	0.035** (2.413)	0.006 (0.557)
CEO age	-0.003 (-0.800)	-0.003 (-0.785)
Female CEO	-0.247** (-2.048)	-0.021 (-0.278)
Log size	-0.010 (-0.340)	0.055** (2.501)
Leverage	0.002 (1.591)	0.002*** (3.282)
ROA	-0.004 (-1.063)	0.000 (0.121)
ESG score	0.002 (0.995)	0.002 (1.434)
MTB ratio	-0.000 (-0.362)	0.001** (2.035)
Institutional ownership	0.065 (0.274)	-0.317* (-1.720)
Political donations	0.364*** (4.960)	0.129** (2.159)
Online visibility	0.072*** (5.917)	0.034*** (3.249)
HQ state politics	0.123** (2.164)	0.058 (1.300)
High black workforce	0.033 (0.513)	-0.027 (-0.535)
High-tech	-0.075 (-0.946)	-0.053 (-1.043)
Observations	462	462
Pseudo R-squared	0.331	0.254

This table reports the probit regression results, where the dependent variables are *Speak up*, and *BLM Donation*, and the independent variables are firm characteristics. Variable definitions are in Appendix A1. All continuous variables are winsorized at 1% and 99%. The coefficients reported are marginal effects. Z-statistics are in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% p-levels (two-tailed) respectively.

where X_i includes all the control variables reported in Table 2. Definitions of all variables are given in the Appendix A1. Table 3 presents the marginal effects of each dependent variable obtained from the probit regression. As expected, the results show that having a black director is associated with an increased probability of speaking up of 0.169. Furthermore, the coefficient of % female directors is also positive and statistically significant. These results suggest that a diversified board of directors plays a vital role in corporate social and political activism, complementing the findings of Maks-Solomon and Drewry (2019).

We also find that both political variables used in our analysis are significantly positively related to speaking up. Given that the BLM movement is perceived by many as political, with strong left-wing views and ideas,²¹ this result is hardly surprising. In addition, we found that companies with higher online visibility, which tend to be consumer-oriented companies, are more likely to speak up. None of the other variables, including firm financial variables, such as size, leverage, ROA, and MTB ratio, are significantly related to speaking up while controlling for other factors. Surprisingly, the coefficient on ESG score is also insignificant.

The results are slightly different when we consider the BLM donation variable. Racial and gender diversity is still positively associated with a decision to donate, but it is no longer statistically significant. On the other hand, firm size and leverage are now highly related to donations, perhaps due to the availability of resources in large companies. Both of the political variables are still positively associated with donations. Donations are also positively associated with online visibility. Finally, institutional ownership is negatively related to donations. This could potentially be explained by the institutional investors' view that BLM donations are not value-generating investments (as suggested by Bhagwat et al., 2020). Since these investors have control over the companies, the managers are reluctant to pledge any financial resources to the cause.

²¹ <https://www.telegraph.co.uk/news/2020/06/12/make-no-mistake-blm-radical-neo-marxist-political-movement/>

6. Analyses of retail investor reaction

6.1. Research design and summary statistics

To investigate the response of retail investors to corporate CSA engagements of firms, we use daily time-series data of retail investor interest, stock returns, and Google search frequency of all firms in our sample for the period from May 14th, 2020 to June 30th, 2020, including both event and non-event days. The regression model is as follows:

$$Y_{i,t} = \gamma_1 \times \text{Speak up day}_{i,t} + \gamma_2 \times \text{Black square}_{i,t} + \gamma_3 \times \text{Donation day}_{i,t} + \gamma_4 \times \text{Speak up day} * \text{Donation day}_{i,t} + \beta_1 \times \text{Return}[-4, -1]_{i,t} + \beta_2 \times \text{Return}[-25, -5]_{i,t} + \eta_i + \theta_t + \varepsilon_{i,t} \quad (5)$$

The primary dependent variable $Y_{i,t}$ can be the abnormal Google search frequency ($AbSVI[t]_{i,t}$), abnormal changes in the number of retail investor holding stock i ($AbRI[t]_{i,t}$), or abnormal buy-and-hold return of stock i ($AbRet[t]_{i,t}$), as described in Section 4. *Speak up day* is a dummy variable that equals one on the day that a company first spoke up in support of the BLM movement. *Black square* is a dummy variable that equals one on the day that a company posted a black square on its social media pages on Blackout Tuesday. *Donation day* is a dummy variable that equals one on the day that a company committed a donation supporting the BLM movement. *Speak up day*Donation day* is the interaction term of *Speak up day* and *Donation day*, i.e., by construction, it equals one on the day that a company simultaneously first spoke up and made a donation commitment supporting the BLM movement. This variable captures the marginal effect of a simultaneous donation pledge conditional on the company speaking up.

It is also possible that retail investors also pay attention to *how much* companies donate relative to their resources. Therefore, as an additional test, we also include the amount that the company pledges to donate, scaled by the company's total assets. We then substitute this measure for the donation day dummy and in the interaction term with *Speak up day*. Our model accounts for the momentum and contrarian trading behaviors by including lagged average stock returns for the $[-4, -1]$ and $[-25, -5]$ periods in our empirical tests. Additionally, all specifications include firm and date fixed effects, with two-way (firm and date) standard error clustering. Descriptions of all variables are detailed in Appendix A1.

Table 4 reports descriptive statistics of variables used in our regression Eq. (5). The primary dependent variables are $AbRI[t]$, $AbRet[t]$, and $AbSVI[t]$. Both means and medians of these variables are close to zero. Two percent of our company-days are designated as *Speak up day*, and 0.8% as *Donation day*. The mean for *Black square* is much smaller because it only captures speaking up on a particular day, June 2nd. 0.4% of our observations are company-days with *Speak up day*Donation day* being equal to one. The means of the *Donation ratio* and the interaction with *Speak up day* are small because companies generally donate only a fraction of their total assets. Finally, the means of both our lagged return variables are slightly positive.

6.2. Google search frequency

First, we explore the effect of BLM activism on abnormal Google search frequency of companies' tickers using the regression Eq. (5). Our aim here is to ascertain whether retail investors notice BLM-related activity.

The results in column (1) of Table 5 suggest that speaking up is associated with a higher search frequency on the day. In column (2), when we include more independent variables, the coefficient on *Speak up day* is slightly reduced but still statistically significant. In addition, we see that on the 'Black square' day, there was an even higher increase in search frequency. This was probably because of a higher sensitivity of retail investors (and the general public) to the announcements that were taking place on that day, specifically designated by the activists and companies as a day of paying tribute to the BLM movement. As shown earlier in Fig. 1, this was also the day with the highest Google search frequency for the term 'Black Lives Matter'.

Finally, in column (3), we substitute the donation dummy variable with the donation amount, scaled by the firm's total assets, since a study by Alhouti et al. (2016) reports that participants in their survey suggested that the company's donations should be correlated with their size. We name this variable *Donation Ratio*. The coefficient on *Speak up day* is still positive and significant. Interestingly, it

Table 4
Descriptive statistics – Panel data analysis.

Variables	N	Mean	SD	p25	Median	p75
AbSVI[t]	13,421	0.004	0.454	-0.203	-0.002	0.21
AbRI[t]	14,792	0	0.013	-0.007	-0.002	0.004
AbRet[t]	14,856	0.001	0.024	-0.012	-0.001	0.012
Speak up day	14,856	0.02	0.14	0	0	0
Black square	14,856	0.001	0.035	0	0	0
Donation day	14,856	0.008	0.09	0	0	0
Speak up day*Donation day	14,856	0.004	0.063	0	0	0
Donation ratio	14,856	0.003	0.169	0	0	0
Speak up day*Donation Ratio	14,856	0	0.006	0	0	0
Return[-4, -1]	14,856	0.001	0.017	-0.008	0.001	0.011
Return[-25, -5]	14,856	0.004	0.005	0	0.003	0.006

The table shows the number of observations, means, and other statistics of the variables used in the panel data analyses of investor reactions. Variable definitions are in Appendix A1.

Table 5
Abnormal google search index.

	(1)	(2)	(3)
Variables	AbSVI[t]	AbSVI[t]	AbSVI[t]
Speak up day	0.037*** (2.998)	0.040* (1.811)	0.041** (2.334)
Black square		0.107*** (3.115)	0.106*** (3.306)
Donation day		0.042 (0.933)	
Speak up day*Donation day		-0.089 (-1.167)	
Donation ratio			0.038 (1.165)
Speak up day * Donation ratio			-0.977*** (-3.156)
Return[-4, -1]	1.355*** (2.848)	1.348*** (2.823)	1.339*** (2.825)
Return[-25, -5]	0.058 (0.037)	0.065 (0.042)	0.096 (0.062)
Observations	14,079	14,079	14,079
Adjusted R-squared	0.193	0.193	0.193
Firm FE	Yes	Yes	Yes
Date FE	Yes	Yes	Yes

This table shows retail investor attention captured by abnormal Google search volume index ($AbSVI[t]$) in response to BLM speak up and BLM donation announcement days relative to non-event days and non-speak up companies. *Speak up day* is a dummy variable that takes a value of one on the day firms release their first-ever statement supporting the BLM movement and zero otherwise. *Black square* is a dummy variable that equals one if a firm uses the black square as a means of its first speaking up on the 2nd of June and zero otherwise. *Donation day* is a dummy variable that takes the value of one on the day that firms announce their BLM donation commitment. *Speak up day*Donation day* is the interaction term of *Speak up day* and *Donation day*, which has the value of one on the day that firms speak up for the first time and also announce their donation commitment simultaneously. *Donation ratio* equals the donation amount, scaled by the firm's total assets on the day of the donation announcement and zero otherwise. *Speak up day*Donation ratio* is the interaction term of *Speak up day* and *Donation ratio*. Control variables are the average lagged stock returns ($Return[-4, -1]$ and $Return[-25, -5]$). Detailed variable definitions are in Appendix A1. The table reports OLS coefficient estimates and (in parentheses) t-statistics. For all regressions, we include firm and date fixed effects, and standard errors are clustered by firm and by date. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% p-levels (two-tailed) respectively.

seems that speaking up combined with significant donations relative to firm size decreases the attention relative to just speaking up. This potentially suggests that as far as drawing attention goes, just speaking up or posting a black square is enough.

In short, these results suggest that speaking up catches retail investors' attention. However, we still need to establish whether attention leads to an investment decision, an issue we will investigate in the next section.

6.3. Retail investors' portfolio holdings

We conduct a regression analysis on the relationship between corporate socio-political activism and retail investors' portfolio choices. We regress changes in the number of retail investors holding a stock (retail investor interest) on BLM-related variables and a set of control variables as in Eq. (5).

In column (1) of Table 6, results show no significant change in retail investor interest associated with speaking up. This relationship remains largely unaltered in column (2); however, speaking up via the use of a black square on the 2nd of June is associated with a significantly higher retail interest. In addition, it seems that donations, when they *follow* speaking up rather than coinciding with it, are negatively related to retail investor interest. On the other hand, when they *do* coincide with speaking up, retail interest increases strongly.

To explore this issue further, we carry out tests using the scaled donation measure instead of the donation dummy. The coefficient on the interaction term is still positive and significant, but that on the *Donation ratio* is no longer significant, suggesting that the *follow-up* donations scaled by the firm's size do not induce a retail investor reaction. These results suggest that compared to only speaking up and only donating (a few days after speaking up), speaking up and donating *simultaneously* initiates retail investor purchases.²²

Overall, the results in this table align with [Elfenbein et al. \(2019\)](#), who find that consumers disapprove of 'cheap talk'. For companies that want to attract retail investors, this would imply that speaking up would be pointless unless they are ready to also take more tangible steps in order to promote a social cause. Our results support Hypothesis 1 (H1).

²² It is worth noting here, as will be shown in the robustness tests section, that when we restructure our variables in this specification so that we have *Only Speak up day*, *Only Donation day*, and contrast those to *Speak up and donation day*, allowing us to compare speaking up and donating to non-event company-days, we find similar results.

Table 6
Retail investor reaction to BLM support.

Variables	(1) AbRI[t]	(2) AbRI[t]	(3) AbRI[t]
Speak up day	0.000 (0.022)	-0.001 (-1.411)	-0.001 (-1.644)
Black square		0.004*** (3.270)	0.004*** (3.564)
Donation day		-0.001* (-1.863)	
Speak up day*Donation day		0.006*** (3.304)	
Donation Ratio			-0.000 (-0.679)
Speak up day * Donation Ratio			0.078*** (3.054)
Return[-4,-1]	0.062* (1.718)	0.062* (1.719)	0.063* (1.727)
Return[-25,-5]	-0.045 (-0.523)	-0.045 (-0.521)	-0.047 (-0.538)
Observations	15,510	15,510	15,510
Adjusted R-squared	0.212	0.213	0.214
Firm FE	Yes	Yes	Yes
Date FE	Yes	Yes	Yes

This table shows the retail investor reaction captured by the adjusted change in retail investors' holdings ($AbRI[t]$) in response to BLM speak up and BLM donation announcement days relative to non-event days and to non-speak up companies. *Speak up day* is a dummy variable that takes a value of one on the day that firms release their first-ever statement supporting the BLM movement and zero otherwise. *Black square* is a dummy variable that equals one if a firm uses the black square as a means of its first speaking up on the 2nd of June and zero otherwise. *Donation day* is a dummy variable that takes the value of one on the day that firms announce their BLM donation commitment. *Speak up day*Donation day* is the interaction term of *Speak up day* and *Donation day*, which has the value of one on the day that firms speak up for the first time and also announces their donation commitment simultaneously. *Donation ratio* equals the donation amount scaled by the firm's total assets on the day of the donation announcement and zero otherwise. *Speak up day*Donation ratio* is the interaction term of *Speak up day* and *Donation ratio*. Control variables are the average lagged stock returns ($Return[-4,-1]$ and $Return[-25,-5]$). Detailed variable definitions are in Appendix A1. The table reports OLS coefficient estimates and (in parentheses) t-statistics. For all regressions, we include firm and date fixed effects, and standard errors are clustered by firm and by date. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% p-levels (two-tailed) respectively.

6.4. CSA and firm value

So far, our results have established that retail investor interest increases for companies that engage in CSA. One possible explanation for this result is that CSA, in general, leads to positive changes in company fundamentals, such as an increase in sales and profitability, although this would go against the findings of [Bhagwat et al. \(2020\)](#). If that were the case, one would also expect to find an increase in firm value associated with CSA.

In order to test whether the expected change in fundamentals drives our results, we regress one-day abnormal returns ($AbRet[t]$) on the set of independent variables and control variables as in Eq. (5).

Based on the results reported in [Table 7](#), we observe no significant change in firm value as a result of speaking up, including on Blackout Tuesday. In fact, in column (3), we show that the same interaction between the *Speaking up day* and the *Donation ratio* that induces retail investors to buy shares is associated with a negative abnormal return (as in [Bhagwat et al., 2020](#)). This result implies that the increase in retail investor interest goes against the general market sentiment. If we extend this argument, we can also say that it goes against the firm fundamentals, as these are most likely reflected in the general investor behavior.

Overall, these results give some preliminary support to the second hypothesis (H2) and prior findings in the literature about the irrationality of retail investors (see, e.g., [Lee et al., 1991](#); [Bodurtha Jr et al., 1995](#); [Neal and Wheatley, 1998](#); [Gemmill and Thomas, 2002](#)).

6.5. Subsample tests – firm's credibility

It is possible that the effect of BLM support on retail investors is conditional on the credibility of the company's action. To further our understanding of the nuances of the effects of CSA on retail investors, we perform subsample tests based on the presence of black directors.²³

²³ For simplicity, in our subsample tests, we do not tabulate the results of regressions when we use the variable *Donation Ratio* and the interaction *Speak up day * Donation Ratio* instead of the variable *Donation Day* and the interaction *Speak up day * Donation Day* because the results are similar. The results are available upon request.

Table 7
Abnormal returns and the BLM support.

Variables	(1)	(2)	(3)
	AbRet[t]	AbRet[t]	AbRet[t]
Speak up day	−0.000 (−0.036)	0.001 (0.587)	0.001 (1.397)
Black square		−0.004 (−1.516)	−0.005* (−1.842)
Donation day		0.001 (0.287)	
Speak up day*Donation day		−0.003 (−0.809)	
Donation ratio			0.000 (0.582)
Speak up day * Donation ratio			−0.103*** (−3.178)
Return[−4,−1]	−0.413** (−2.461)	−0.413** (−2.461)	−0.413** (−2.465)
Return[−25,−5]	−1.541*** (−3.997)	−1.541*** (−3.997)	−1.539*** (−3.996)
Observations	15,510	15,510	15,510
Adjusted R-squared	0.182	0.182	0.182
Firm FE	Yes	Yes	Yes
Date FE	Yes	Yes	Yes

This table shows the market reaction captured by daily abnormal return ($AbRet[t]$) in response to BLM speak up and BLM donation announcement days relative to non-event days and to non-speak up companies. *Speak up day* is a dummy variable that takes a value of one on the day that firms release their first-ever statement supporting the BLM movement and zero otherwise. *Black square* is a dummy variable that equals one if a firm uses the black square as a means of its first speaking up on the 2nd of June and zero otherwise. *Donation day* is a dummy variable that takes value of one on the day that firms announce their BLM donation commitment. *Speak up day*Donation day* is the interaction term of *Speak up day* and *Donation day*, which has the value of one on the day that firms speak up for the first time and also announces their donation commitment simultaneously. *Donation ratio* equals the donation amount scaled by the firm's total assets on the day of the donation announcement and zero otherwise. *Speak up day*Donation ratio* is the interaction term of *Speak up day* and *Donation ratio*. Control variables are the average lagged stock returns ($Return[-4, -1]$ and $Return[-25, -5]$). Detailed variable definitions are in Appendix A1. The table reports OLS coefficient estimates and (in parentheses) t-statistics. For all regressions, we include firm and date fixed effects, and standard errors are clustered by firm and by date. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% p-levels (two tailed) respectively.

For companies that already had black directors, their BLM support statements might be viewed as being more credible. However, an alternative possibility would be that for companies with no black directors on board, the effect of speaking up and donating is stronger since they are less expected to speak up by retail investors and, therefore, have more to gain in their eyes. Results in columns (1) and (2) of Table 8 favor the former interpretation. In particular, retail investor interest increases by about 0.7% (significant at 1% level) in companies that spoke up and donated *simultaneously* if they had black directors on board. There is no statistically significant increase in retail investor interest for companies that did not have black directors on board. In addition, retail investors seem to be reacting very differently toward companies posting a black square, depending on whether they had a black director. Those that did experienced a significant increase in retail interest, while there was a significant decrease in retail interest for those that did not have black directors.

Overall, the results in this table suggest that retail investors tend to value CSA when it appears to be more credible and backed up by companies' behavior, particularly concerning *pre-existing* board racial diversity. This result further supports the notion that retail investors disregard 'cheap talk'.

6.6. Moral sentiment vs. attention bias

From our results, sentiment appears likely to be one of the driving forces of retail investors' reaction to CSA. There are two possible explanations for this. First, retail investors might prefer companies that speak up in support of and donate to BLM because the companies' moral stance aligns with their own on this issue (see discussion in the introduction and Section 3). Second, retail investors' reactions could be driven by attention bias, whereby they flock to companies that grab their attention. If these companies are the same ones that engage in CSA, we would see an increase in retail interest.

With this in mind, we conduct a test based on investor attention by splitting the companies into two subsamples based on the number of Twitter followers they have.²⁴ If the attention-grabbing explanation were behind our results, we would expect a more pronounced increase in retail interest for companies with more followers, i.e., those that are more visible online and, therefore, more attention-grabbing. However, our results in columns (1) and (2) of Table 9 do not support this narrative. The coefficient of the *Speak up*

²⁴ Some companies have several Twitter accounts (one for each brand or regional representation). If that is the case, we use the one with the biggest number of followers.

Table 8
Subsample analyses: Firm's credibility.

Variables	(1)	(2)
	Blackdir AbRI[t]	NoBlackdir AbRI[t]
Speak up day	-0.001 (-1.007)	-0.003 (-1.561)
Black square	0.008*** (4.532)	-0.005** (-2.612)
Donation day	-0.002 (-1.663)	0.002 (0.699)
Speak up day*Donation day	0.007*** (2.741)	0.003 (0.707)
Return[-4,-1]	0.048 (1.358)	0.081* (1.838)
Return[-25,-5]	-0.049 (-0.571)	-0.051 (-0.394)
Observations	9108	6402
Adjusted R-squared	0.215	0.213
Firm FE	Yes	Yes
Date FE	Yes	Yes

This table reports the OLS regression results of subsample analyses based on the credibility of the BLM support pledge for firms that have already had Black director(s) on board at the time of speaking up are seen as more credible (columns 1 and 2). *Speak up day* is a dummy variable that takes a value of one on the day that firms release their first-ever statement supporting the BLM movement and zero otherwise. *Black square* is a dummy variable that equals one if a firm uses the black square as a means of its first speaking up on the 2nd of June and zero otherwise. *Donation day* is a dummy variable that takes value of one on the day that firms announce their BLM donation commitment. *Speak up day*Donation day* is the interaction term of *Speak up day* and *Donation day*, which has the value of one on the day that firms speak up for the first time and also announces their donation commitment simultaneously. Control variables are the average lagged stock returns (*Return*[-4,-1] and *Return*[-25,-5]). Detailed variable definitions are in Appendix A1. The table reports OLS coefficient estimates and (in parentheses) t-statistics. For all regressions, we include firm and date fixed effects, and standard errors are clustered by firm and by date. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% p-levels (two tailed) respectively.

*day*Donation day* of the low visibility group is double that of the high visibility companies, although both are statistically significant.²⁵

Of course, the fact that our results are not driven by attention-grabbing stocks does not necessarily mean that they are driven by investors' moral preferences. Therefore, we follow Pan et al. (2022) and conduct a more direct test of moral alignment based on local norms at a firm's headquarter location. In particular, we split our sample into two subsamples based on the state's political leaning, which is defined by whether the state governor in the company's headquarters is a Democrat. This test relies on two assumptions. First, we expect most retail investors holding a company's stock to be local, meaning they live in the same state.²⁶ Second, residents in Democrat-leaning states are likely to be more liberal and more sympathetic to social justice causes, including the BLM movement. A survey carried out in 2020 by the Pew Research Centre has found that only 19% of respondents who considered themselves Republican supported the movement, compared to 88% of Democrats.²⁷ Combining these conjectures, if moral sentiment drives our results, we would expect them to be stronger in Democrat states. Indeed, the results in columns (3) and (4) of Table 9 support this. The coefficient of the *Speak up day*Donation day* variable is only significant in the Democratic HQ subsample.

To ensure that this result is robust to our choice of the local political leaning measure, we also re-run this test using the state-wide 2016 presidential voting data. In particular, we define states as *Democrat Leaning* if at least 50% of their population voted for the Democratic candidate. The results, reported in columns (5) and (6) of Table 9, are consistent with those reported in columns (3) and (4). We, therefore, conclude that the moral stance is likely behind the increase in retail investor interest, supporting our second hypothesis (H2).

6.7. Robustness tests

One potential concern with the results that we have reported so far is that we are only looking for changes in retail investor interest

²⁵ One possible explanation for this result is that companies with low visibility are actually trying to use the opportunity provided by the BLM protests to grab more attention. This explanation would still be consistent with the attention mechanism, albeit in a way different from the one we are explicitly testing for. While we do not find this explanation very plausible, since the results in Table 3 suggest that online visibility is associated with a higher probability of speaking up, we still carry out an additional test on the difference between the coefficients of the *Speak up day*Donation day* variable between the samples of low and high visibility firms. The difference is 0.0045 with a Z-core of 0.923, which is statistically insignificant, further suggesting that retail investor interest in low visibility firms was not different from that of high visibility firms.

²⁶ See Coval and Moskowitz (1999), Ivkovic and Weisbenner (2005) and Chi and Shantikumar (2017).

²⁷ <https://www.pewresearch.org/fact-tank/2020/09/16/support-for-black-lives-matter-has-decreased-since-june-but-remains-strong-among-black-americans/>

Table 9
Subsample analyses – Firm’s visibility and political leaning.

	(1)	(2)	(3)	(4)	(5)	(6)
Variables	High visibility AbRI[t]	Low visibility AbRI[t]	DemGov AbRI[t]	RepGov AbRI[t]	DemVote AbRI[t]	Non-Dem Vote AbRI[t]
Speak up day	−0.001 (−1.559)	−0.002 (−1.027)	−0.002 (−1.265)	−0.001 (−0.854)	−0.002* (−1.903)	−0.001 (−0.911)
Black square	0.005** (2.486)	0.003* (1.747)	0.005*** (2.810)	0.003** (2.584)	−0.000 (−0.000)	0.008*** (4.075)
Donation day	−0.001 (−1.616)	−0.002 (−1.484)	−0.001 (−1.020)	−0.003 (−1.175)	−0.002 (−1.452)	−0.001 (−0.233)
Speak up day*Donation day	0.005** (2.736)	0.010** (2.110)	0.007** (2.736)	0.004 (1.586)	0.009*** (2.919)	0.003 (1.522)
Return[−4,−1]	0.090** (2.488)	0.028 (0.743)	0.068* (1.810)	0.054 (1.421)	0.069* (1.766)	0.053 (1.367)
Return[−25,−5]	0.027 (0.296)	−0.125 (−1.153)	−0.047 (−0.386)	−0.036 (−0.522)	−0.090 (−0.718)	−0.011 (−0.129)
Observations	7755	7755	10,032	5478	7359	8151
Adjusted R-squared	0.203	0.227	0.214	0.211	0.214	0.213
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Date FE	Yes	Yes	Yes	Yes	Yes	Yes

This table reports the OLS regression results of subsample analyses based on the firm’s visibility and the political leaning of the state where the firm’s headquarters is located. For firm visibility, we split the sample based on the number of their Twitter followers using the median number of followers (Columns 1 and 2). Political leaning is defined in two different ways: i) based on the political party of the state governor (Columns 3 and 4), and ii) based on the percentage of votes received by the Democratic candidate in the 2016 presidential election (Columns 5 and 6). DemHQ (RepHQ) indicates that the firm’s headquarters are in a state whose governor is a Democrat (Republican). DemVote (Non-DemVote) means that at least 50% (less than 50%) of voters voted for the Democrat candidate in the 2016 Presidential Election. *Speak up day* is a dummy variable that takes a value of one on the day that firms release their first-ever statement supporting the BLM movement and zero otherwise. *Black square* is a dummy variable that equals one if a firm uses the black square as a means of its first speaking up on the 2nd of June and zero otherwise. *Donation day* is a dummy variable that takes value of one on the day that firms announce their BLM donation commitment. *Speak up day*Donation day* is the interaction term of *Speak up day* and *Donation day*, which has the value of one on the day that firms speak up for the first time and also announces their donation commitment simultaneously. Control variables are the average lagged stock returns (*Return[−4,−1]* and *Return[−25,−5]*). Detailed variable definitions are in Appendix A1. The table reports OLS coefficient estimates and (in parentheses) t-statistics. For all regressions, we include firm and date fixed effects, and standard errors are clustered by firm and by date. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% p-levels (two-tailed) respectively.

on the day of speaking up/donations, whereas it is possible that the effect either carries on to the next day (if investors are slow to react) or that it is reversed. Therefore, we repeat our regressions using a two-day window for changes in retail holdings, which are defined as follows:

$$AbRI[t, t + 1]_{i,t} = \frac{RI_{i,t+1} - RI_{i,t-1}}{RI_{i,t-1}} - \frac{RI_{i,t-1}}{Robinhood_{t-1}} * \frac{Robinhood_{t+1} - Robinhood_{t-1}}{Robinhood_{t-1}} \quad (6)$$

We carry out the regression Eq. (5) with the dependent variable being $AbRI[t, t + 1]_{i,t}$. Since, for event days (speaking up days or donation days), the two-day window change in the retail holding of the day immediately before and after the event date mechanically contains the information of retail investor reaction on the event days, we exclude those days for a clean comparison of event days vs. non-event days. Results are reported in Table 10. All the results are consistent with those reported earlier, with somewhat diminished statistical significance. Despite this, all the main results are still significant, at least at the 10% level.

As discussed earlier, our main tests focus on the marginal effect of speaking up and donating relative to only speaking up or late donations. In another robustness test, we would like to test the net effect of speaking up and donating relative to non-CSA event days. Here, we redefine our independent variables to represent independent event categories, including *Non-black square speak up only day*, *Black-square only day*, *Donation only day*, and *Speak up and donation day*.²⁸ This new specification allows us to measure the effect of different types of communication of BLM support on retail investor interest compared to CSA non-events. The results, reported in Table 11, confirm the positive reaction of retail investors only if the company communicates its support and makes a donation pledge simultaneously, which lends more credence to our hypotheses.

7. Conclusion

This paper investigates whether retail investors value companies’ decisions to take a stance on an important and controversial social issue. In order to answer this question, we use an event where many companies decided to take a stance on a social issue – by

²⁸ Note that there is no need to construct a new *Black square and donation* dummy, as the black square event, by definition, only includes speaking up in a very specific way (without donations) – posting a black square on social media.

Table 10

Robustness test: Two-day window of changes in retail investors' holding.

Variables	(1) AbRI[t, t + 1]	(2) Blackdir AbRI[t, t + 1]	(3) NoBlackdir AbRI[t, t + 1]	(4) High visibility AbRI [t, t + 1]	(5) Low visibility AbRI [t, t + 1]	(6) DemGov AbRI[t, t + 1]	(7) RepGov AbRI[t, t + 1]	(8) DemVote AbRI[t, t + 1]	(9) Non-DemVote AbRI [t, t + 1]
Speak up day	−0.002 (−1.215)	−0.002 (−1.419)	0.000 (0.017)	−0.001 (−0.867)	−0.002 (−0.923)	−0.001 (−0.823)	−0.003 (−1.455)	−0.001 (−0.708)	−0.003 (−1.327)
Black square	0.003* (1.712)	0.008*** (3.146)	−0.014*** (−6.201)	0.007** (2.413)	−0.001 (−0.581)	0.008*** (2.755)	−0.002 (−1.264)	−0.008*** (−5.891)	0.014*** (3.505)
Donation day	−0.004* (−1.796)	−0.004 (−1.283)	−0.004 (−0.907)	−0.002 (−0.850)	−0.009** (−2.513)	−0.005** (−2.174)	−0.001 (−0.185)	−0.006 (−1.687)	−0.003 (−0.477)
Speak up day*Donation day	0.008** (2.154)	0.009** (2.089)	0.004 (0.709)	0.006 (1.498)	0.013* (1.857)	0.008* (1.860)	0.005 (0.575)	0.009* (1.757)	0.006 (1.114)
Return[−4, −1]	0.096* (1.704)	0.076 (1.371)	0.121* (1.717)	0.159** (2.667)	0.021 (0.353)	0.118* (1.888)	0.067 (1.185)	0.107 (1.669)	0.078 (1.317)
Return[−25, −5]	−0.154 (−1.045)	−0.142 (−1.059)	−0.190 (−0.761)	−0.009 (−0.064)	−0.312 (−1.495)	−0.159 (−0.746)	−0.129 (−0.974)	−0.265 (−1.163)	−0.063 (−0.433)
Observations	14,792	8589	6203	7275	7517	9516	5276	6972	7820
Adjusted R-squared	0.257	0.246	0.268	0.225	0.288	0.262	0.251	0.268	0.249
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Date FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

This table reports the changes in retail investors' holdings over two days ($AbRI[t, t + 1]$) in response to corporate BLM support relative to non-event days and non-speak-up companies for the entire sample (column 1) and subsample analyses (columns 2 to 9). We exclude the day immediately before and after the event days because the two-day changes in retail holdings on those days mechanically contain the change in retail holdings on the event day. *Speak up day* is a dummy variable that takes a value of one on the day that firms release their first-ever statement supporting the BLM movement and zero otherwise. *Black square* is a dummy variable that equals one if a firm uses the black square as a means of its first speaking up on the 2nd of June and zero otherwise. *Donation day* is a dummy variable that takes value of one on the day that firms announce their BLM donation commitment. *Speak up day*Donation day* is the interaction term of *Speak up day* and *Donation day*, which has the value of one on the day that firms speak up for the first time and also announces their donation commitment simultaneously. Control variables are the average lagged stock returns ($Return[-4, -1]$ and $Return[-25, -5]$). Detailed variable definitions are in Appendix A1. The table reports OLS coefficient estimates and (in parentheses) t-statistics. For all regressions, we include firm and date fixed effects, and standard errors are clustered by firm and by date. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% p-levels (two-tailed) respectively.

Table 11

Robustness test: Speak up only vs. speak up and donation simultaneously.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Blackdir	NoBlackdir	High visibility	Low visibility	DemGov	RepGov	DemVote	Non-DemVote
Variables	AbRI[t]	AbRI[t]	AbRI[t]	AbRI[t]	AbRI[t]	AbRI[t]	AbRI[t]	AbRI[t]	AbRI[t]
Non-black square speak up only day	-0.001 (-1.411)	-0.001 (-1.008)	-0.003 (-1.561)	-0.001 (-1.556)	-0.002 (-1.027)	-0.002 (-1.265)	-0.001 (-0.848)	-0.002* (-1.903)	-0.001 (-0.911)
Black square only day	0.003*** (3.429)	0.007*** (5.331)	-0.007*** (-11.196)	0.004*** (2.774)	0.001** (2.351)	0.004** (2.476)	0.002*** (3.321)	-0.002** (-2.048)	0.008*** (4.391)
Donation only day	-0.001* (-1.863)	-0.002 (-1.664)	0.002 (0.699)	-0.001 (-1.599)	-0.002 (-1.480)	-0.001 (-1.020)	-0.003 (-1.168)	-0.002 (-1.452)	-0.001 (-0.233)
Speak up and donation day	0.004*** (2.870)	0.004** (2.367)	0.003 (1.365)	0.003 (1.466)	0.006* (1.833)	0.004*** (3.370)	0.000 (0.258)	0.005** (2.343)	0.002 (0.773)
Return[-4, -1]	0.062* (1.719)	0.048 (1.358)	0.081* (1.838)	0.090** (2.488)	0.028 (0.743)	0.068* (1.810)	0.054 (1.421)	0.069* (1.766)	0.053 (1.367)
Return[-25, -5]	-0.045 (-0.521)	-0.049 (-0.571)	-0.051 (-0.394)	0.027 (0.296)	-0.125 (-1.153)	-0.047 (-0.386)	-0.036 (-0.522)	-0.090 (-0.718)	-0.011 (-0.129)
Observations	15,510	9108	6402	7755	7755	10,032	5478	7359	8151
Adjusted R-squared	0.213	0.215	0.213	0.203	0.227	0.214	0.211	0.214	0.213
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Date FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

This table reports the change in retail investors' holdings ($AbRI[t]$) in response to different forms of corporate BLM support relative to non-event days and non-speak-up companies for the entire sample (column 1) and subsample analyses (columns 2 to 9). *Non-black square speak up only day* is a dummy variable that takes the value of one on the day that firms release their first non-black square statement supporting the BLM movement without a donation pledge and zero otherwise. *Black square day only* is a dummy variable that equals one if a firm only uses the black square as a means of their first speaking up on the 2nd of June and zero otherwise. *Donation only day* is a dummy variable that takes the value of one on the day that firms announce their BLM donation commitment after the day of their first speaking up. *Speak up and donation day* is a dummy variable that takes the value of one on the day that firms speak up for the first time and *simultaneously* announce their donation commitment. Control variables are the average lagged stock returns ($Return[-4, -1]$ and $Return[-25, -5]$). Detailed variable definitions are in Appendix A1. The table reports OLS coefficient estimates and (in parentheses) t-statistics. For all regressions, we include firm and date fixed effects, and standard errors are clustered by firm and by date. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% p-levels (two-tailed) respectively.

making a statement of public support for the Black Lives Matter movement and speaking up against social injustice in the aftermath of the death of George Floyd in Minnesota, USA, in May 2020.

Using data on retail investors, we find that speaking up catches retail investors' attention. However, there is an increase in the number of retail investors holding a company's stock only if speaking up in support is backed up by actions in the form of a monetary donation to the cause. This positive reaction is only observed for firms with a black director on board. These results suggest that retail investors' reactions depend on the credibility of the CSA engagement and on the credibility of the company itself. We also find that the positive reaction of retail investors to CSA is more likely to be influenced by moral sentiment rather than by fundamentals or attention bias.

Our results suggest that retail investors do not value greenwashing or cheap talk. Engagements that are backed by substantial measures are relevant for their investment decisions. In a broader context, our results have practical implications for the disclosure exercises of firms and financial reporting standard setters, especially when it comes to non-financial information disclosures.

Declaration of Competing Interest

None.

Data availability

Data will be made available on request.

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Appendix A. Variable definitions

This table reports the definitions of variables used in this paper and the data sources for each variable. All continuous variables are winsorized at 1% and 99%.

Variable	Definition	Source
Speak up	A dummy variable that equals one if a company spoke up in support of the BLM movement at any point in time between the 28th of May and the 18th of June 2020 on either their social media accounts or corporate website, and zero otherwise.	Twitter, Instagram, Facebook, LinkedIn, corporate websites.
BLM donation	A dummy variable that equals one if a company made a donation commitment to a BLM-related cause at any point in time between the 28th of May and 18th of June 2020, and zero otherwise.	Twitter, Instagram, Facebook, LinkedIn, corporate websites.
Speak up day	A dummy variable that equals one on the day that a company first spoke up in support of the BLM movement, and zero otherwise.	
Black square	A dummy variable which equals one on the 2nd of June if a firm uses the black square as their first speaking up means on that day, and zero otherwise.	Twitter, Instagram, Facebook, LinkedIn, corporate websites.
Donation day	A dummy variable that equals one on the day that a company made a donation commitment in support of the BLM movement and zero otherwise.	Twitter, Instagram, Facebook, LinkedIn, corporate websites.
Donation ratio	The dollar amount donated (in \$) to BLM-related causes scaled by total assets (in \$M) as of the end of 2019 on the day the donation is announced and zero otherwise.	Twitter, Instagram, Facebook, LinkedIn, corporate websites.
Speak up day*Donation day	The interaction term of <i>Speak up day</i> and <i>Donation day</i> which has the value of one on the day that firms speak up for the first time and also announce their donation commitment simultaneously, and zero otherwise.	Twitter, Instagram, Facebook, LinkedIn, corporate websites.
Speak up day*Donation ratio	The product of <i>Speak up day</i> and <i>Donation ratio</i> .	Twitter, Instagram, Facebook, LinkedIn, corporate websites.
AbRI[t]	One-day period adjusted change in the number of retail investors holding a stock on day <i>t</i> .	Robintrack
AbRI[t, t + 1]	Two-day period adjusted change in the number of retail investors holding a stock on days <i>t</i> and <i>t + 1</i> .	Robintrack
AbRet[t]	One-day abnormal return on a firm's stock on day <i>t</i> .	CRSP
AbSVI[t]	Abnormal Google search index. For each company's ticker, it equals the log of search interest of the ticker on day <i>t</i> minus the log of the mean of searches of the same ticker on the same weekday during the previous eight weeks.	Google Trends
Return[-4,-1]	Average daily raw return for the period from day -4 to day -1	CRSP
Return[-25,-5]	Average daily raw return for the period from day -25 to day -5	CRSP
Black director	A dummy variable that equals one if a company has a black director on its board as of the 1st of May 2020, and zero otherwise.	Black Enterprise and BoardEx
% Female directors	The fraction of female directors on a company's board as of the 1st of May 2020.	BoardEx
% Independent directors	The fraction of independent (non-executive) directors on a company's board as of the 1st of May 2020.	BoardEx
Board size	Total number of directors on a company's board	BoardEx
CEO age	CEO age in years	BoardEx
Female CEO	A dummy variable that equals one if the CEO is female, and zero otherwise.	BoardEx
Size	The market price of a company's stock multiplied by the total number of shares outstanding as of the 1st of May 2020.	Refinitiv Datastream
Log Size	The natural logarithm of the firm size.	Refinitiv Datastream
Leverage	The ratio of total debt to total assets as of the 1st of May 2020.	Refinitiv Datastream
ROA	The ratio of net income before extraordinary items to total assets as of the 1st of May 2020.	Refinitiv Datastream
MTB ratio	The ratio of the total market capitalization of the firm to total assets as of the 1st of May 2020.	Refinitiv Datastream
ESG score	The Environmental, Social, and Governance score for the company. Measures the company's ESG performance based on verifiable reported data in the public domain.	Refinitiv Datastream
Institutional ownership	The number of shares held by the institutions divided by the total number of shares outstanding. This variable measures a company's political action committee (PAC) donations in the last full federal election cycle (2016–2018), which equals (PAC donations to the Democratic party-PAC donations to the Republican party)/Total firm PAC donation.	Refinitiv Datastream
Political donations	The natural logarithm of the number of Twitter followers of the main corporate Twitter account as of May 2020.	Center for Responsive Politics
Online visibility	A dummy variable that equals one if the state where the company is headquartered has a Democratic governor as of the 1st of May 2020, and zero otherwise. If a company's headquarters are not in the US, we use the headquarters of the company's US division instead.	Twitter
HQ state politics	A dummy variable that equals one if the state in which the company is headquartered is in the top half of the states with respect to the proportion of African-American labor force, and zero otherwise.	Manual web-search
High black workforce	A dummy variable that equals one if the firm is from a high-tech industry, and zero otherwise. High-tech industries are those with the following SIC codes: 2834–2836, 3570–3572, 3575–3579, 3600, 3612–3613, 3620–3621, 3630, 3634, 3640, 3651–3652, 3661, 3663, 3669–3670, 3672, 3674, 3677–3679, 3821–3829, and 3841–3845 (Sridhar et al., 2014).	US Bureau of Labor Statistics ^a
High-tech		Refinitiv Datastream

^a <https://www.bls.gov/>

References

- Alhouti, S., Johnson, C.M., Holloway, B.B., 2016. Corporate social responsibility authenticity: investigating its antecedents and outcomes. *J. Bus. Res.* 69 (3), 1242–1249.
- Baker, M., Wurgler, J., 2006. Investor sentiment and the cross-section of stock returns. *J. Financ.* 61 (4), 1645–1680.
- Balasubramanian, S.K., Fang, Y., Yang, Z., 2021. Twitter presence and experience improve corporate social responsibility outcomes. *J. Bus. Ethics* 173 (4), 737–757.
- Barber, B.M., Odean, T., 2008. All that glitters: the effect of attention and news on the buying behavior of individual and institutional investors. *Rev. Financ. Stud.* 21 (2), 785–818.
- Barber, B.M., Huang, X., Odean, T., Schwarz, C., 2022. Attention-induced trading and returns: evidence from Robinhood users. *J. Financ.* 77 (6), 3141–3190.
- Bear, S., Rahman, N., Post, C., 2010. The impact of board diversity and gender composition on corporate social responsibility and firm reputation. *J. Bus. Ethics* 97 (2), 207–221.
- Bhagwat, Y., Warren, N.L., Beck, J.T., Watson IV, G.F., 2020. Corporate sociopolitical activism and firm value. *J. Mark.* 84 (5), 1–21.
- Bodurtha Jr., J.N., Kim, D.S., Lee, C.M., 1995. Closed-end country funds and US market sentiment. *Rev. Financ. Stud.* 8 (3), 879–918.
- Brewer, M.B., 1999. The psychology of prejudice: Ingroup love and outgroup hate? *J. Soc. Issues* 55 (3), 429–444.
- Burbano, V.C., 2021. The demotivating effects of communicating a social-political stance: field experimental evidence from an online labor market platform. *Manag. Sci.* 67 (2), 1004–1025.
- Burch, T.R., Emery, D.R., Fuerst, M.E., 2003. What can “nine-eleven” tell us about closed-end fund discounts and investor sentiment? *Financ. Rev.* 38 (4), 515–529.
- Chatterji, A.K., Toffel, M.W., 2019. Assessing the impact of CEO activism. *Organ. Environ.* 32 (2), 159–185.
- Cheng, M.M., Green, W.J., Ko, J.C.W., 2015. The impact of strategic relevance and assurance of sustainability indicators on investors’ decisions. *Audit. J. Pract. Theory* 34 (1), 131–162.
- Chi, S.S., Shanthikumar, D.M., 2017. Local bias in Google search and the market response around earnings announcements. *Account. Rev.* 92 (4), 115–143.
- Coval, J.D., Moskowitz, T.J., 1999. Home bias at home: local equity preference in domestic portfolios. *J. Financ.* 54 (6), 2045–2073.
- Crocker, J., Thompson, L.L., McGraw, K.M., Ingerman, C., 1987. Downward comparison, prejudice, and evaluations of others: effects of self-esteem and threat. *J. Pers. Soc. Psychol.* 52 (5), 907.
- Da, Z., Engelberg, J., Gao, P., 2011. In search of attention. *J. Financ.* 66 (5), 1461–1499.
- Dodd, M.D., Supa, D.W., 2014. Conceptualizing and measuring “corporate social advocacy” communication: examining the impact on corporate financial performance. *Publ. Relat. J.* 8 (3), 2–23.
- Drake, M.S., Roulstone, D.T., Thornock, J.R., 2012. Investor information demand: Evidence from Google searches around earnings announcements. *J. Account. Res.* 50 (4), 1001–1040.
- Durney, M.T., Johnson, J., Sinha, R.K., Young, D., 2020. CEO (In) Activism and Investor Decisions. Available at SSRN 3604321.
- Edelman Earned Brand, 2018. Brands Take a Stand. https://www.edelman.com/sites/g/files/aatuss191/files/2018-10/2018_Edelman_Earned_Brand_Global_Report.pdf.
- Elfenbein, D.W., Fisman, R., McManus, B., 2019. Does cheap talk affect market outcomes? Evidence from eBay. *Am. Econ. J. Appl. Econ.* 11 (4), 305–326.
- Endrikat, J., De Villiers, C., Guenther, T.W., Guenther, E.M., 2021. Board characteristics and corporate social responsibility: a meta-analytic investigation. *Bus. Soc.* 60 (8), 2099–2135.
- Friedman, H.L., Heine, M.S., 2016. Taste, information, and asset prices: implications for the valuation of CSR. *Rev. Acc. Stud.* 21 (3), 740–767.
- Fu, F., Tarnita, C.E., Christakis, N.A., Wang, L., Rand, D.G., Nowak, M.A., 2012. Evolution of in-group favoritism. *Sci. Rep.* 2 (1), 1–6.
- Gemmill, G., Thomas, D.C., 2002. Noise trading, costly arbitrage, and asset prices: evidence from closed-end funds. *J. Financ.* 57 (6), 2571–2594.
- Global Strategy Group. Business & Politics: Do They Mix? GSG 2016 Annual Study. https://live-gsg-new.pantheonsite.io/wp-content/uploads/2012/07/112016_BusinessPolitics_forward.pdf.
- Harjoto, M., Laksmana, I., Lee, R., 2015. Board diversity and corporate social responsibility. *J. Bus. Ethics* 132 (4), 641–660.
- Hartzmark, S.M., Sussman, A.B., 2019. Do investors value sustainability? A natural experiment examining ranking and fund flows. *J. Financ.* 74 (6), 2789–2837.
- Ivković, Z., Weisbenner, S., 2005. Local does as local is: information content of the geography of individual investors’ common stock investments. *J. Financ.* 60 (1), 267–306.
- Iyengar, S., Sood, G., Lelkes, Y., 2012. Affect, not ideology: a social identity perspective on polarization. *Public Opin. Q.* 76 (3), 405–431.
- Kaniel, R., Liu, S., Saar, G., Titman, S., 2012. Individual investor trading and return patterns around earnings announcements. *J. Financ.* 67 (2), 639–680.
- Lee, C.M., Shleifer, A., Thaler, R.H., 1991. Investor sentiment and the closed-end fund puzzle. *J. Financ.* 46 (1), 75–109.
- Lee, K., Oh, W.Y., Kim, N., 2013. Social media for socially responsible firms: analysis of fortune 500’s twitter profiles and their CSR/CSIR ratings. *J. Bus. Ethics* 118 (4), 791–806.
- MacKinlay, A.C., 1997. Event studies in economics and finance. *J. Econ. Lit.* 35 (1), 13–39.
- Ma-Kellams, C., Spencer-Rodgers, J., Peng, K., 2011. I am against us? Unpacking cultural differences in ingroup favoritism via dialecticism. *Personal. Soc. Psychol. Bull.* 37 (1), 15–27.
- Maks-Solomon, C., Drewry, J.M., 2019. Why do corporations engage in activism on LGBT issues? *Acad. Manag.* <https://doi.org/10.5465/AMBPP.2019.323>.
- Manjoo, F., 2017. Silicon Valley’s Politics: Liberal, with One Big Exception. *The New York Times*, p. 6.
- Moss, A., Naughton, J.P., Wang, C., 2020. The Irrelevance of ESG Disclosure to Retail Investors: Evidence from Robinhood. Available at SSRN 3604847.
- Neal, R., Wheatley, S.M., 1998. Do measures of investor sentiment predict returns? *J. Financ. Quant. Anal.* 523–547.
- Pan, Y., Pikulina, E.S., Siegel, S., Wang, T.Y., 2022. Do equity markets care about income inequality? Evidence from pay ratio disclosure. *J. Financ.* 77 (2), 1371–1411.
- Seasholes, M.S., Wu, G., 2007. Predictable behavior, profits, and attention. *J. Empir. Financ.* 14 (5), 590–610.
- Sridhar, S., Narayanan, S., Srinivasan, R., 2014. Dynamic relationships among R&D, advertising, inventory and firm performance. *J. Acad. Mark. Sci.* 42 (3), 277–290.
- Tajfel, H., 1982. Social psychology of intergroup relations. *Annu. Rev. Psychol.* 33 (1), 1–39.
- Tajfel, H., Turner, J.C., Austin, W.G., Worchel, S., 1979. An integrative theory of intergroup conflict. *Organiz. Ident. A Read.* 56 (65), 33–48.
- Wang, Q., Zhang, J., 2015. Does individual investor trading impact firm valuation? *J. Corp. Finan.* 35, 120–135.
- Zhong, C.B., Phillips, K.W., Leonardelli, G.J., Galinsky, A.D., 2008. Negational categorization and intergroup behavior. *Pers. Soc. Psychol. Bull.* 34 (6), 793–806.