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Spotlight on the neighborhood: The spillover effect of IPOs on retail investor attention

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ABSTRACT

We investigate the reallocation of retail investor attention during firm-specific disruptive events, such as IPOs. While IPOs increase investor attention across listed firms, those geographically and industrially close to the IPO attract the most significant interest. Attention builds up prior to the IPO, peaks during the event, and remains elevated afterward, particularly for geographically proximate firms. Notably, geographic proximity plays a dominant and persistent role, even under firm-specific and market-wide uncertainty. Attention also responds systematically to information, increasing with negative and uncertain tone in IPO prospectuses, consistent with the negativity bias. Conversely, high levels of aggregate market attention divert attention away from IPO events, although this effect is attenuated for geographically proximate firms. We further show that heightened attention is associated with a positive contemporaneous return effect followed by a reversal over longer horizons, consistent with temporary price pressure. Our findings indicate that retail investor attention is allocated in a systematic and economically meaningful way, reflecting the role of local information advantages, social and geographic proximity

1. Introduction

Attention is a scarce resource (Kahneman, 1973), and investors tend to focus on news that they can easily comprehend (Van Nieuwerburgh and Veldkamp, 2009). This behavior influences their trading activities and portfolio choices, leading to a concentration on certain assets (Barber and Odean, 2007; Adams et al., 2023). This paper explores the hypothesis that well-established financial market conditions are disrupted by firm-specific shocks, such as IPOs, leading to a reallocation of attention among retail investors.

Going public provides firms with a competitive edge over their industry peers (Hsu et al., 2010), and competitors often respond to these actions with their own IPO decisions (Aghamolla and Thakor, 2022). This dynamic significantly impacts rival firms' performance and survival probabilities, prompting retail investors to increase their attention following IPO events.

Scholars have extensively studied investor attention and sentiment in the context of IPOs. For instance, Colaco et al. (2017) and Da et al. (2011) show the impact of Google search volume on IPO price formation and subsequent return reversals. Demers and Lewellen (2003) highlight a surge in corporate web traffic and marketing benefits during IPO events. Furthermore, Gao et al. (2016) differentiate between the sentiments of institutional and retail investors, revealing distinct effects on long-term IPO performance.

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Motivated by these studies, we investigate the reallocation of retail investor attention toward IPO peers, that is, firms in the same industry or located nearby. Since attention directly impacts individual investors' trading behavior (Barber and Odean, 2013), investigating this phenomenon is crucial.

In distinguishing between product market competition and the competition for retail investor attention, we recognize that while industry dynamics primarily drive the former, the latter is more influenced by geographical proximity to the IPO firm, as argued by Ivković and Weisbenner (2005) and Massa and Simonov (2006). Retail investors often rely on geographical proximity to enhance their capacity to process financial information (Blankespoor et al., 2019). Rather than being solely driven by behavioral biases, households' preference for local investments may also be driven by information advantages. This advantage arises from focusing on proximate stocks to mitigate the higher costs of accessing and processing information.

Our study empirically tests this hypothesis in a financial market environment disrupted by IPOs, providing insights into how competitive dynamics influence retail investor behavior and attention allocation. We use Google web searches for US stocks from 2004 to 2020 to measure attention, following the approach of Da et al. (2011), Engelberg and Parsons (2011), and Andrei and Hasler (2014).[1] This web-based measure reflects intentional choices rather than search costs, given the equal accessibility of the Google search engine.

IPO events significantly boost retail investor attention towards peer firms during the week a firm goes public. This effect is more pronounced for firms located geographically close than those in the same industry. These results remain robust after controlling for market cycles, IPO peer citations in the IPO prospectus, and firm characteristics such as size, book-to-market ratio, and dividend yield.

To better understand the mechanisms underlying these effects, we analyze the joint dynamics of attention, trading activity, and valuation. The results reveal that attention is persistent and interacts endogenously with trading volumes and valuation measures, highlighting the dynamic nature of investor attention around IPO events.

We further examine the implications of attention for asset prices. The results show that heightened attention is associated with a positive contemporaneous return effect, followed by a reversal over longer horizons. This pattern is consistent with temporary price pressure induced by attention-driven trading (e.g., Da et al., 2011; Chen et al., 2023), suggesting that while attention is allocated in an economically meaningful way, it may also generate short-term mispricing.

We then investigate which investor characteristics are associated with stronger spatial attention effects. The findings reveal that geographically driven attention is more pronounced in U.S. States where residents are more engaged in online financial activities, exhibit greater willingness to take risks, and report lower confidence in their financial abilities. These patterns suggest that local attention is particularly strong where investors appear more exposed to financial decision-making but also more likely to rely on proximity as a heuristic to process information.

Following the approaches of Dorn et al. (2015), Gao and Lin (2015), and Havakhor et al. (2024), we also find that the geographic peer effect is more substantial for speculative, 'get-rich-quick' stocks. This result confirms that retail investors, facing higher costs for accessing and processing information, are the primary drivers of these results, leveraging spatial proximity to mitigate these costs.

We document that the geographic spillover effect of attention is not limited to the IPO week, but is present both before and after the event, indicating anticipation and persistence, in line with evidence on pre-IPO attention dynamics (e.g., Da et al., 2011). By contrast, the sector-based effect is largely concentrated around the IPO week, with limited evidence of pre- or post-event dynamics.

To further investigate the role of proximity, we extend the analysis beyond physical distance by incorporating measures of social connectedness across U.S. States. Using the Social Connectedness Index (SCI), based on Facebook friendship networks, we show that attention spillovers are also shaped by social ties between regions. Firms located in areas that are more socially connected to IPO locations experience higher levels of attention, suggesting that information diffuses not only through geographic proximity but also through underlying social networks.

We also investigate which market characteristics increase retail investor attention during IPO events. Both firm-specific and aggregate uncertainties attract investor attention. Using the methodology of Loughran and McDonald (2011), firm-specific uncertainty is measured by the tone (positive, negative, and uncertain) in the IPO prospectus (S-1 SEC Form). In contrast, aggregate uncertainty is proxied by the VIX market index. Our results highlight that negative and uncertain tones increase retail investor attention, while positive tones have the opposite effect. These findings are consistent with the well-documented negativity bias in psychology (Baumeister et al., 2001), according to which individuals allocate greater attention to negative information than to positive information. This pattern has also been documented in financial markets (Akhtar et al., 2011; Williams, 2015). Overall, our results confirm that retail investors allocate attention in a systematic and economically meaningful way, rather than avoiding negative information. Moreover, we find that aggregate market attention crowds out firm-specific attention, consistent with the limited nature of investor attention. However, this crowding-out effect is attenuated for geographically proximate IPOs, which continue to attract local attention even in periods of high aggregate information flow.

The significant role of spatial proximity in our results aligns with extensive literature indicating that households prefer local stocks and invest in firms headquartered nearby, leveraging local knowledge (Ivković and Weisbenner, 2005). For instance, Lu et al. (2024) show that local households and institutions are significantly more informed than their foreign counterparts. Therefore, when referring to 'peer firms', it is crucial to consider not only companies in the same industry that compete in the product market but

[1] Using Bloomberg data, Ben-Rephael et al. (2017) apply similar approach to measure institutional investor attention.

also those geographically close to the company going public. Indeed, local information advantages may partially drive households' preference for local investments.

Our findings contribute to understanding how competitive dynamics in financial markets influence retail investor behavior and attention allocation. As an IPO potentially conveys negative externalities for competitors, retail investors capture information related to their peers and promptly allocate their attention toward value-relevant information, thereby contributing to the incorporation of value-relevant information into prices, albeit with temporary distortions. This evidence contradicts the common belief that mispricing is primarily attributed to retail investors subject to various behavioral biases (Barber and Odean, 2000, 2001, 2007, 2013). Indeed, as more recent research highlights (Kaniel et al., 2008, 2012; Kelley and Tetlock, 2013; Friedman and Zeng, 2021), retail investors play a more significant role in price discovery than traditionally believed, mainly through their geographically informed attention patterns.

The rest of the paper proceeds as follows. Section 2 describes the data. Section 3 presents the empirical analysis. Section 4 provides the conclusion.

2. Data

Our dataset originates from two primary sources. Using Refinitiv Eikon, we first identify a cohort of 3577 publicly traded companies on the NYSE/NASDAQ. Then, we track these firms and their IPO dates from the beginning of 2004 to the end of 2020. The choice of 2004 as a starting point aligns with the availability of Google Trends web search data, which is our second main data source (see Google Trends at https://trends.google.com/trends/). Google Trends offers aggregated and anonymized insights into the volume of specific web search queries, which we use to gauge public interest and attention toward particular companies. For our analysis, we compiled a dataset encompassing 2,015,613 company-week instances of Google search volumes, specifically focusing on each stock's ticker symbol. The Google Search Index measures the frequency of these search terms relative to total Google searches during the same period, providing a scaled indication of public interest in each company. We denote this variable as `GSearch`, representing the relative number of weekly Google web searches for a specific stock ticker. Formally,

$$\texttt{GSearch}_{it} = 100 \times \frac{G_{it}/G_t}{G_{iT}/G_T}, \tag{1}$$

where G_{it} represents the Google searches for ticker i in week t, G_t represents the total Google searches in the same week, and T denotes the week in which G_{it}/G_t reaches the maximum value for ticker i. Thus, `GSearch` is a proxy for retail investor attention, as Google web searches for stocks typically originate from potential retail investors. Indeed, professional investors are assumed to utilize specialized financial information services. Among others, Liu et al. (2019) compare retail attention with institutional attention, using Google search volume as a proxy for the former and Bloomberg user access data as a proxy for the latter. This variable is widely used in the finance literature to measure retail investor attention, in line with Da et al. (2011), Engelberg and Parsons (2011), Andrei and Hasler (2014), and Mengoli et al. (2025).[2]

The index normalizes search volumes by transforming weekly counts into a scale where the week with the highest search frequency for each ticker is set at a baseline value of 100. For instance, if Apple's ticker, AAPL, reached its peak search volume during the third week of January 2010, that week would be assigned a score of 100. If the search volume dropped to 20% of the peak in the following week, it would score 20, indicating a significant decrease from the peak. One challenge in utilizing this data is Google's policy that restricts the download of weekly data from time series to a maximum of five years at a time. While monthly data would remove this limitation, it would substantially diminish the depth of our findings. To maintain the thoroughness of our analysis, we employ weekly data. To ensure comparability over time of our search metric, we adopt a strategy akin to the dilution factor adjustment, which guarantees comparability between consecutive price series during stock splits. So, extending our analysis from 2004 to 2020 for each ticker, we leverage overlapping weeks at the start and end of each five-year time series. For example, assuming a last value for `GSearch` equals 50 of a five-year series and a starting value of 100 for the next series for the same given ticker in the same overlap week, we calculate a ratio of 0.5 (50/100). This ratio is then used to adjust all values of the subsequent second series downwards, maintaining consistency across the extended timeline. This method achieves a unified time series of Google searches for each ticker, eventually spanning the entire 2004–2020 period.

To assess the impact of the shock represented by the IPO on investor attention, we introduce four dummy variables for each firm and week, namely, `IpoInWeek`, `IpoInWeekSect`, `IpoInWeekState`, and `IpoInWeekStateSect`. Respectively, the dummies

[2] Research has extensively utilized Google search data to analyze financial markets and public interest. Bae and Wang (2012) show that during China's 2007 stock market boom, stocks with names associated with China significantly outperformed those without. They attribute this outperformance to heightened attention, quantified by Google search volumes. Similarly, Da et al. (2014) use Google queries to assess investor sentiment, which they link to short-term return reversals, temporary spikes in volatility, and shifts in mutual fund flows from equity to bond funds. Notably, they highlight that in 2009, Google dominated the search engine market in the United States, handling 72% of all queries. Further exploring the role of online searches, Andrei and Hasler (2014) and Hartzmark and Sussman (2019) find that Google search volumes can serve as proxies for investor attention, impacting stock return variance, risk premia, and the engagement with financial products like the Morningstar sustainability rating system. On a related note, Focke et al. (2019) examine the influence of firm advertising on investor attention, employing Google searches of ticker symbols as an engagement metric. The utility of Google data extends beyond financial markets. Choi et al. (2020) use Google queries about climate change to show that increased search activity correlates with changes in public beliefs and actions regarding local temperature fluctuations. In sectors such as public health and real estate, Welch (2022) and Berger et al. (2020) utilize Google Trends to track public interest in COVID and analyze demand in the housing market. Benamar et al. (2020) further confirm the significance of Google queries in forecasting economic indicators, finding that information demand on Google can predict future interest rates.

Table 1
Descriptive statistics.

	Obs	Mean	SD	Min	Max
GSearch	1,904,449	22.21	21.35	0.00	100.00
IpoInWeek	1,904,449	0.84	0.37	0.00	1.00
IpoInWeekSect	1,904,449	0.31	0.46	0.00	1.00
IpoInWeekState	1,904,449	0.16	0.37	0.00	1.00
IpoInWeekStateSect	1,904,449	0.08	0.27	0.00	1.00
NIpoInWeek	1,904,449	3.03	2.91	0.00	22.00
HotIssueMarket	1,904,449	0.47	0.50	0.00	1.00
CitCount	1,904,449	0.30	2.68	0.00	29.00
MV	1,904,449	6.83	2.06	−4.61	14.57
MTBV	1,904,449	2.94	2.80	0.24	11.60
DY	1,904,449	1.83	3.17	0.00	126.42

This table shows descriptive statistics of the variables used in this study. GSearch is each ticker's weekly Google Trends index, ranging from 0 to 100. IpoInWeek is a dummy variable that indicates whether an IPO occurred during the week; IpoInWeekSect whether this IPO is in the same industry; IpoInWeekState whether it is headquartered in the same US State; IpoInWeekStateSect whether it holds both characteristics. Other variables measure the business cycle (HotIssueMarket), the sum of citations of the firm in the IPO's prospectus (CitCount), size (MV, which indicates a company's market value in the logarithmic form), market-to-book ratio (MTBV), and dividend yield (DY) of the firm.

indicate whether an IPO occurs during the week, is in the same industry, is in the same US State as the firm, or both. Similarly, the variable NIpoInWeek quantifies the number of IPOs occurring in a given week.

We incorporate a set of control variables into the regression analysis. To account for the business cycle and the varying intensity of the IPOs, we introduce a dummy variable, HotIssueMarket, which is set to one when the frequency of IPOs is above the average. Moreover, to control for the direct impact of a company's citations in the IPO's prospectus, we compute CitCount, which represents the total number of times already listed firms are mentioned in the IPO prospectus. This variable is particularly valuable as it reflects the relevance and influence of existing companies on the new public firm and vice versa. To calculate CitCount, we analyzed the prospectuses of all the IPOs in our sample, counting the mentions of already-listed companies, thereby capturing the extent of their recognition and significance in the IPO documentation. Lastly, we include firm-specific characteristic variables, which are the (natural) logarithm of the firm's market value (MV), used as a proxy for company size, the market-to-book ratio (MTBV), used as a proxy for growth opportunities, and the dividend yield (DY).

Table 1 presents descriptive statistics for the main variables used in the baseline models. The average weekly GSearch score is 22.21, indicating that the typical web search volume for a stock is around 22% of its peak search volume. This finding suggests that web searches cluster significantly in particular weeks. Over the 883 weeks from 2004 to 2020, the probability of observing at least one IPO in any given week is 84% (IpoInWeek). This probability decreases to 31% for IPOs that occur within the same sector (IpoInWeekSect) and to 16% for IPOs that occur within the same State (IpoInWeekState). The frequency further narrows to 8% when referring to IPOs sharing both sector and State (IpoInWeekStateSect). On average, there are 3 IPOs per week (NIpoInWeek), with the market being classified as 'hot' — meaning above-average IPO activity — 47% of the time (HotIssueMarket). The average already listed company citation count in the IPO prospectus is 0.30 (CitCount). Regarding firm characteristics, the average firm has a market value of 7337 million dollars (before the log transform), a market-to-book ratio of 2.94 (MTBV), and a dividend yield of 1.83% (DY).

3. Results

3.1. Exploratory analysis

In this Section, we conduct a preliminary analysis of the characteristics and the relationship between variables in our sample. Fig. 1 illustrates the geographical distribution of companies in our sample, distinguishing between those that went public from 2004 to 2020 (light blue) and the others (dark blue). As expected, some geographical clusters emerge, yet both samples are quite well distributed across the US. Fig. 1 also illustrates the geographical distribution of average GSearch values across the US States, conditional on the occurrence of at least one listed firm in each State. The maps use color intensity to represent the average GSearch activity, with darker shades indicating higher activity levels. The top map shows that web search activity when no IPO occurs in a given State is widely distributed across the US and is not primarily concentrated in traditional financial hubs such as New York or California. Surprisingly, regions like Idaho exhibit the highest levels of search activity, with an average GSearch value of 32. The bottom map displays deviations from these average values when at least one IPO occurs in a given State. It is worth noting that in all the cases, the latter value is always positive and ranges from 0 to 10. Specifically, North Dakota and South Dakota exhibit the greatest change in search activity, reflecting significant differences in search behavior between weeks with and without IPO activity. Overall, IPO activity substantially influences retail investors' attention toward peer firms.

Fig. 2 presents a scatterplot comparing the average GSearch values in each US State during weeks with at least one IPO and weeks without IPOs. The data points predominantly lie above the bisector, indicating higher search activity during IPO weeks in most States. Data points above the bisector are colored blue, while those below are red. Notable exceptions include Alabama,

Table 2
Effects of IPOs on attention.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	GSearch	GSearch	GSearch	GSearch	GSearch	GSearch	GSearch
IpoInWeek	1.594***	0.497***	1.496***			0.494***	0.428***
	[17.578]	[10.567]	[14.439]			[10.470]	[7.174]
Spatial lag of GSearch			0.128***				
			[17.651]				
NIpoInWeek				0.358***	0.481***		
				[21.153]	[17.375]		
$NIpoInWeek^2$					−0.011***		
					[−8.748]		
Rainfall						0.013**	−0.014
						[2.421]	[−0.943]
IpoInWeek × Rainfall							0.032*
							[1.849]
HotIssueMarket		1.858***	0.421***			1.870***	1.870***
		[11.495]	[6.666]			[11.481]	[11.480]
CitCount		0.018	0.009			0.018	0.018
		[0.527]	[0.818]			[0.522]	[0.522]
MV		2.266***	0.918***			2.246***	2.246***
		[13.767]	[9.113]			[13.581]	[13.583]
MTBV		−0.012	0.053*			−0.009	−0.009
		[−0.243]	[1.844]			[−0.190]	[−0.188]
DY		0.026	−0.262***			0.031	0.030
		[0.697]	[−9.029]			[0.764]	[0.760]
Constant	20.868***	5.429***		21.116***	20.932***	5.537***	5.591***
	[275.266]	[4.942]		[412.043]	[317.136]	[5.009]	[5.055]
N	1 903 089	1 903 089	140 504	1 903 089	1 903 089	1 878 269	1 878 269
$\bar{R}^2$	0.561	0.569		0.562	0.562	0.570	0.570

This table shows estimates from the regression of GSearch on a dummy which indicates whether an IPO occurred during the week (IpoInWeek), the number of IPOs in a week (NIpoInWeek), and its squared value ($NIpoInWeek^2$). The variable Rainfall measures total weak rainfall in a State. Other variables measure the business cycle (proxied by HotIssueMarket), citations in the IPO's prospectus (CitCount), size (MV), market-to-book ratio (MTBV), and the dividend yield (DY) of the firm. All the regressions in the table, except the third, are estimated by OLS. The third column shows ML estimates. All variables are described in Sections 2. The inference is based on unit-cluster standard errors. *t*-statistics are reported in brackets. Significance code: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Montana, Nebraska, New Mexico, Oklahoma, South Carolina, and Wyoming, characterized by lower population densities and a solid agricultural and rural tradition. In these States, the size of the dots, representing the number of IPOs in the sample, is relatively smaller compared to other States.

Using a similar approach, Fig. 3 explores this relationship at the sector level, utilizing the North American Industry Classification System (NAICS) for industry classification. Consistent with previous observations, most sectors display data points above the blue dashed bisector, indicating higher search activity during IPO than non-IPO weeks. Notable exceptions occur in industries with fewer IPO occurrences, specifically NAICS 11 (Agriculture, Forestry, Fishing, and Hunting) and NAICS 81 (primarily private households employing workers), where GSearch activity does not significantly increase during IPO weeks.

Figs. 2 and 3 underscore the localized impact of IPO events on public interest as captured by web search behavior, varying notably by State and sector demographics. Overall, the occurrence of an IPO week emerges as a potential discriminator in explaining the GSearch patterns of peer firms.

3.2. Baseline results and geographical spillover effects

We investigate the relationship between public attention and IPO events by estimating variations of the following general model

$$\texttt{GSearch}_{it} = \boldsymbol{\beta}' \boldsymbol{x}_{it} + \boldsymbol{\gamma}' \boldsymbol{c}_{it} + \mu_i + \epsilon_{it}. \tag{2}$$

In this equation, $\texttt{GSearch}_{it}$ represents the web search activity for ticker i during week t, $\boldsymbol{x}_{it}$ denotes a vector of explanatory variables with $\boldsymbol{\beta}$ as the corresponding coefficient vector, and $\boldsymbol{c}_{it}$ refers to a vector of control variables with $\boldsymbol{\gamma}$ as its coefficients. The terms μ_i indicate fixed effects for the firm, designed to adjust for unobserved heterogeneity in attention across different stocks.[3] The term ϵ_{it} denotes a zero-mean stochastic error component.

In Table 2, we present estimates from the model specified in Eq. (2) to analyze the spillover effect of IPO occurrences on retail investor attention towards peer companies. A simple model that excludes control variables (Model 1) indicates that the average

[3] The model does not incorporate weekly dummy variables because our primary objective is to capture changes in GSearch driven by time-series shocks. Including such dummies would absorb much of the temporal variation, thereby limiting our ability to estimate the effects of the key time-varying variables.

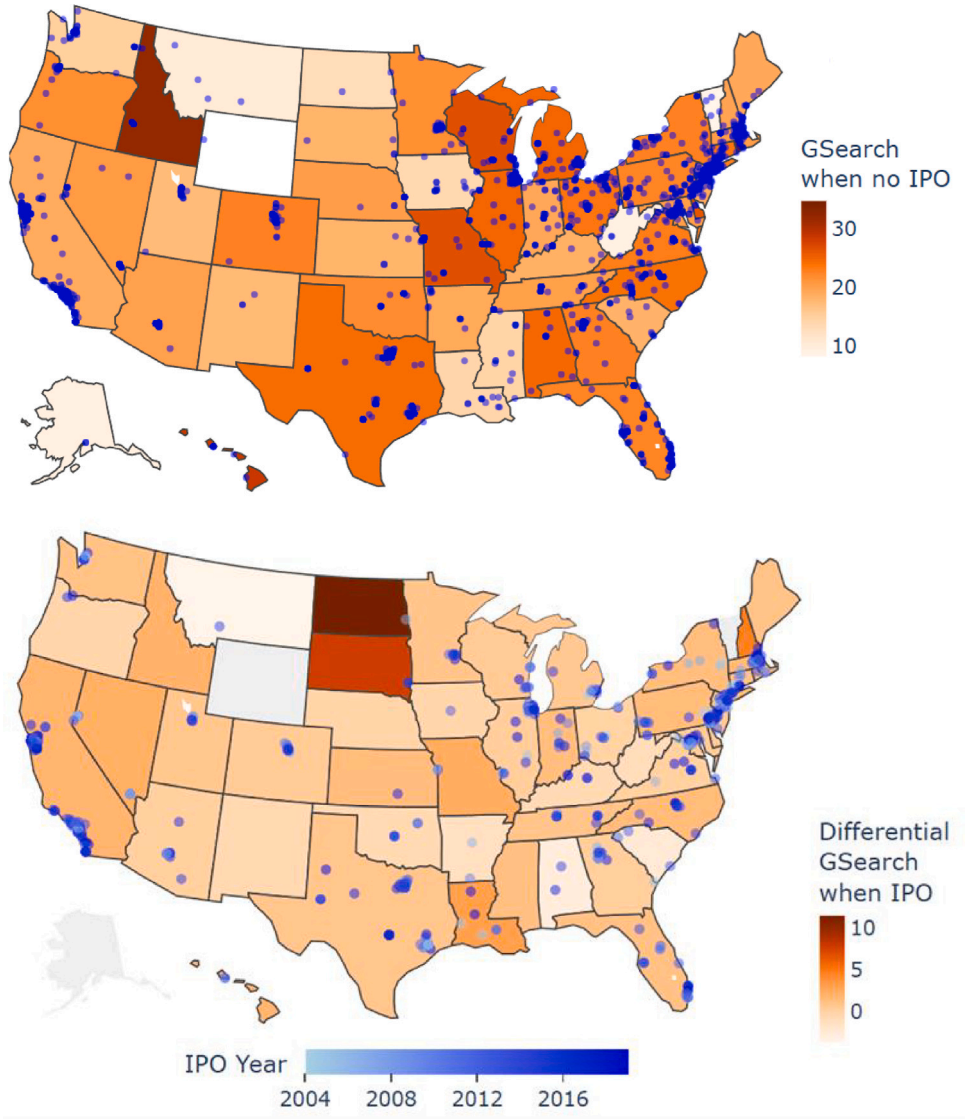

Fig. 1. Geographic distribution of firms and GSearch based on IpoInWeekState.
The maps illustrate the geographical distribution of companies in our sample across the United States. On the top map, points represent firms that went public before 2004, while on the bottom map, points indicate firms that went public after 2004. In the top map, each US State is shaded according to the average GSearch value when IpoInWeekState is set to zero, while in the bottom map, each US State is shaded according to the differential GSearch between the case when IpoInWeekState is set to one and the case when IpoInWeekState is set to zero. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)

GSearch value is approximately 20.87 (constant term). IPO occurrences in a given week (IpoInWeek) statistically increase GSearch by 1.59 points, which corresponds to an approximate 8% increase. When control variables are included (Model 2), this increase diminishes as the IpoInWeek coefficient reduces by more than one point. Although the coefficient remains statistically significant, high IPO market activity (HotIssueMarket) and company size (MV) attenuate the effect of IpoInWeek on GSearch. Conversely, company mentions in IPO prospectuses, the market-to-book value ratio (MTBV), and the dividend yield (DY) do not significantly alter the effect of IPOs on peer company attention.

An interesting result emerges from Model (3) in Table 2, which introduces a spatial lag to the regression equation to explicitly account for potential spatial dependence in investor attention across firms. This specification is included as a robustness check to ensure that our baseline results are not driven by spatial clustering in attention. Formally, the estimated regression equation becomes

$$\texttt{GSearch}_{it} = \rho \sum_{i \neq j} w_{ij} \texttt{GSearch}_{jt} + \boldsymbol{\beta}' \boldsymbol{x}_{it} + \boldsymbol{\gamma}' \boldsymbol{c}_{it} + \mu_i + \epsilon_{it}. \tag{3}$$

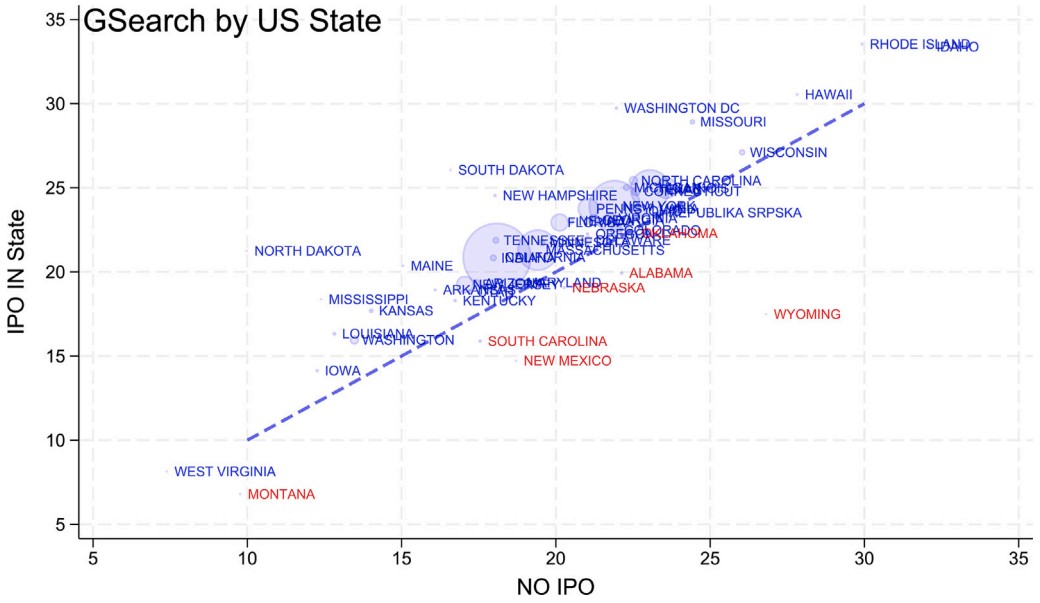

Fig. 2. `GSearch` by US state.
The scatterplot illustrates `GSearch` across the US States. The *x*-axis shows the average `GSearch` in the US State when no IPO occurs in that week, while the *y*-axis represents the average `GSearch` in the US State when at least one IPO occurs. The size of the dot indicates the number of IPOs in that US State. The dashed line represents the bisector: for the US States above the line (blue), `GSearch` in the week the IPO occurs is higher than the others, while for those below the line (red), `GSearch` in the week the IPO occurs is lower than the others. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)

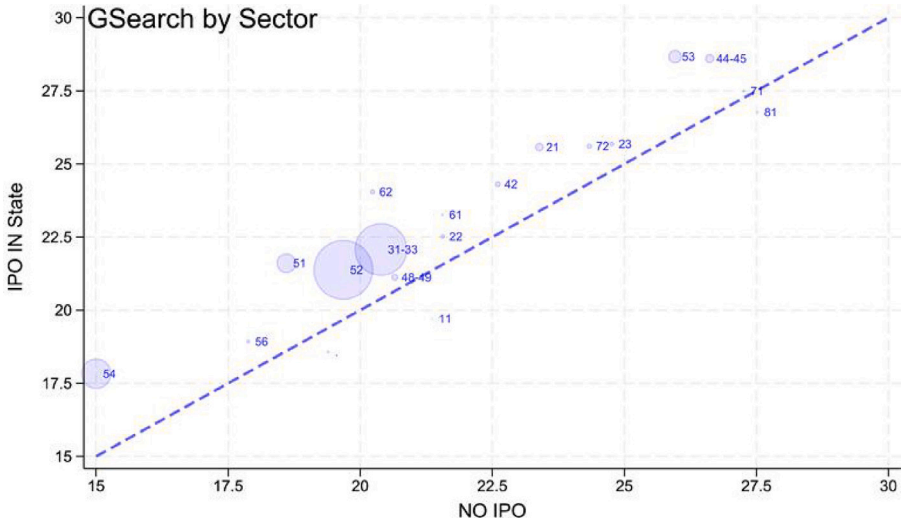

Fig. 3. `GSearch` by sector.
This scatterplot illustrates `GSearch` across Sectors (11: Agriculture, Forestry, Fishin,g and Hunting; 21: Mining, Quarrying, and Oil and Gas Extraction; 22: Utilities; 23: Construction; 31-33: Manufacturing; 42: Wholesale Trade; 44-45: Retail Trade; 48-49: Transportation and Warehousing; 51: Information; 52: Finance and Insurance; 53: Real Estate and Rental and Leasing; 54: Professional, Scientific, and Technical Services; 56: Administrative and Support and Waste Management and Remediation Services; 61: Educational Services; 62: Health Care and Social Assistance; 71: Arts, Entertainment, and Recreation; 72: Accommodation and Food Services; 81: Other Services except Public Administration). The chart displays the average `GSearch` on the *x*-axis for weeks without an IPO in the sector. The *y*-axis shows the average `GSearch` for weeks with at least one IPO in the sector. The dot size corresponds to the number of IPOs in that sector. The dashed line represents the bisector; industries above the line have higher `GSearch` in the IPO week, while those below have lower `GSearch`.

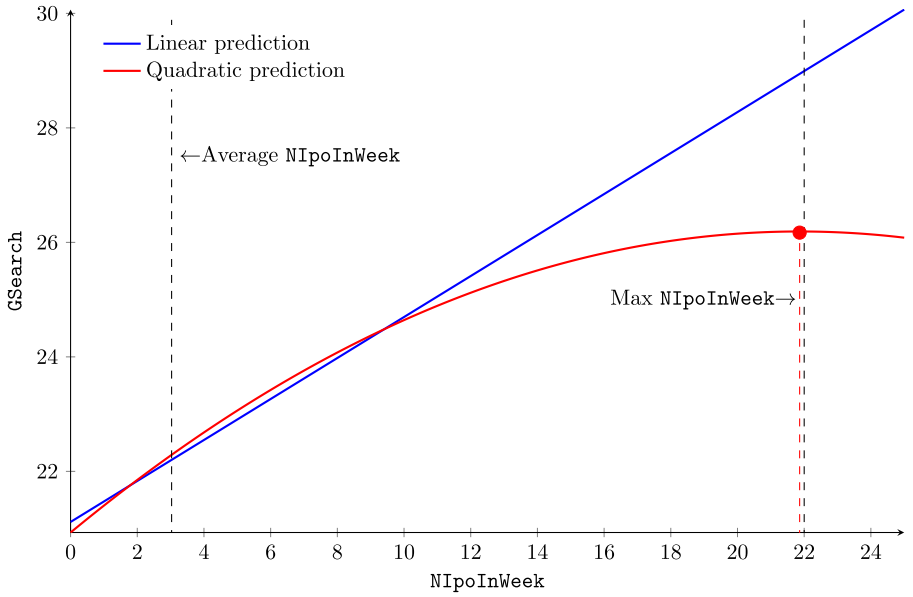

Fig. 4. GSearch as a function of the number of IPOs in week.
This figure illustrates GSearch as a function of the number of IPOs in a week based on the model parameter estimates in Model 4 (Linear prediction) and 5 (Quadratic prediction) of Table 2. The vertical dashed lines identify on the x-axis the average and the maximum NIpoInWeek in our sample, respectively. The red dot identifies the maximum value of GSearch using the quadratic function. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)

The term $\sum_{i \neq j} w_{ij} \texttt{GSearch}_{jt}$ represents a contemporaneous spatial lag of the dependent variable. That is, it captures the idea that investor attention to a given firm may be influenced by the level of attention paid to other geographically proximate firms at the same point in time. This corresponds to a standard spatial autoregressive (SAR) specification, in which cross-sectional dependence is explicitly modeled.

The spatial weighting matrix $W = [w_{ij}]$ is constructed using the geographic distance between firms' headquarters. All firms are connected to each other, but the strength of the connection decreases with distance, so that closer firms receive larger weights. The matrix is row-normalized, implying that the weights assigned to neighboring firms sum to one for each firm. Importantly, this specification differs from a temporal autoregressive model, as dependence operates across firms rather than over time. By accounting for spatial correlation in attention, this approach allows us to isolate the IPO effect from broader geographic clustering patterns.

The coefficient ρ quantifies the strength of these endogenous interactions within the spatial framework. The statistically significant positive coefficient of SpatialLagGSearch suggests substantial spatial dependency among observations. Thus, an increase in GSearch for neighboring firms typically translates into a corresponding increase in GSearch for a given firm located nearby. This result highlights an overall geographic influence and diffusion effect on retail investor attention, where high (or low) values of GSearch for one company are likely to be mirrored by high (or low) values for geographically adjacent companies.

Crucially, even after controlling for spatial dependence, the coefficient on IpoInWeek remains positive and statistically significant, indicating that the IPO effect on peer attention is not merely driven by spatial clustering but reflects a distinct and robust relationship.[4]

Further analysis in Models 4 and 5 examines the impact of the weekly number of IPOs (NIpoInWeek) through linear and quadratic models. Model 4 reveals a significant positive linear relationship, while Model 5 introduces a quadratic term, resulting in an inverted U-shaped relationship. Although the quadratic term is statistically significant, Fig. 4, based on the estimated parameters of Models 4 and 5, illustrates the nuanced economic effects of this term. The peak of the quadratic function occurs when the weekly IPO count is approximately 21.86, which is very close to the maximum observed value of NIpoInWeek at 22 (see Table 1).[5] The average value of NIpoInWeek is approximately 3. The two models exhibit similar behavior near this average value, indicating an approximately linear relationship.

Preliminary results suggest a relationship between IPO events and peer investors' attention, although unobserved factors may confound this relationship. To address this concern and strengthen the identification of the relationship of interest, we incorporate

[4] In this model, the number of observations is reduced because the estimator requires a strongly balanced panel dataset.
[5] The value of 21.86 is derived as $\frac{-0.481}{-0.011 \times 2}$.

Table 3
Spatial and sectorial proximity.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	GSearch	GSearch	GSearch	GSearch	GSearch	GSearch	GSearch
IpoInWeek	1.376***	1.428***	1.498***	1.269***	0.606***	0.404***	1.445***
	[16.188]	[16.650]	[17.003]	[15.667]	[12.377]	[8.357]	[13.361]
IpoInWeekSect	0.601***			0.474***	0.156***	0.117***	0.110
	[13.088]			[10.299]	[3.637]	[2.758]	[1.032]
IpoInWeekState		0.942***		0.781***	0.384***	0.327***	0.028
		[13.316]		[10.133]	[5.447]	[4.721]	[0.337]
IpoInWeekStateSect			1.158***	0.101	0.060	0.040	0.238*
			[13.521]	[1.131]	[0.672]	[0.449]	[1.646]
Spatial lag of GSearch							0.127***
							[17.523]
HotIssueMarket					2.833***	1.820***	0.388***
					[16.654]	[11.266]	[6.019]
CitCount					0.027	0.016	0.007
					[0.742]	[0.448]	[0.620]
MV						2.263***	0.912***
						[13.740]	[9.052]
MTBV						−0.012	0.052*
						[−0.251]	[1.811]
DY						0.026	−0.261***
						[0.695]	[−9.003]
Constant	20.871***	20.867***	20.868***	20.859***	20.246***	5.460***	
	[274.935]	[274.261]	[274.631]	[273.800]	[182.521]	[4.967]	
N	1 904 449	1 904 449	1 904 449	1 903 089	1 903 089	1 903 089	140 504
$\bar{R}^2$	0.560	0.560	0.560	0.561	0.565	0.569	

This table shows estimates from the regression of GSearch on a dummy which indicates whether an IPO occurred during the week (IpoInWeek), whether it was in the same industry (IpoInWeekSect) or headquartered in the same US State (IpoInWeekState), or, finally, both (IpoInWeekStateSect). Other variables measure the business cycle (proxied by HotIssueMarket), citations in the IPO's prospectus (CitCount), size (MV), market-to-book ratio (MTBV), and the dividend yield (DY) of the firm. All the regressions in the table, except for the last, are estimated by OLS. The last column shows ML estimates. All specifications include firm fixed effects. The inference is based on unit-cluster standard errors. t-statistics are reported in brackets. Significance code: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

an exogenous variable: precipitation levels in the US State where each firm is headquartered. The intuition behind this approach is that higher total weekly rainfall in a given State (Rainfall) may encourage investors to stay indoors, potentially increasing their attention to financial markets and related information during rainy weeks. Importantly, precipitation is assumed to be unrelated to the timing of IPO events, making it a suitable variable to help isolate shifts in investor attention that are plausibly exogenous to IPO activity. We collect daily rainfall data from Meteostat, a platform providing freely available weather and climate data from numerous US weather stations, and aggregate this information to obtain weekly cumulative rainfall for each State. Each firm is then linked to these rainfall measures based on the location of its headquarters.

The last two models of Table 2 present results consistent with our assumption. In Model 6, Rainfall is significantly positive (0.013), suggesting that rainfall in the firm's home state increases investor attention to the firm. Furthermore, in Model 7, when this variable interacts with IPO occurrences (IpoInWeek×Rainfall), investor attention to peer firms increases significantly more than under normal conditions (0.030). This interaction improves the identification of the relationship under investigation, suggesting that the link between IPO events and peer attention is not incidental but rather reflects a structural connection. By leveraging an exogenous source of variation (rainfall) in attention, our analysis provides evidence supporting the hypothesis that IPO events systematically drive peer attention, rather than merely coinciding with it.

Table 3 directly tests our main hypotheses regarding the relative importance of sectoral and geographic proximity by incorporating three dummy variables: IpoInWeekSect, IpoInWeekState, and IpoInWeekStateSect. The coefficients reveal that retail investor attention is notably and positively influenced by IPO occurrences within the same industry sector (IpoInWeekSect, Models 1, 4, 5, and 6) and within the same US State (IpoInWeekState, Models 2, 4, 5, and 6). Additionally, IPOs that share both characteristics (IpoInWeekStateSect) also affect retail investor attention (Models 3 to 7), although this effect is less consistent across models. Overall, results emphasize the importance of spatial proximity and sector similarity as individual factors in attracting retail investor attention. When comparing their economic effects, geographic proximity has a stronger influence than sector affiliation. This finding is reflected in the consistently lower coefficients of IpoInWeekSect relative to IpoInWeekState (Models 4, 5, and 6). In Model 4, for instance, IpoInWeekState has a coefficient of 0.781, nearly 1.6 times the 0.474 estimated for IpoInWeekSect.

To provide an economic interpretation of the results, we focus on the coefficients from Model 4. The baseline retail investor attention is 20.859, corresponding to the constant term. When an IPO occurs within a week, attention rises to 22.128 (20.859 + 1.269), representing a 6% increase. If the IPO occurs in the same sector, attention further increases to 22.602 (20.859 + 1.269 + 0.474), reflecting an 8% increase. In contrast, geographical proximity leads to a larger rise in GSearch, reaching 22.909 (20.859 + 1.269 + 0.781), which corresponds to a 10% increase. Therefore, although both sectoral and geographical proximity boost retail investor attention, geographical proximity has a greater impact.

In Model 7, we estimate a spatial regression model to accurately capture the effect of geographical distance on retail investor attention, thereby confirming the persistent influence of location. This model incorporates a spatial lag dependency in the attention metrics (spatial lag of GSearch), accounting for the influence that nearby firms exert on each other's investor attention. By adjusting for this spatial dependency, we observe that the sector effect (IpoInWeekSect) and the geographical effect (IpoInWeekState) vanish when considered separately. However, when jointly considered through the spatial interaction term (IpoInWeekStateSect), they remain significant. This result underscores the critical role of spatial proximity in amplifying investor attention. Consequently, geographical factors significantly influence retail investor behavior, alongside industry-specific effects.

3.3. Attention and the financial market

According to the investor recognition hypothesis modeled by Merton (1987), stocks that receive greater attention should have lower returns and thus higher valuations. In this section, we examine whether shifts in investor attention triggered by IPO events directly influence financial market variables. The analysis of these dynamics clarifies how IPO events shape investor behavior and impact financial markets.

We focus on three key variables: investor attention (GSearch), trading volume (VO), and the price-to-sales multiple (PSales). In particular, VO measures the level of market activity and liquidity, as heightened investor attention often translates into and responds to increased trading. On the other hand, the price-to-sales ratio (PSales) serves as a valuation metric, indicating how much investors are willing to pay per unit of revenue. By examining the interplay among these variables, we aim to uncover the mechanisms through which IPO-related attention shifts affect market dynamics.

We estimate the following panel vector autoregressive (pVAR) model:

$$\boldsymbol{y}_{it} = \boldsymbol{A}\boldsymbol{y}_{it-1} + \boldsymbol{B}\boldsymbol{x}_{it} + \boldsymbol{C}\boldsymbol{c}_{it} + \boldsymbol{\mu}_i + \boldsymbol{\epsilon}_{it} \tag{4}$$

where $\boldsymbol{y}_{it}$ is the vector of endogenous variables, including GSearch, VO, and PSales. The vectors $\boldsymbol{x}_{it}$ and $\boldsymbol{c}_{it}$ contain additional explanatory and control variables, as previously defined. The coefficient matrices $\boldsymbol{A}$, $\boldsymbol{B}$, and $\boldsymbol{C}$ capture the relationships among the endogenous and exogenous variables. The term $\boldsymbol{\mu}_i$ represents variable-specific firm fixed effects, accounting for systematic cross-sectional heterogeneity, while $\boldsymbol{\epsilon}_{it}$ denotes the vector of idiosyncratic error terms.

We estimate the system of Eq. (4) using the Generalized Method of Moments (GMM), as the fixed effects estimator would produce biased estimates due to the presence of lagged dependent variables. As Nickell (1981) points out, this bias stems from the demeaning process used in fixed effects estimation, which introduces a correlation between the regressors and the error terms, resulting in endogeneity. In contrast, the GMM estimator offers consistent estimates. Since stationarity is a prerequisite for estimation, we commence by conducting Fisher-type unit root tests based on the Phillips–Perron approach (Choi, 2001). These tests indicate that the variables used in our analysis are indeed stationary.

While the baseline regressions presented earlier focus on contemporaneous relationships between IPO activity and investor attention, capturing how attention responds to IPO events within the same week, the pVAR framework explicitly models the joint dynamics of attention, trading activity, and valuation over time by incorporating lagged endogenous variables. This dynamic structure allows to account for persistence in investor attention and to capture feedback effects across variables. For instance, attention may not only respond to IPO events, but also evolve gradually over time and interact with trading volumes and valuation metrics. As a result, the pVAR estimates capture conditional short-run effects, given past realizations of the endogenous variables, rather than unconditional contemporaneous associations.

This distinction is important when comparing the results across specifications. While the static models capture the overall contemporaneous relationship between IPO activity and attention, the pVAR framework isolates the incremental effect of IPOs after controlling for the dynamic evolution of the system.

Table 4 presents the results of the estimation, highlighting key dynamics in investor behavior. The lagged values of the endogenous variables show significant persistence, indicating that past values have a strong influence on current levels. Retail investor attention, as measured by GSearch, is positively influenced by both VO and PSales. The relationship between GSearch and VO is bidirectional, indicating that higher trading volumes attract investor interest, which, in turn, fuels additional trading activity. On the other hand, the influence of PSales on GSearch is unidirectional, suggesting that fluctuations in price-to-sales drive investor attention, but investor attention does not necessarily influence PSales.

During IPO weeks, there is a notable increase in both GSearch and PSales, reflecting heightened retail investor interest and higher price-to-sales. However, trading volumes (VO) exhibit a decline during these periods. Furthermore, sector- and state-level IPO effects, represented by IpoInWeekSect and IpoInWeekState, contribute to shaping investor attention and trading volume. This result reinforces the notion that localized IPO activity has a notable impact on market dynamics, particularly for IPO peers.

Furthermore, the HotIssueMarket variable consistently exhibits negative and statistically significant coefficients across all endogenous variables. This result indicates that during periods of high IPO activity, both retail investor attention and initial trading volume decline. One possible explanation is that the abundance of simultaneous IPOs dilutes investor focus, resulting in a dispersion of market interest across the various peers. This result differs from the positive association observed in the baseline specifications, and reflects the dynamic nature of the pVAR model, where the coefficient captures short-run adjustments conditional on past attention rather than the overall contemporaneous relationship.

Overall, these findings support the hypothesis that retail investor attention is endogenously connected to both trading volumes and price-to-sales activity. Moreover, IPO events have a significant impact on these relationships, highlighting the complex interplay between investor attention, market liquidity, and stock performance during periods of heightened IPO activity.

Table 4
Retail investor attention and market variables.

	(1)	(2)	(3)
	GSearch	VO	PSales
Lagged GSearch	0.4156***	0.0008***	0.0000
	[205.736]	[12.003]	[0.308]
Lagged VO	2.5071***	0.7328***	0.0094***
	[52.822]	[385.255]	[4.489]
Lagged PSales	0.0730***	−0.0042***	0.9919***
	[19.709]	[−24.442]	[436.871]
IpoInWeek	0.6865***	−0.0212***	0.0071**
	[16.500]	[−12.795]	[2.243]
IpoInWeekSect	0.2641***	0.0170***	0.0019
	[6.701]	[11.216]	[1.216]
IpoInWeekState	0.1125**	0.0177***	0.000
	[2.094]	[8.299]	[−0.025]
IpoInWeekStateSect	−0.0539	0.0189***	−0.0066**
	[−0.701]	[6.172]	[−2.114]
HotIssueMarket	−0.9635***	−0.0685***	−0.0138***
	[−20.539]	[−34.538]	[−7.694]
CitCount	0.0368***	0.0059***	−0.0006
	[4.018]	[13.669]	[−1.242]
MV	5.7277***	0.1431***	0.0233***
	[73.183]	[44.478]	[5.605]
MTBV	0.1121***	0.0002	0.0061***
	[7.026]	[0.251]	[3.973]
DY	−0.0429***	−0.0148***	−0.0014***
	[−3.252]	[−15.769]	[−3.967]
N		1 021 112	

This table shows GMM estimates of panel VAR models whose endogenous variables are GSearch, VO, and PSales. Other variables measure the business cycle (proxied by HotIssueMarket), citations in the IPO's prospectus (CitCount), size (MV), market-to-book ratio (MTBV), and the dividend yield (DY) of the firm. The inference is based on robust standard errors. z-statistics are reported in brackets. Significance code: * p < 0.10, ** p < 0.05, *** p < 0.01.

Table 5
Attention and returns.

	IpoInWeek= 1		IpoInWeekSect= 1		IpoInWeekState= 1	
	Coef.	t-stat	Coef.	t-stat	Coef.	t-stat
IPO week ($s = 0$)	0.005***	[11.613]	0.005***	[8.424]	0.008***	[7.797]
Six months (26 weeks, $s = 26$)	−0.013***	[−2.783]	−0.017***	[−3.045]	−0.020**	[−2.293]
One year (52 weeks, $s = 52$)	−0.036***	[−3.960]	−0.046***	[−4.651]	−0.067***	[−4.579]

This table examines whether investor attention toward peer firms around IPO events is associated with subsequent market-adjusted abnormal stock returns. For each return horizon, the sample is restricted to firm-week observations satisfying one of three IPO exposure definitions: any IPO occurring in a given week (IpoInWeek= 1), an IPO occurring in the same sector (IpoInWeekSect= 1), or an IPO occurring in the same state (IpoInWeekState= 1). For each horizon and each IPO definition, a separate OLS regression is estimated. The dependent variable is the market-adjusted abnormal return in the IPO week ($s = 0$) and the cumulative market-adjusted abnormal return from the IPO week to 26 weeks (approximately six months, $s = 26$) and 52 weeks (approximately one year, $s = 52$). The table reports the marginal effects $\frac{\partial \mathbb{E}[\text{AbRet}_{i,t+s}|\text{GSearch}_{i,t}]}{\partial \text{GSearch}_{i,t}}$ estimated from OLS regressions with firm fixed effects. Standard errors are clustered at the firm level, and t-statistics are reported in brackets. Significance code: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

To further investigate the implications of investor attention for market outcomes, and whether attention may lead to temporary mispricing as suggested in the literature (e.g., Da et al., 2011; Chen et al., 2023), we examine whether investor attention toward peer firms around IPO events is associated with subsequent market-adjusted abnormal stock returns. While the previous analysis highlights the endogenous relationship among attention, trading activity, and valuation, it does not directly address whether heightened attention results in temporary price pressure and subsequent return reversals.

For each return horizon, we estimate three separate OLS regressions by restricting the sample to firm-week observations satisfying one of three IPO exposure definitions: any IPO occurring in a given week (IpoInWeek), an IPO occurring in the same sector (IpoInWeekSect), or an IPO occurring in the same US state (IpoInWeekState). The dependent variable is the market-adjusted abnormal return during the IPO week and the cumulative market-adjusted abnormal return from the IPO week to 26 weeks (approximately six months) and 52 weeks (approximately one year).

Table 5 reveals a consistent pattern across all three IPO exposure definitions. During the IPO week, higher levels of investor attention are associated with positive and statistically significant abnormal returns, indicating that heightened attention is accompanied by short-run price pressure on peer firms.

At longer horizons, the initial price effect gradually reverses. Cumulative abnormal returns become negative over the subsequent six months and remain negative after one year, with the reversal becoming more pronounced over time. This pattern suggests that the initial price appreciation associated with heightened investor attention is subsequently corrected.

Overall, these findings provide evidence consistent with temporary mispricing induced by attention-driven trading pressure. While retail investors appear to allocate attention in response to economically relevant information, their trading behavior may nevertheless generate short-run price pressure that is gradually reversed. These findings suggest that rational attention allocation and temporary mispricing are not mutually exclusive, but may instead coexist in the presence of attention-driven demand shocks.

3.4. Identifying retail investor characteristics behind spatial proximity effects: The 'supply side' of attention

As shown by Xu et al. (2022), household financial literacy significantly influences individuals' financial behavior and enhances their limited attention, thereby increasing stock market participation. Notably, this relationship differs substantially between urban and rural households. Drawing on data from the National Financial Capability Study (NFCS), we investigate the factors underlying previous findings by leveraging detailed information on the financial experiences, attitudes, behaviors, and knowledge of a large, diverse, and representative sample of US adults. The NFCS evaluates the financial capability of over 25,000 households, surveying at least 500 individuals in each US State. Using this rich dataset, we analyze how the characteristics of residents within each US State shape the previously identified relationship. We consider five waves (2009, 2012, 2015, 2018, and 2021)[6] and compute the mean value for each State and reference year. We then collect the following variables, which are subsequently interacted with our main variables:

`UseWebForFin` indicates the fraction of respondents who use *websites to help with financial tasks such as budgeting, saving, or credit management*.

`EduLev` represents the highest level of education completed by respondents, ranging from 1 (*did not complete high school*) to 7 (*postgraduate degree*). To facilitate comparison across variables, `EduLev` is rescaled to the unit interval [0,1]. Then, the state-level average reflects the overall educational attainment of respondents in a given US State.

`FinControlMyLife` represents responses to the question about *how often... ...my finances control my life?*. The responses are rescaled to the unit interval [0,1], with higher values indicating greater frequencies. The average response indicates the extent to which respondents feel their finances control their lives.

`WillToTakeRisks` represents responses to the question, *when thinking of your financial investments, how willing are you to take risks?*. The responses are rescaled to the unit interval [0,1], where higher values signify a greater inclination to take risks. The average response offers a snapshot of respondents' overall willingness to embrace financial risks.

`GoodAtFin` represents responses to the question, *on a scale from 1 to 7, where 1 means 'Very Low' and 7 means 'Very High', how would you assess your overall financial knowledge?*. The responses are rescaled to the unit interval [0,1], where higher values indicate a greater perception of financial knowledge. The average response represents the respondents' overall perceived financial knowledge.

To illustrate these relationships, we report the results graphically in Fig. 5, rather than in tabular form. This choice reflects the presence of multiple interaction terms, for which graphical representations provide a more intuitive interpretation of the economic effects across different levels of the state-level characteristics. The figure reports predicted levels of `GSearch` associated with different IPO conditions and their interaction with each characteristic, along with 95% confidence intervals.

Each subplot compares three cases: weeks without IPO activity (baseline), weeks in which an IPO occurs, and weeks in which an IPO occurs in the same US State. The interpretation, therefore, focuses on differences between these lines across the range of the underlying characteristic.

The first subplot shows that in US States where individuals more frequently use the internet for financial purposes (`UseWebForFin`), the overall level of `GSearch` is higher. Moreover, the gap between IPO and non-IPO weeks widens as internet usage increases, indicating that online engagement amplifies attention responses to IPO events. This finding supports the interpretation of `GSearch` as a meaningful proxy for retail investor attention.

The second subplot indicates that `GSearch` is higher in States with lower levels of education (`EduLev`). However, the differences between IPO and non-IPO weeks remain broadly similar across education levels, suggesting that the localized IPO effect is not driven by variation in educational attainment. A plausible interpretation is that this pattern reflects differences in the channels through which investors acquire information rather than differences in underlying attention. In States with lower levels of education, investors may rely more heavily on general and easily accessible sources of information, such as online searches, when processing financial news. By contrast, in States with higher levels of education, investors may rely more on alternative information channels — such as professional data platforms or financial news services — that are not captured by our proxy. As a result, higher `GSearch` in less educated States may reflect differences in information acquisition channels rather than differences in the overall level of investor attention.

The third subplot shows that attention patterns are relatively stable across different levels of perceived financial control (`FinControlMyLife`), indicating that this dimension does not materially affect how investors respond to IPO events.

More pronounced heterogeneity emerges when considering risk attitudes and financial confidence. In the fourth subplot, the difference between IPO and non-IPO weeks is statistically significant in States where individuals report a higher willingness to take

[6] For years with unavailable data, the closest subsequent available year is used.

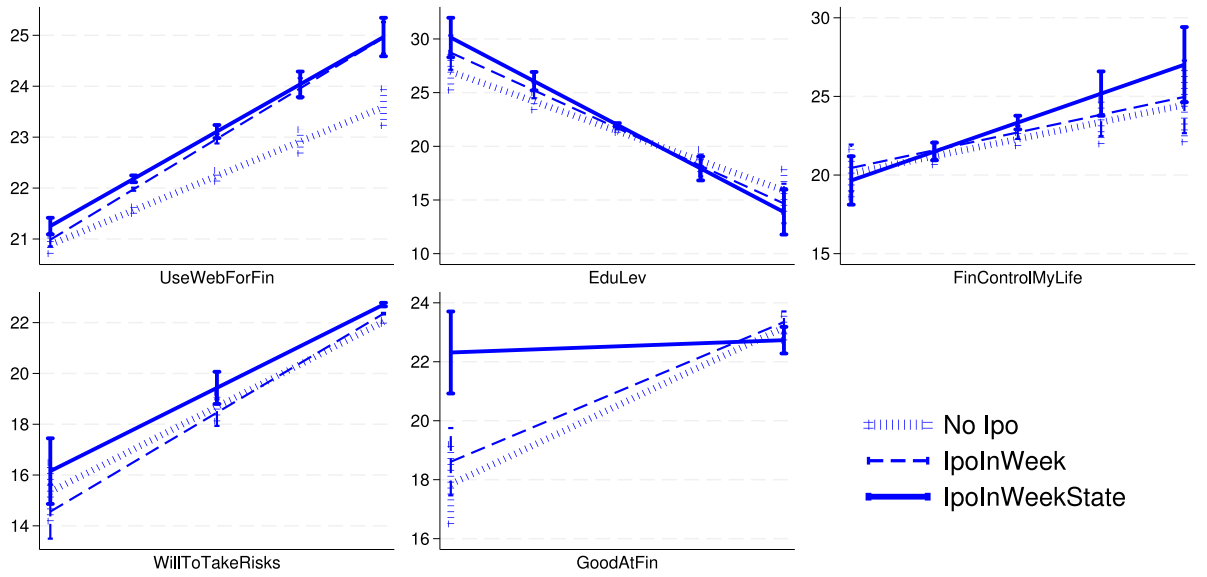

Fig. 5. Retail investor characteristics behind spatial proximity effects.
This figure illustrates the estimates from the regression of `GSearch` on variables indicating whether an IPO occurred during the week (`IpoInWeek`) or not (No IPO), and whether the IPO was headquartered in the same US State (`IpoInWeekState`). These variables interact with state-level resident characteristics, including the use of websites for financial tasks such as budgeting, saving, or credit management (`UseWebForFin`), education level (`EduLev`), feelings of financial dependency (`FinControlMyLife`), willingness to take risks (`WillToTakeRisks`), and confidence in one's financial knowledge (`GoodAtFin`). The regressions control for factors such as the business cycle (proxied by `HotIssueMarket`), citations in the IPO prospectus (`CitCount`), firm size (`MV`), market-to-book ratio (`MTBV`), and dividend yield (`DY`). All regressions are estimated using OLS and include firm fixed effects. The figure also displays 95% confidence intervals.

risks (`WillToTakeRisks`), whereas no statistically significant difference emerges for States with lower willingness to take risks. This finding suggests that more risk-tolerant populations respond more strongly to IPO-related information.

The final subplot highlights that the additional attention associated with geographically proximate IPOs is particularly evident in States where individuals report lower confidence in their financial abilities (`GoodAtFin`). In these cases, the gap between IPO activity in the same State and generic IPO activity is more pronounced. By contrast, for higher levels of financial confidence, this difference becomes less distinguishable. At the same time, the level of attention associated with geographically proximate IPOs remains relatively stable across different levels of financial confidence, indicating that the geographic component of attention operates broadly across investor types.

While several individual characteristics are associated with different baseline levels of attention, the amplification of attention around IPO events — particularly for geographically proximate firms — is stronger in States where individuals are more engaged online, more willing to take risks, and less confident in their financial abilities.

3.5. Which stocks attract retail investor attention? the 'demand side' of attention

Some authors argue that retail investors suffer from an informational disadvantage due to their limited ability to access and process relevant information (Blankespoor et al., 2019). This information deficit leads to a clientele effect, wherein investors with an information gap trade certain stocks. Specifically, Dorn et al. (2015), Gao and Lin (2015), and Havakhor et al. (2024) show that retail investors are inclined toward get-rich-quick stocks, which offer the allure of significant returns despite their inherent risks.

To assess whether these particular stocks are the primary drivers of the previous results, we adopt an approach inspired by Kumar (2009) and Havakhor et al. (2024), using a dummy variable, `Lottery`, to identify 'get-rich-quick' stocks. These stocks are characterized by above-median volatility, above-median skewness, and below-median price in the cross-section—traits that align with the profile of stocks retail investors are likely to perceive as having high potential for substantial gains.

Table 6 provides insights into whether the attention effects documented in previous sections are driven by stocks that are more likely to attract retail investors, as proxied by `Lottery`. Importantly, the coefficient associated with the interaction term `IpoInWeek×Lottery` captures whether the effect of IPOs on attention differs between lottery and non-lottery stocks.

The results show that this interaction term is not statistically significant, indicating that the increase in attention associated with IPO activity does not differ systematically between lottery and non-lottery stocks. In other words, IPO events do not appear to disproportionately increase attention toward lottery-type stocks in general. At the same time, the main effect of `Lottery` is positive and statistically significant, indicating that lottery-type stocks attract higher levels of attention overall, consistent with the existing literature on retail investor preferences.

Table 6
Attention and get-rich-quick stocks.

	(1)	(2)	(3)	(4)
	GSearch	GSearch	GSearch	GSearch
IpoInWeek	0.491***	0.433***	0.448***	0.401***
	[8.868]	[7.646]	[8.196]	[7.143]
× Lottery	0.002	0.033	−0.060	−0.019
	[0.011]	[0.220]	[−0.425]	[−0.129]
IpoInWeekSect		0.172***		0.148***
		[3.362]		[2.891]
× Lottery		−0.090		−0.125
		[−0.722]		[−1.004]
IpoInWeekState			0.302***	0.283***
			[3.940]	[3.676]
× Lottery			0.252*	0.269*
			[1.694]	[1.821]
Lottery	0.614***	0.616***	0.620***	0.622***
	[3.164]	[3.177]	[3.195]	[3.204]
HotIssueMarket	1.841***	1.827***	1.813***	1.803***
	[11.428]	[11.324]	[11.275]	[11.197]
CitCount	0.018	0.017	0.016	0.016
	[0.521]	[0.489]	[0.468]	[0.445]
MV	2.349***	2.348***	2.346***	2.346***
	[14.148]	[14.137]	[14.129]	[14.121]
MTBV	−0.013	−0.013	−0.013	−0.013
	[−0.268]	[−0.266]	[−0.276]	[−0.275]
DY	0.028	0.028	0.028	0.028
	[0.740]	[0.741]	[0.736]	[0.736]
Constant	4.744***	4.754***	4.766***	4.773***
	[4.251]	[4.259]	[4.270]	[4.275]
N	1 900 721	1 900 721	1 900 721	1 900 721
$\bar{R}^2$	0.570	0.570	0.570	0.570

This table reports estimates from the regression of GSearch on a dummy, which indicates whether an IPO occurs in a week (IpoInWeek), whether it was in the same industry (IpoInWeekSect), or headquartered in the same US State (IpoInWeekState). All three variables interact with the variable Lottery, which identifies get-rich-quick stock: stocks with above-median volatility, above-median skewness, and below-median price in cross-section. Other variables measure the business cycle (proxied by HotIssueMarket), citations in the IPO's prospectus (CitCount), size (MV), market-to-book ratio (MTBV), and the dividend yield (DY) of the firm. All the regressions in the table are estimated by OLS. All specifications include firm fixed effects. The inference is based on unit-cluster standard errors. t-statistics are reported in brackets. Significance code: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

A more nuanced pattern emerges when considering geographic proximity. The interaction between IpoInWeekState and Lottery is positive and statistically significant at the 10% level, indicating that the increase in attention associated with geographically proximate IPOs is stronger for lottery-type stocks. So, when investors face higher information frictions, they rely more heavily on both geographic proximity and salient stock characteristics when allocating their attention.

As a robustness check, we explore alternative proxies for retail investor presence, such as free float. However, results based on these measures (not tabulated) do not display a systematic pattern, and we therefore rely on lottery-like characteristics, which more directly capture retail investor preferences.

Overall, these findings indicate that while IPO-related attention is broadly distributed across firms, the amplification of attention due to geographic proximity is particularly pronounced for stocks that are more likely to attract retail investors.

3.6. Anticipation and persistence in attention

To examine the dynamic evolution of investor attention around IPO events, we estimate an event-time specification that relates retail investor attention, measured by GSearch, to the timing of IPO events. Specifically, the regression includes a set of event-time dummy variables identifying observations occurring four weeks before ($t-4$), one week before ($t-1$), during the IPO week (t), one week after ($t+1$), and four weeks after ($t+4$) the IPO. The specification simultaneously includes all four IPO exposure definitions (IpoInWeek, IpoInWeekSect, IpoInWeekState, and IpoInWeekStateSect), together with the standard set of controls (HotIssueMarket, CitCount, MV, MTBV, and DY) and firm fixed effects. For ease of presentation, Table 7 reports the estimated coefficients separately for each IPO exposure definition, although they are obtained from a single regression.

Table 7
Anticipation and persistence in attention around IPO events.

	(1)			
	IpoInWeek	IpoInWeekSect	IpoInWeekState	IpoInWeekStateSect
$t-4$	0.171***	0.027	0.158**	0.046
	[3.794]	[0.679]	[2.409]	[0.551]
$t-1$	0.246***	0.095**	0.270***	−0.097
	[5.495]	[2.394]	[4.513]	[−1.243]
t	0.365***	0.064*	0.259***	0.022
	[8.456]	[1.825]	[4.292]	[0.289]
$t+1$	0.144***	−0.026	0.160***	−0.050
	[3.424]	[−0.674]	[2.679]	[−0.652]
$t+4$	0.141***	−0.062	0.107*	0.001
	[3.151]	[−1.626]	[1.713]	[0.018]
Controls	Yes			
Firm fixed effects	Yes			
N	1 874 877			
$\bar{R}^2$	0.571			

This table reports the coefficients from a single OLS regression of GSearch on IPO event-time indicators. The regression includes all four IPO exposure definitions (IpoInWeek, IpoInWeekSect, IpoInWeekState, and IpoInWeekStateSect) together with their corresponding event-time leads and lags. Event time is defined relative to the IPO week (t), where t denotes the IPO week, $t-k$ indicates k weeks before the IPO, and $t+k$ indicates k weeks after the IPO. For ease of presentation, the estimated coefficients are reported separately according to the four IPO exposure definitions. The regression includes the standard set of controls (HotIssueMarket, CitCount, MV, MTBV, and DY) and firm fixed effects. t-statistics are reported in brackets. Significance code: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

The coefficients reveal a clear and consistent pattern. First, investor attention increases prior to the IPO week, as indicated by the positive and statistically significant coefficients on the lead variables (e.g., $t-4$ and $t-1$). This evidence suggests that attention builds up in anticipation of the IPO, consistent with a gradual diffusion of information before the event.

Second, the effect reaches its peak during the IPO week (t), when attention is highest. This result confirms that IPO events represent focal points that attract substantial investor interest.

Third, attention remains elevated after the IPO week, although the magnitude of the effect declines over time. The positive and statistically significant coefficients at $t+1$ and $t+4$ indicate persistence in attention, suggesting that the impact of IPO events is not limited to the event week but extends into subsequent periods.

Importantly, the dynamic pattern differs markedly across dimensions of proximity. The sector-based effect is concentrated around the IPO week, with limited evidence of anticipation or persistence. By contrast, the geographic effect is present both before and after the IPO, in addition to the event week itself. This result indicates that geographically proximate IPOs generate a more sustained attention response, consistent with the idea that local information channels support both pre-event information accumulation and post-event attention dynamics.

The evidence points to a dynamic pattern characterized by anticipation, peak attention during the IPO week, and gradual decay thereafter. These results indicate that IPO-related attention is not a purely contemporaneous phenomenon, but evolves over time, reflecting both pre-event information accumulation and post-event adjustment.

3.7. Physical proximity and social proximity

We observe systematic variations in the web searches for peer firms near the headquarters of the IPO firm, traditionally measured by physical proximity. To dive deeper into this finding, we extend the concept of distance by considering the social interconnections between residents in the IPO's US State headquarters and those of the peer firm. This approach provides a more nuanced understanding of the influence of proximity on retail investor attention, conceptualizing proximity in terms of social proximity rather than physical proximity.

To quantify social connections between US States, we use the Social Connectedness Index (SCI) provided by Meta, available at https://dataforgood.facebook.com/dfg/tools/social-connectedness-index. This index measures the density of connections between individuals in different U.S. States based on Meta friendship links. It is derived from the network of Facebook users and their friendships, with user locations determined through a combination of self-reported profile information and device-related activity data. Several studies, such as Bailey et al. (2018), Kuchler et al. (2021), and Bailey et al. (2021), have used this index to analyze the strength and patterns of social links across geographical areas.

The social connection between two locations i and j is quantified as:

$$\mathrm{SCI}_{ij} = \frac{\mathrm{FBConn}_{ij}}{\mathrm{FBUsers}_i \times \mathrm{FBUsers}_j}. \tag{5}$$

Table 8
Retail investor attention and social proximity.

	(1)	(2)	(3)
	GSearch	GSearch	GSearch
SocCon	0.104***	0.034***	0.032***
	[18.204]	[11.673]	[10.312]
IpoInWeekSect			0.110***
			[2.594]
HotIssueMarket		1.819***	1.811***
		[11.374]	[11.300]
CitCount		0.016	0.015
		[0.459]	[0.441]
MV		2.261***	2.260***
		[13.731]	[13.725]
MTBV		−0.012	−0.012
		[−0.250]	[−0.248]
DY		0.026	0.026
		[0.702]	[0.703]
Constant	20.696***	5.411***	5.418***
	[250.494]	[4.928]	[4.933]
N	1 903 089	1 903 089	1 903 089
$\bar{R}^2$	0.561	0.569	0.569

This table shows estimates from the regression of GSearch on SocCon, the index which measures the social connection between people in different geographic locations based on friendship links on Facebook and which was introduced by Bailey et al. (2018). Other variables are business cycle (proxied by HotIssueMarket), citations in the IPO's prospectus (CitCount), size (MV), market-to-book ratio (MTBV), and the dividend yield (DY) of the firm. All the regressions in the table are estimated by OLS. All specifications include firm fixed effects. The inference is based on unit-cluster standard errors. t-statistics are reported in brackets. Significance code: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

In our setting, this index captures the overall social exposure of peer firm i to IPO activity occurring in week t. When a single IPO occurs, the measure reflects the connectedness between the State of the peer firm and that of the IPO firm. When multiple IPOs take place in different States within the same week, we aggregate the corresponding social connectedness values across all IPO locations, so that the variable reflects the overall intensity of social ties linking the peer firm to the set of IPO States.

Formally, we define $\texttt{SocCon} = \ln(1 + \texttt{SCI})$, where SCI denotes the relevant (possibly aggregated) measure of social connectedness. The logarithmic transformation is used to reduce the influence of extremely large values and to obtain a smoother scaling of the variable, in line with standard transformations commonly applied to firm and market characteristics.

Table 8 confirms the significant role of social connections in directing retail investor attention during IPOs. The models show that social ties (SocCon) between the State where an IPO firm is headquartered and those of peer firms significantly influence retail investor attention.

Across specifications, SocCon enters with a positive and statistically significant coefficient, indicating that firms that are more socially connected to IPO locations attract greater investor attention, consistent with the idea that social proximity facilitates the diffusion of firm-related information.

To further assess the functional form of this relationship, we estimate additional specifications (not tabulated) based on quantile indicators of social connectedness and on a quadratic specification using a rescaled non-logarithmic version of the SCI. These exercises confirm the strong positive first-order relationship documented in Table 8, while suggesting only a mild curvature in the data. This second-order feature does not materially affect the main conclusion.

Overall, the fact that proximity continues to significantly affect investor attention when measured in social rather than purely physical terms reinforces the interpretation that geographic closeness partly acts as a proxy for broader patterns of information exposure and interpersonal connectedness.

3.8. Attention and uncertainty

This section explores the impact of firm-specific and aggregate market uncertainty on retail investor attention. Firm-specific uncertainty is assessed through a textual analysis of IPO prospectuses (Form S-1 filed with the SEC), employing a keyword-based dictionary approach. This systematic method enables us to classify the sentiment and uncertainty embedded in the language of financial disclosures, capturing dimensions that traditional financial metrics may overlook. By applying this replicable linguistic analysis across the full set of IPO filings, we gain insights into how variations in disclosure tone influence investor behavior.

Table 9
Retail investor attention and uncertainty.

	(1)	(2)	(3)	(4)	(5)	(6)
	GSearch	GSearch	GSearch	GSearch	GSearch	GSearch
NegToneInWeek	1.102***			3.857***		2.898***
	[7.806]			[14.189]		[11.398]
PosToneInWeek		−1.900***		−9.783***		−7.125***
		[−7.369]		[−15.579]		[−12.430]
UncertInWeek			0.576	1.083***		0.879**
			[1.455]	[2.943]		[2.407]
VIX					0.060***	0.091***
					[11.324]	[18.210]
IpoInWeek					−0.018	
					[−0.245]	
× VIX					0.029***	
					[7.275]	
IpoInWeekSect	0.001	0.022	0.015	0.015	0.042	0.037
	[0.013]	[0.493]	[0.326]	[0.326]	[0.457]	0.379
× VIX					0.005	0.001
					[1.154]	[0.241]
IpoInWeekState	0.263***	0.279***	0.275***	0.254***	−0.293**	−0.284**
	[4.494]	[4.756]	[4.689]	[4.350]	[−2.434]	[−2.191]
× VIX					0.034***	0.030***
					[4.968]	[3.971]
IpoInWeekStateSect	0.022	0.029	0.031	−0.009	−0.060	−0.060
	[0.270]	[0.353]	[0.380]	[−0.116]	[−0.732]	[−0.732]
HotIssueMarket	1.691***	1.767***	1.755***	1.540***	2.191***	1.855***
	[11.636]	[12.031]	[11.909]	[10.941]	[13.330]	[12.833]
CitCount	0.046	0.047	0.047	0.043	0.016	0.042
	[1.114]	[1.154]	[1.160]	[1.060]	[0.455]	[1.018]
MV	2.503***	2.512***	2.513***	2.470***	2.381***	2.532***
	[14.918]	[14.970]	[14.971]	[14.785]	[14.302]	[15.147]
MTBV	−0.015	−0.012	−0.013	−0.016	−0.002	−0.013
	[−0.316]	[−0.269]	[−0.290]	[−0.335]	[−0.040]	[−0.275]
DY	0.030	0.031	0.031	0.028	0.008	0.013
	[0.809]	[0.819]	[0.825]	[0.751]	[0.200]	[0.355]
Constant	3.664***	5.055***	4.308***	4.890***	3.266***	2.605**
	[3.227]	[4.503]	[3.803]	[4.361]	[2.826]	[2.255]
N	1 187 548	1 187 548	1 187 548	1 187 548	1 903 089	1 187 548
$\bar{R}^2$	0.586	0.586	0.586	0.587	0.571	0.588

This table presents estimates from the regression of GSearch on uncertainty, measured by firm-specific uncertainty and aggregate market uncertainty. The former is measured in Models 1, 2, and 3 using the tone in the IPO prospectus: negative (NegToneInWeek), positive (PosToneInWeek), or uncertain (UncertInWeek). The latter using VIX which interacts with IpoInWeek, IpoInWeekSect, IpoInWeek-State. The remaining variables control for the business cycle (proxied by HotIssueMarket), citations in the IPO's prospectus (CitCount), size (MV), market-to-book ratio (MTBV), and the dividend yield (DY) of the firm. All the regressions in the table are estimated by OLS. All specifications include firm fixed effects. The inference is based on unit-cluster standard errors. *t*-statistics are reported in brackets. Significance code: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Specifically, we adopt the methodology and sentiment Master Dictionary word list available at https://sraf.nd.edu/loughranmcdonald-master-dictionary/developed by Loughran and McDonald (2013), who analyze the initial SEC filings of IPOs. Their approach categorizes the textual content into positive, negative, and uncertain tones, focusing on how firms articulate their business operations and strategic outlooks. Words such as 'may', 'could', 'depend', and 'approximately', as well as terms like 'loss', 'failure', 'termination', and 'adverse', introduce ambiguity and signal higher perceived risk. Such language can complicate investor evaluation, potentially deterring investment and increasing the difficulty of valuing the firm.

Additionally, we study the effect of aggregate market uncertainty on retail investor attention. In line with Liu et al. (2019) and Fisher et al. (2022), we measure financial market uncertainty using the CBOE VIX. This approach provides a comprehensive view of the factors at play, enabling a deeper understanding of how different types of uncertainty influence retail investor attention.

In Table 9, we examine how the linguistic tone of IPO prospectuses influences retail investor attention toward peer firms. We quantify the occurrence of negative, positive, and uncertain sentiment words, following the approach used in the analysis of 10-K filings by Jegadeesh and Wu (2013) and newspaper articles by Gurun and Butler (2012). Consistent with Loughran and McDonald (2013), we hypothesize that increasing negative or uncertain language within the prospectus leads to greater uncertainty regarding a company's prospects. This uncertainty affects the valuation of the company issuing the IPO and its competitors, thereby drawing increased attention from investors.

Negative words in the S-1 document (NegToneInWeek) heighten retail investor attention on peer firms during the IPO week (Models 1, 4, and 6). Conversely, positive terms, such as 'beneficial', 'successful', 'good', and 'strong' (PosToneInWeek), decrease

investor scrutiny (Models 2, 4, and 6). Finally, uncertainty words (UncertInWeek) amplify retail investor focus during the IPO week (Models 4 and 6). The results highlight the significant role of narrative tone in shaping investor behavior and market dynamics during IPO events. In particular, negative and uncertain language in IPO prospectuses is associated with increased retail investor attention, while positive tone is associated with lower attention.

These findings are consistent with the well-documented negativity bias in psychology (e.g., Baumeister et al., 2001), according to which individuals allocate greater attention to negative information than to positive information. Consistent with this perspective, a negativity bias has also been documented in financial markets (e.g., Akhtar et al., 2011; Williams, 2015).

In our setting, IPO prospectuses may convey information about both the issuing firm and its competitors. As a result, negative and uncertain disclosures can increase the perceived risk of peer firms, thereby attracting additional investor attention. Conversely, positive disclosures reduce uncertainty and may require less active information processing, leading to lower attention levels.

Overall, these findings suggest that retail investor attention responds systematically to the informational content of IPO disclosures, with stronger reactions to negative and uncertain signals. This pattern is consistent with rational information processing under limited attention, rather than with behavioral avoidance of negative information.

Model 5 of Table 9 introduces aggregate market uncertainty measured by VIX. In times of higher aggregate market uncertainty, retail investor attention increases by 0.060 (VIX). The interaction terms with the three dummy variables IpoInWeek, IpoInWeekSect, and IpoInWeekState show that when an IPO occurs under high market uncertainty (IpoInWeek× VIX), retail investor attention on IPO peers is significantly higher. This effect is even more pronounced for firms located in the same U.S. State as the IPO firm (IpoInWeekState× VIX), with a coefficient of 0.034. By contrast, the coefficient for firms in the same sector (IpoInWeekSect× VIX) is much smaller (0.005) and, most importantly, not statistically significant. This result suggests that geographical proximity significantly impacts investor attention during periods of high market uncertainty. For robustness, the final model (Model 6) examines the language used within the prospectus, specifically measuring the IPO-specific uncertainty, combined with the aggregate market uncertainty, as represented by the VIX. Previous results are confirmed.

3.9. Firm-specific versus aggregate market attention

The results in Section 3.8 show that uncertainty stimulates retail investor attention. This Section investigates whether aggregate attention distracts firm-specific retail investor attention when a shock, such as an IPO, occurs. This exercise is relevant for understanding the dynamics of these variables under the influence of other pertinent factors and addressing potential biases that may affect previous findings. Indeed, aggregate attention may be linked to the decision to go public, potentially leading to an endogeneity issue that must be accounted for.

To mitigate the effects of potential confounding factors, we use the Macroeconomic Attention Index (MAI), developed by Fisher et al. (2022). MAI captures various macroeconomic risks that exhibit temporal variability and includes individual components such as information on Credit Rating, GDP, Housing Market, Inflation, Monetary Policy, Oil, Unemployment, and USD.

Using a similar regression framework as in our previous analyses, we illustrate the estimated coefficients in Fig. 6 rather than reporting them in tabular form. This choice allows for a more intuitive and accessible visualization of the effects. Each plot discriminates the results based on the influence of the presence of an IPO in a week (IpoInWeek), within the same US State (IpoInWeekState), or within the same sector (IpoInWeekSect). We use distinct visual markers: red solid thick lines with squares indicate the presence of an IPO, and blue dashed thin lines with points indicate its absence. Furthermore, the results are differentiated by the volume of news releases concerning various topics. We categorize the news intensity into three regimes: a mild news-release regime, indicated by the 10th percentile of news volume (labeled 'Low' on the x-axis); a median news-release regime, indicated by the 50th percentile of news volume (labeled 'Med' on the x-axis); and an intense news-release regime, represented by the 90th percentile ('High' on the x-axis). All figures also display the 95% confidence intervals, which are notably narrow, reflecting the efficiency of the estimates.

Fig. 6 shows that heightened macroeconomic attention diverts investor focus away from firm-specific information. Specifically, firm-level attention (GSearch, y-axis) is consistently lower during periods of high MAI compared to periods of low MAI. This inverse relationship is visually supported by the negative slope observed across all lines in the figure.

Moreover, IPOs (represented by red solid lines and squares) divert investor attention primarily during periods of Low or Med(ium) aggregate macroeconomic attention, as shown in the left panel. In contrast, during periods of High macroeconomic attention, the occurrence of an IPO does not significantly influence firm-specific attention, which remains subdued. In these high-attention regimes, when the flow of information into financial markets is particularly intense, only IPOs taking place in the same state (IpoInWeekState, middle panel) are able to sustain significantly higher levels of firm-specific attention. In such cases, attention to individual firms varies depending on whether an IPO occurred during the week. This effect is not observed when the IPO occurs in the same sector (IpoInWeekSect, right panel).

Overall, this finding underscores the limited nature of investor attention and the costs associated with information acquisition. Firm-specific retail investor attention declines in periods of heightened aggregate attention, but less so in the case of geographically proximate IPOs, which continue to attract significant local interest.

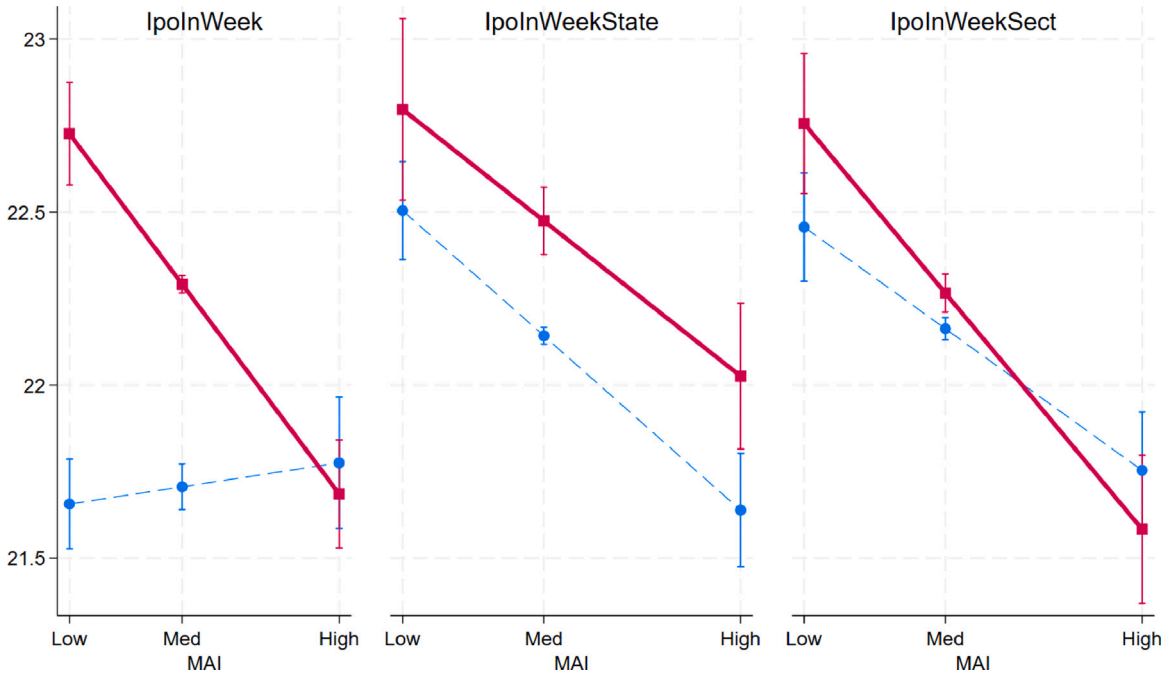

Fig. 6. `GSearch` as a function of the Macroeconomic Attention Index (MAI) and at least an IPO in a week.
This figure illustrates the coefficients (and 95% confidence intervals) of `GSearch` regressed against the Macroeconomic Attention `MAI` as defined in Fisher et al. (2022), and the presence of at least an IPO in a week. The red thick solid line and squares represent the case of at least an IPO in a week, while the blue thin dashed line and dots represent the case of no IPO occurring in a week. For the different indices, we report on the *x*-axis the estimated values for the variable 10th (Low), 50th (Med), and 90th (High) percentiles. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)

4. Conclusion

This study confirms that IPO events significantly boost retail investor attention toward peer firms, especially those geographically close. We document a clear and structured reallocation of attention around IPO events: attention builds up prior to the IPO, peaks during the IPO week, and remains elevated afterward. This dynamic pattern highlights that investor attention is not purely reactive, but also reflects anticipation and gradual information diffusion.

The geographic dimension emerges as the primary dominant channel through which attention is allocated. Compared to sectoral proximity, geographically proximate firms attract stronger and more persistent attention, suggesting that spatial frictions and local information advantages play a central role in shaping investor behavior. This effect is further reinforced when proximity is defined in terms of social connectedness, indicating that attention propagates not only through physical distance but also through underlying social networks.

These attention patterns are economically meaningful. Increased attention around peer IPOs is associated with a positive contemporaneous return effect, followed by a longer-run reversal. This evidence suggests that while investors allocate attention toward economically relevant events, the resulting trading activity generates temporary price pressure and subsequent correction. Rational attention allocation and short-run mispricing, therefore, coexist in our setting.

Our findings also reveal that firm-specific and aggregate market uncertainties amplify investor attention, with negative and uncertain tones in IPO prospectuses increasing attention. We interpret this result in light of the negativity bias, whereby investors devote more attention to adverse or ambiguous information.

At the aggregate level, we find that attention is subject to a crowding-out mechanism: high levels of macroeconomic attention divert focus away from firm-specific information. Importantly, this crowding-out effect does not fully eliminate the role of geographic proximity, which remains a robust driver of attention even in high-attention environments. These findings highlight how different layers of information interact in shaping attention allocation.

Finally, attention is more pronounced for stocks that are more likely to attract retail investors, such as those with lottery-like characteristics, suggesting that our results are indeed driven by retail behavior rather than by institutional attention.

These results underscore the significant role of spatial proximity in shaping retail investor behavior, consistent with the literature documenting a preference for local stocks and the informational advantages of local investments. Our findings provide a comprehensive view of how attention is allocated, propagated, and priced in financial markets, emphasizing the role of geography, social connections, and information frictions in driving investor behavior.

CRediT authorship contribution statement

Stefano Mengoli: Writing – review & editing, Writing – original draft, Resources, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Pierpaolo Pattitoni:** Writing – review & editing, Writing – original draft, Methodology, Investigation, Formal analysis, Data curation, Conceptualization.

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