The background of the slide features a complex financial chart. It includes a candlestick chart with teal and blue bars, overlaid with a red line graph and a dashed blue line. Faint, semi-transparent text such as '0.15%', '1.29%', and '4.22%' is visible in the upper left. A thick, dark blue diagonal band runs from the bottom left towards the top right, partially obscuring the chart. The overall color palette is dominated by blues and teals.

FINA4430 Project 2

Group members:

Yick Ka Ho 1155142189

Wei Yu Hsin 1155118924

Wang Pin Hao 1155135030

Chen Pin Chao 1155135557

The background of the slide is a blurred collage of financial market data. It features several candlestick charts with green and red bars, overlaid with various colored trend lines (red, blue, and grey). Scattered throughout the background are numerous percentage values in different colors and sizes, such as 3.15%, 1.29%, -4.65%, -4.25%, -4.72%, -4.65%, -4.23%, -1.25%, -1.49%, 2.25%, 2.48%, 1.72%, 5.40%, -2.35%, and -1.75%. Some of these values are accompanied by small upward or downward pointing triangles. The overall aesthetic is that of a busy, data-driven financial environment.

Task 1

Search trend peaks of WSB stocks

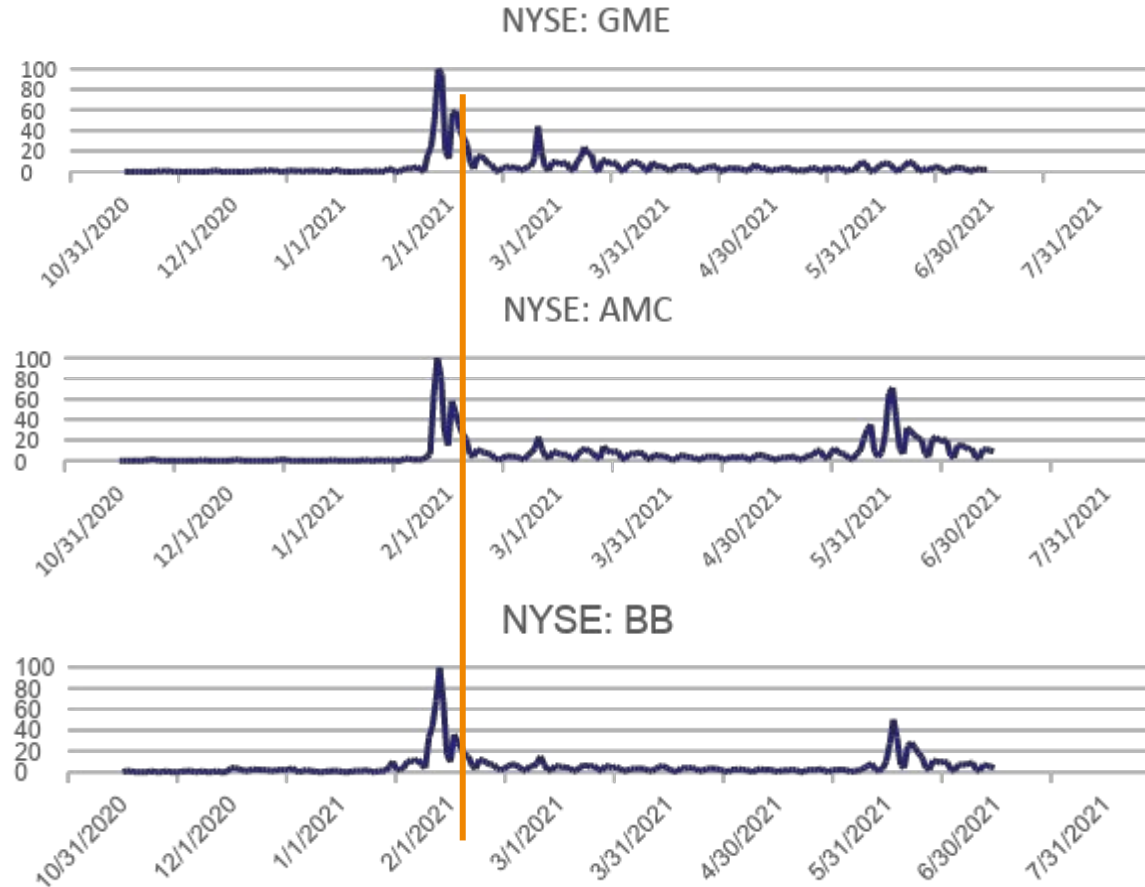
Methodology

- 1 Download each SVI datasets from Google Trends, using EX:TICKER as the keyword (EX is the stock exchange, e.g. NYSE)
- 2 Find out the date that each SVI dataset records the maximum of 100

Search trend peak dates

Stocks	Search peak date
GME	28/01/2021
AMC	28/01/2021
BB	28/01/2021
NOK	28/01/2021
SLV	01/02/2021

Search trend peaks of WSB stocks

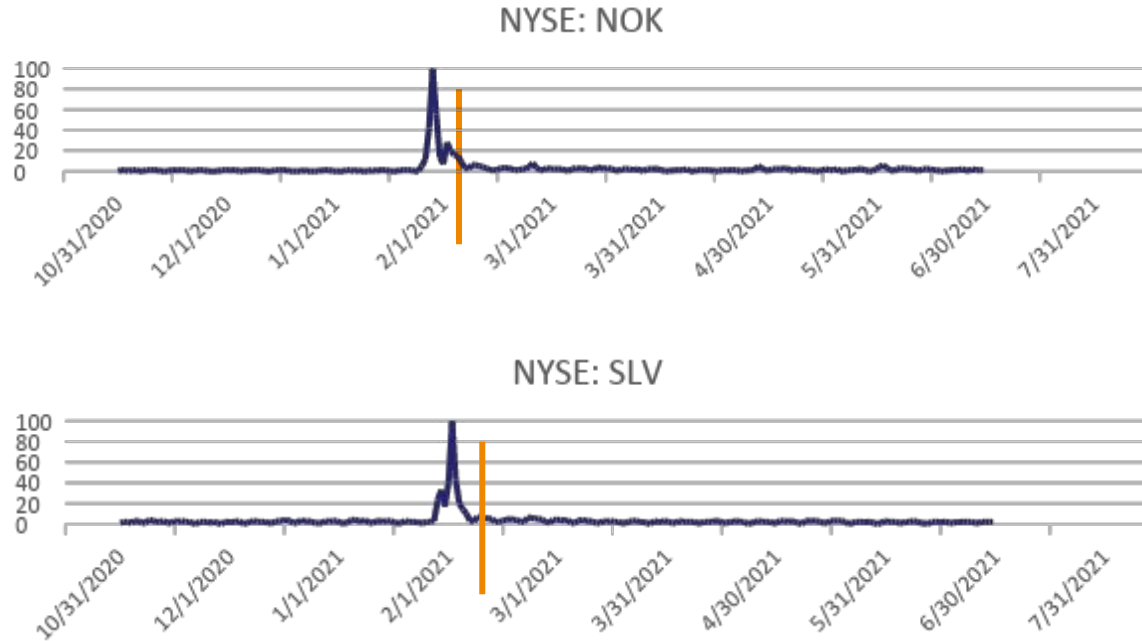


Search trend peak dates

- The search trend peak of GME, AMC and BB were all recorded on 28 January 2021



Search trend peaks of WSB stocks



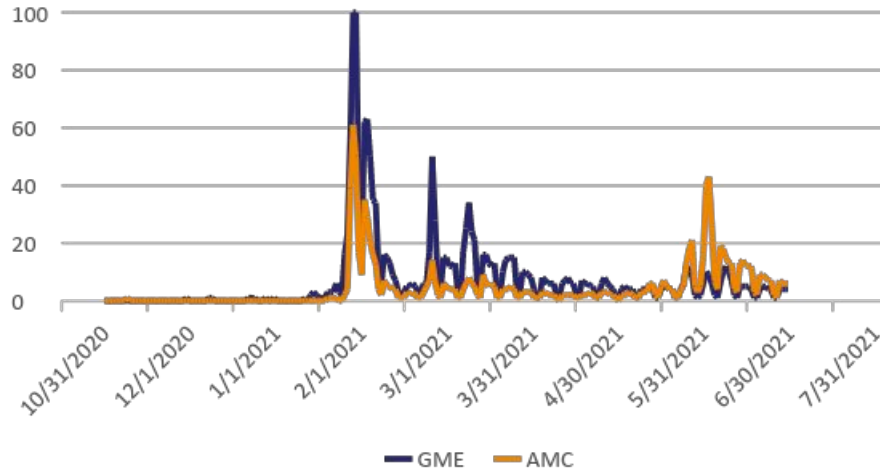
Search trend peak dates

- The search trend peak of NOK was recorded on 28 January 2021
- The search trend peak of SLV was recorded on 1 February 2021



SVI between GME and other WSB stocks

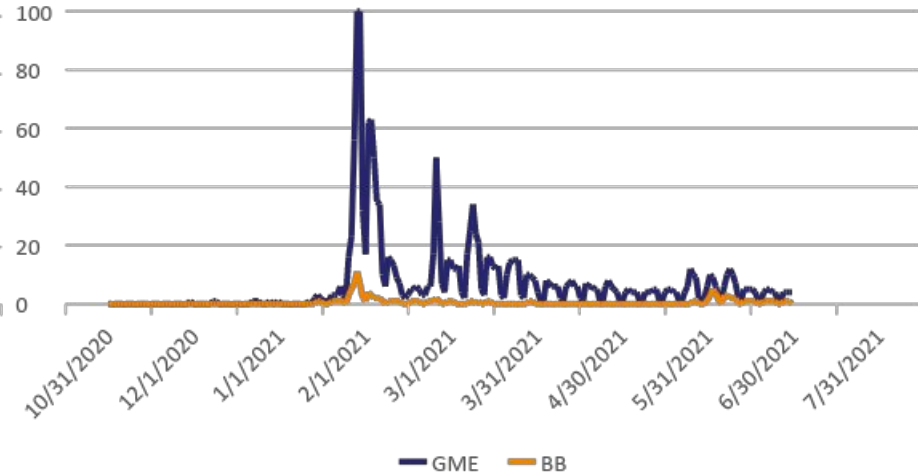
GME vs AMC



Findings

- GME attracts more search interest during the peak period and most of the period
- AMC attracts more search interest than GME in some of the later periods

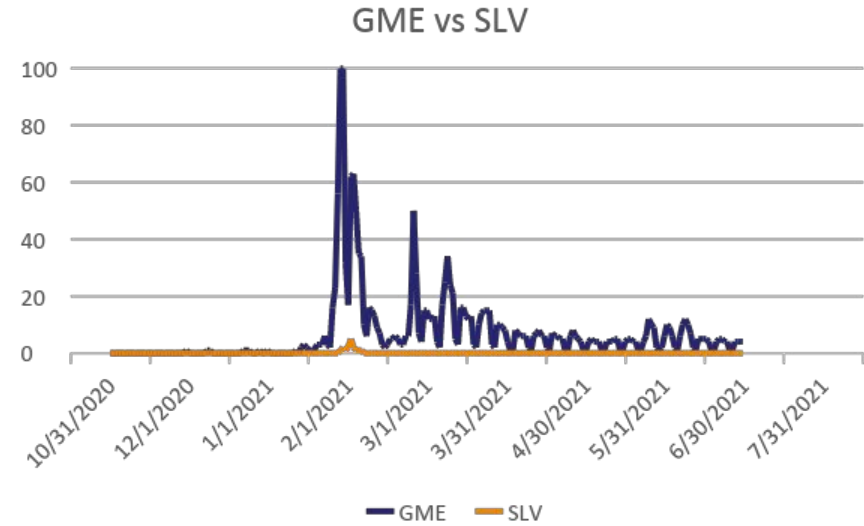
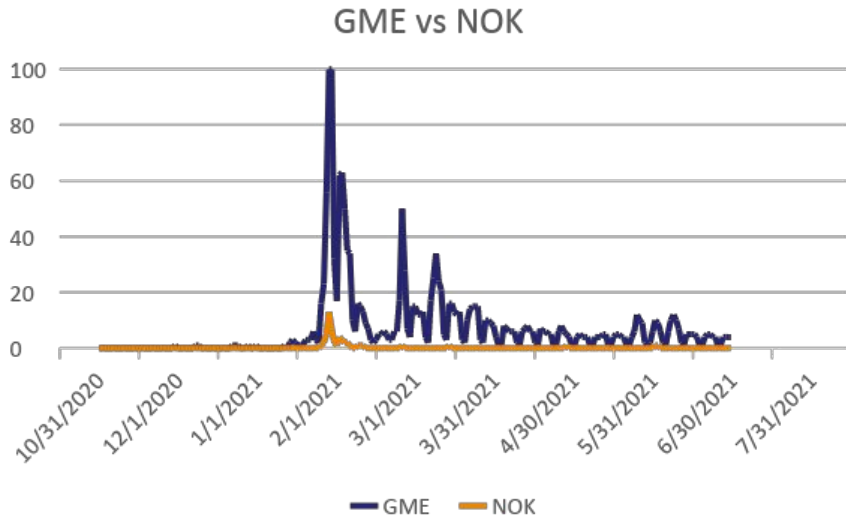
GME vs BB



Findings

- BB attract less search interest than GME throughout the whole period
- The trends of both stocks perform similarly, implied by the search peaks of BB and GME occurring on the same time

SVI between GME and other WSB stocks



Findings & conclusions

- Similar to the situation of BB, SLV and NOK attract less search interest than GME throughout the whole period
- But the trends of both stocks perform similarly, although the variations of SLV and NOK are less significant than GME

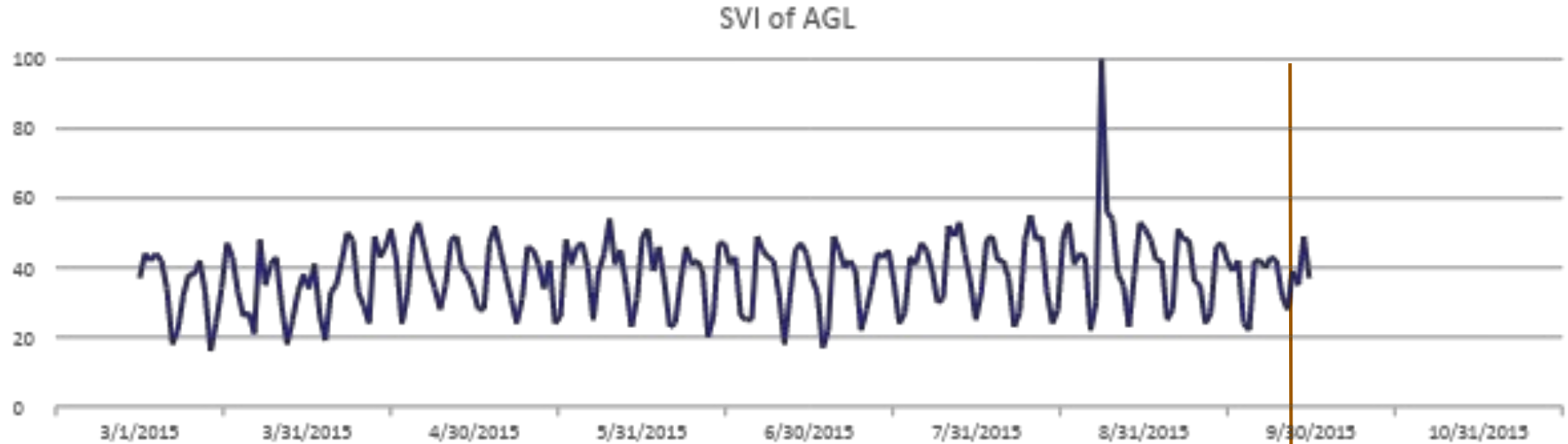
Conclusions

The search interests in AMC, BB, SLV and NOK are weaker than that in GME

The background of the slide is a blurred collage of financial market data. It features several candlestick charts with green and red bars, overlaid with red and blue trend lines. Scattered throughout are various percentage values in a dotted font, such as 3.15%, 1.29%, 4.65%, 4.25%, 4.72%, 4.65%, 4.23%, 1.25%, 1.49%, 2.25%, 2.48%, 1.72%, 5.40%, 5.40%, 1.0%, and -25%. Some of these values are accompanied by small upward or downward pointing triangles. The overall color palette is a mix of light blue, teal, and white, creating a professional and data-driven aesthetic.

Task 2

Peak SVI: August 24, 2015



*Search term AGL was used to generate this trend.

Fluctuations

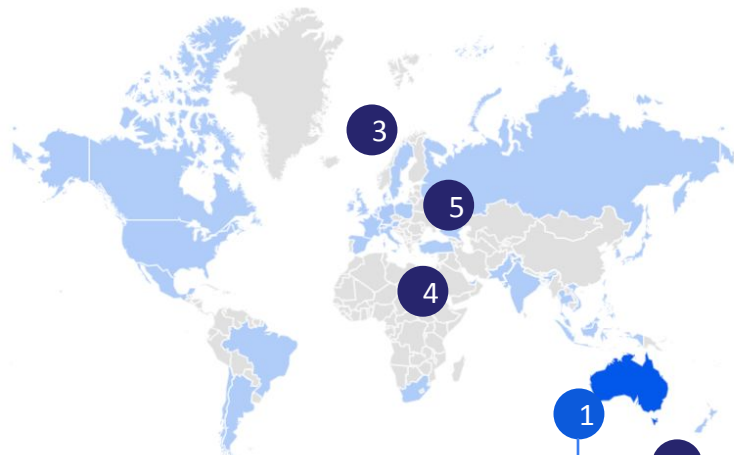
Fluctuations were mainly due to “AGL Energy”, an Australian company.

Peak

- Recorded on Aug 24, 2015
- SVI peak resulted from “AGL Resources”

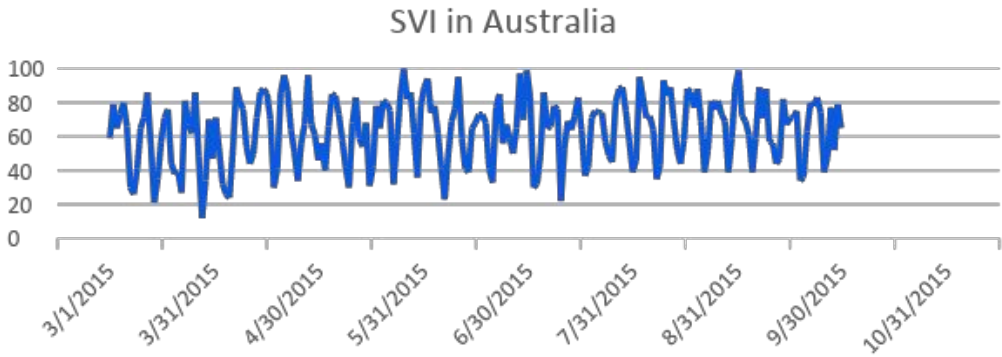
Peak SVI: August 24, 2015

Search trend pattern across countries

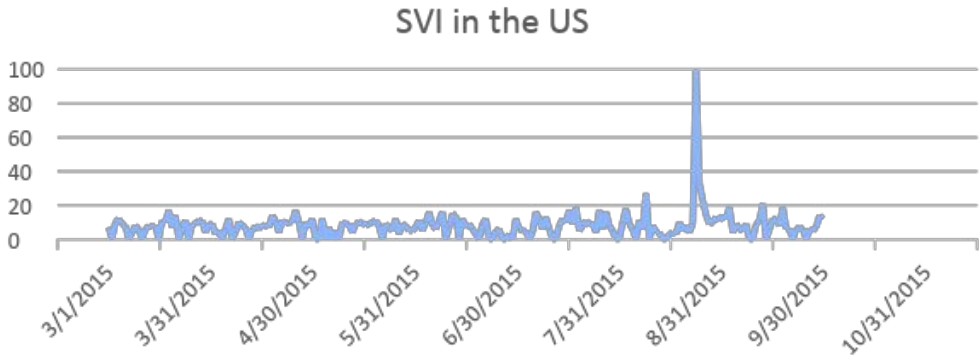


Australia had the highest interest

1	Australia	100
2	New Zealand	3
3	Denmark	3
4	United Arab Emirates	3
5	Germany	3



The trend of SVI in Australia did not show a peak on Aug 24, 2015



The trend of SVI in the US was correspondent to the worldwide one

Headquarter

Atlanta, Georgia, United States, North America

Company name

AGL Resources Inc

Events on SVI peak day

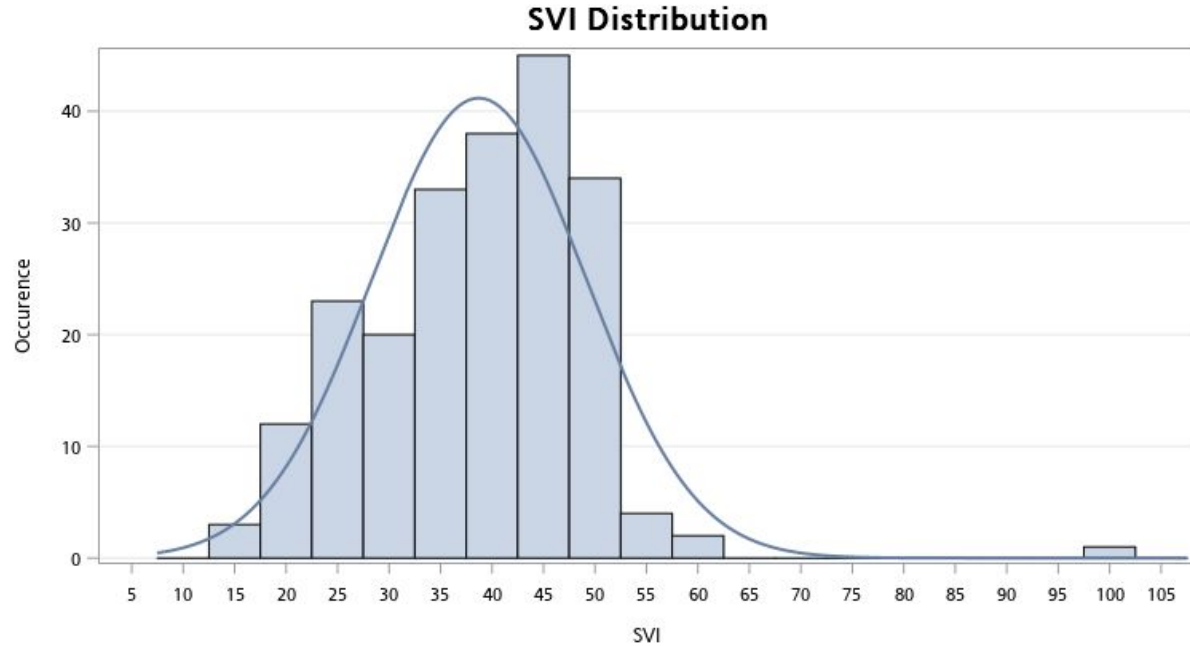
Southern Co.(NYSE: SO) announced that it will purchase AGL Resources in a \$12 billion deal, including a total equity value of \$8 billion. The deal would make Southern the nation's second-largest combined gas and electric utility by customer base.

Reference:

<https://www.utilitydive.com/news/southern-co-to-buy-gas-distributor-agl-resources-in-12b-deal/404472/>

https://www.bizjournals.com/atlanta/morning_call/2015/08/southern-co-to-acquire-agl-resources-in-12-billion.html

Summarizing the SVI data



38.03

Mean

10.39

Standard deviation

0.68

Skewness

The background of the slide is a blurred collage of financial market data. It features several candlestick charts with teal and red bars, overlaid with red and blue trend lines. Scattered throughout are various percentage values in a dotted font, such as 3.15%, 1.29%, -4.65%, -4.25%, -4.72%, -4.65%, -4.23%, -1.25%, -1.49%, 2.25%, 2.48%, 1.72%, 5.40%, -3.5%, and 1.35%. Some of these values are accompanied by small upward or downward pointing triangles. The overall color palette is a mix of light blue, teal, and red, creating a professional and data-driven aesthetic.

Task 3

Comparison of research conclusions

Da, Engelberg, and Gao (2011)	Our research
<ul style="list-style-type: none">SVI is correlated with but different from existing proxies of investor attentionThe correlations are positive but very lowProxies: (1) Absolute Abnormal Return (2) Abnormal Turnover (3) News Coverage	<ul style="list-style-type: none">SVI has little or no correlation with other proxies of investor attentionProxies: (1) High-Low (2) log(Market Cap) (3) 1/Closing price
<ul style="list-style-type: none">SVI captures investor attention in a more timely fashion, that is, SVI leads other proxies of investor attention	
<ul style="list-style-type: none">An increase in SVI predicts higher stock prices in the next 2 weeks and an eventual price reversal within the year	<ul style="list-style-type: none">An increase in SVI predicts lower retail trading activities for a stock the next day.

Comparison of research methodologies

	Da, Engelberg, and Gao (2011)	Our research
Dependent variables	1. DGTW abnormal return (in basis points)	1. Retail fraction 2. Retail volume 3. Daily return
Independent variables	1. ASVI and much more	1. SVI 2. Lag of SVI 3. log(SVI+1)
Control variables (alternative measurements of investor attention)	1. Absolute Abnormal Return 2. Abnormal Turnover 3. News Coverage	1. High-Low 2. log(Market Cap) 3. 1/Closing price
Others	1. Excluded noisy tickers (7% of all Russell 3000 stocks) 2. Excluded price < \$3	

Comparison of samples

	Da, Engelberg, and Gao (2011)	Our research
Sample size	411,930 observations	12,424 observations
Sample period	4+ years (Jan 2004 to Jun 2008)	8 months (Mar to Oct, 2015)
Sampled companies	Stocks in Russell 3000 index, 3606 stocks in total	All stocks from all US stock exchanges
Sample frequency	Weekly data	Daily data
Others	<ul style="list-style-type: none">Excluded noisy tickers (7% of all Russell 3000 stocks)Excluded price < \$3	

Regression result of regression models 1 to 6

	Model 1	Model 2	Model 3
	Retail Fraction	Retail Volume	Stock Return
Intercept	0.097332	822205.2	0.001631
(p-value)	0	8.35E-70	0.108094
SVI	-0.00028	-7212.69	2.01E-05
(p-value)	3.38E-20	1.93E-21	0.225365
R ²	0.68%	0.73%	0.01%

	Model 4	Model 5	Model 6
	Retail Fraction	Retail Volume	Stock Return
Intercept	0.048097	-5,916,955	0.002117
(p-value)	1.09E-19	1.41E-310	0.559573
SVI	-0.00023	-3,197.4	1.98E-05
(p-value)	4.13E-21	6.13E-06	0.239159
log(Market Cap)	0.002017	554,349.8	-6.26E-06
(p-value)	1.12E-06	0	0.982416
High-low	-0.000073	41,582.95	-6.21E-06
(p-value)	0.000157	8.81E-14	0.962595
1/Closing Price	0.274084	620,234.2	-0.00423
(p-value)	0	5.26E-10	0.07491
R ²	37.16%	15.47%	0.04%

Regression result of regression models 7 to 10

	Model 7	Model 8	Model 9
	Retail Fraction	Retail Volume	Stock Return
Intercept	0.050392	-5,875,220	0.003025
(p-value)	3.02E-21	3.0911E-303	0.407186
SVI	-8.28E-05	-356.531	8.13E-05
(p-value)	0.070763	0.787513	0.009783
log(Market Cap)	0.001952	553262.7	-3.01E-05
(p-value)	2.43E-06	0	0.915713
High-low	-0.00072	41780.01	-1.90E-06
(p-value)	0.000198	6.71E-14	0.988579
1/Closing Price	0.274056	619,656	-0.00424
(p-value)	0	5.42E-10	0.074022
lag of SVI	-0.00018	-3,360.05	-7.27E-05
(p-value)	0.000118	0.011062	0.020707
R ²	37.24%	15.51%	0.08%

	Model 10
	Retail Fraction
Intercept	0.041026
(p-value)	2.75E-11
log(SVI+1)	-0.0025
(p-value)	0.001915
log(Market Cap)	0.002349
(p-value)	1.54E-08
High-low	-0.00082
(p-value)	2.19E-05
1/Closing Price	0.274641
(p-value)	0
R ²	36.76%

Analysis results

	Model 4
	Retail Fraction
Intercept	0.048097
(p-value)	1.09E-19
SVI	-0.00023
(p-value)	4.13E-21
log(Market Cap)	0.002017
(p-value)	1.12E-06
High-low	-0.000073
(p-value)	0.000157
1/Closing Price	0.274084
(p-value)	0
R ²	37.16%



What we agree with the paper

- SVI is a significant indicator of attention from retail investors
- SVI is more significant than two of the control variables (log(Market Cap) and High-Low)
- SVI is less significant than one of the control variables (1/Closing Price)



What we disagree with the paper

- The higher SVI is, the lower retail fraction is, which is opposite from the result of the paper

Interpretations of our research results

Our finding

SVI and Retail Fraction have **negative** correlation

Possible explanation

