EXHIBIT 30

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF FLORIDA
CASE NO. 21-2989-MDL-ALTONAGA/Damian

In re: JANUARY 2021 SHORT SQUEEZE TRADING LITIGATION

REBUTTAL REPORT OF DANIEL R. FISCHEL

MARCH 28, 2023

I. BACKGROUND AND SUMMARY OF CONCLUSIONS

1. On February 16, 2023, I submitted the Expert Report of Daniel R. Fischel (the "Fischel Report"),[1] in which I opined:

- Plaintiffs cannot establish that potential Class Members relied on the integrity of the market prices on a class-wide basis.
- Plaintiffs cannot provide a common methodology to calculate damages if any.

2. On February 16, 2023, Plaintiffs in this action submitted the Declaration of Dr. Adam Werner (the "Werner Declaration"). In his Declaration Dr. Werner purports to analyze market efficiency for the Affected Stocks and opines on a purported common damages methodology for potential Class Members.

3. To establish purported market efficiency for the Affected Stocks, Dr. Werner assesses the five Cammer factors (average weekly trading volume, analyst coverage, market makers, eligibility to file Form S-3, price reaction to new information)[2] and three additional "Unger/Krogman" factors (market capitalization, float, and bid-ask spread).[3] He conducts this analysis using data from what he calls the "Relevant Period," which consists of the entire year *before* the Class Period, January 28, 2020 to January 27, 2021.[4] Dr. Werner finds that "[s]even of the nine Affected Companies traded in an efficient market during the Relevant Period. These seven companies are: AMC, BB, BBBY, EXPR, GME, NOK, and TRVG."[5]

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1. My qualifications and testimonial experience are contained in **Appendix A** to that report.
2. Werner Declaration, Section V.C.
3. Werner Declaration, Section V.D.
4. Werner Declaration, ¶ 1. I refer to this period as "Dr. Werner's Analysis Period."
5. Werner Declaration, Section III, at 3. Dr. Werner appears to have conceded that the market was not efficient for KOSS and TR, however I include all nine alleged Affected Stocks in my analyses for completeness.

4. Dr. Werner then asserts that "damages for a defrauded seller can be measured as the difference between the market value of the Affected Companies' shares' prices at close of trading on January 27, 2021 (before Robinhood first implemented various alleged restrictions), and the prices at which Class Members sold their shares during the Class Period, reduced by non-Robinhood related price deflation."[6] He finds that "[w]ith expert assistance, the finder of fact in this matter will be able to compute damages using a common class-wide methodology that applies to the calculation of damages for each and every Class member."[7]

5. I have been asked by counsel for Defendants to review and comment on the Werner Declaration. I have concluded that there is nothing in the Werner Declaration that would cause me to revise my opinions. Specifically:

- Dr. Werner makes no attempt to demonstrate that potential Class Members relied on – i.e., transacted based on – the integrity of the market price on a class-wide basis.
- Dr. Werner makes no attempt to demonstrate that potential Class Members traded in an efficient market during the Class Period.
    - The Affected Stocks did not trade in an efficient market during the Class Period.
    - Dr. Werner's market efficiency analyses and in particular his "news vs. no-news" test prove nothing and provide no basis to conclude that the market was efficient leading up to the Class Period.
- Dr. Werner's attempt to demonstrate the existence of a common methodology to calculate damages is economically incoherent.

6. I elaborate and provide the bases for these opinions in the remainder of this report. Additional materials I considered in reaching my conclusions are listed in **Appendix 1**. I

6. Werner Declaration, ¶ 95.

7. Werner Declaration, at 5.

reserve the right to supplement or amend my conclusions based on additional information that becomes available or additional claims put forth by Plaintiffs or their experts.

II. DR. WERNER MAKES NO ATTEMPT TO DEMONSTRATE THAT POTENTIAL CLASS MEMBERS RELIED ON THE INTEGRITY OF THE MARKET PRICE ON A CLASS-WIDE BASIS

7. Dr. Werner makes no attempt to demonstrate that potential Class Members relied on the integrity of the market price as he completely ignores the artificially inflated prices during the pre-Class Period.[8] My initial report demonstrated that it is virtually certain that the Class includes those who knowingly purchased at a time of inflated artificial prices during the pre-Class Period because of widespread public commentary available to potential Class Members acknowledging and publicizing the artificially high prices for the Affected Stocks.[9] Potential Class Members who fit this description only suffered a loss because they were unable to sell at hypothetically higher artificial prices before prices fell during the Class Period. As a result, these potential Class Members are more accurately characterized as those who made their investment decisions by speculating on the level and persistence of artificial prices rather than a belief in the integrity of market prices either before or during the Class Period.

8. Dr. Werner's failure to acknowledge the artificial prices during the pre-Class Period is particularly important because a large percentage of potential Class Members appear to have purchased their shares during this period. **Table 1** below reports the trading volume by potential Class Members for the Affected Stocks during Dr. Werner's Analysis Period.[10] **Table 1**

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8. I defined the pre-Class Period in the Fischel Report. *See* Fischel Report, fn. 44 ("from January 4, 2021 (the first trading day of 2021) through January 27, 2021").

9. Fischel Report, Section III.B.

10. Since Class Members must have sold at a loss to be part of the Class, they must have bought shares in the Affected Stocks at prices higher than the sale price during the Class Period. **Table 1** shows the proportion of the trading volume during Dr. Werner's Analysis

suggests that a large portion of potential Class Members' trading volume likely occurred during the pre-Class Period.

Table 1
Total Trading Volume on Days Where Stock Traded Above the Minimum Class Period Price

Affected Stock	Pre-Class Period[1]	Dr. Werner's Analysis Period[2]	%
AMC	1,254,198,812	1,641,220,529	76.4%
BB	1,559,209,561	1,559,209,561	100.0%
BBBY	357,850,630	422,315,388	84.7%
EXPR	719,551,738	759,149,223	94.8%
GME	647,016,586	647,016,586	100.0%
KOSS	25,073,496	25,073,496	100.0%
NOK	1,819,825,085	4,420,562,227	41.2%
TR	10,378,426	54,048,800	19.2%
TRVG	57,599,642	117,169,648	49.2%

Notes:
[1] The total trading volume for each Affected Stock during the pre-Class Period (January 4, 2021 – January 27, 2021) on days where stock traded above the Class Period's minimum trading price.
[2] The total trading volume of each Affected Stock during Dr. Werner's Analysis Period (January 28, 2020 – January 27, 2021) on days where stock traded above the Class Period's minimum trading price.
Source: Bloomberg, L.P.

9. The data on Named Plaintiffs' purchases shows that all 12 Named Plaintiffs purchased shares in the Affected Stocks during the pre-Class Period.[11] Two of the Named Plaintiffs,

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Period that was on days where the stock traded above the minimum price during the Class Period, i.e., the lowest possible price a Class Member could have sold. Of course, by definition, most sales during the Class Period were made at a price *higher* than the lowest price, meaning that these figures give an inflated impression of how many potential Class Members purchased the Affected Stocks during the two periods studied and then could have sold for a loss during the Class Period. *See also*, **Appendix 2**, which includes charts comparing the daily high prices of the Affected Stocks with the minimum price during the Class Period. **Appendix 2** shows that a large percentage of potential Class Members could only have suffered a loss during the Class Period had they purchased during the pre-Class Period.

11. Robinhood Named Plaintiffs' Trading Data and account statements produced by Named Plaintiffs for Marcel Poirier, Thomas Cash, Sandy Gar-Lun Ng, and Santiago Gil Bohórquez.

Thomas Cash and Marcel Poirier, also had purchases prior to the pre-Class Period and made money on those purchases.[12] This is further evidence suggesting that a large portion of potential Class Members made their investment decisions by speculating on the level and persistence of artificial prices during the pre-Class Period.

10. Moreover, there is direct evidence that some potential Class Members in fact did not rely on the integrity of the market price in making their purchase decisions.[13] For example, Named Plaintiff Abraham Huacuja testified that his investment decisions were based on the assumption there would be a short squeeze from which he could profit.[14] Named Plaintiff Brendan Clarke testified that he did not think GameStop was fairly valued at the time of his investments.[15]

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12. Merrill Lynch account statements for Thomas Cash show a purchase of 600 GME shares at $18.17 on November 30, 2020, a purchase of 200 GME shares at $15.4566 on December 21, 2020, and a purchase of another 200 GME shares at $37.9678 on January 19, 2021. His statement uses a first-in-first-out loss/gain calculation ("FIFO") and shows a gain of $56,913.54 on 500 GME shares he sold on January 28, 2021 (the sale which Plaintiffs claim as evidence of Thomas Cash's loss). Even if we use a last-in-first-out ("LIFO") gain/loss calculation, Thomas Cash still gained from selling 500 GME shares on January 28, 2021 (for a total gain of $53,498.12). *See* Thomas Cash December 2020 Account Statement (P00001405), Thomas Cash January 2021 Account Statement (P00000942), and Thomas Cash February 2021 Account Statement (P00000924). In addition, Marcel Poirier, who bought 4,000 BB shares prior to the pre-Class Period, among other purchases, also made money on that purchase regardless of which gain/loss calculation is used. *See* Marcel Poirier December 2020 TFSA Account Statement (P00000765), Marcel Poirier January 2021 TFSA Account Statement (P00000786), and Marcel Poirier February 2021 TFSA Account Statement (P00000807).

13. To date, I have received only the Huacuja and Clarke deposition transcripts. I reserve the right to review other deposition transcripts as they become available and to supplement my report based on those.

14. Deposition of Abraham Huacuja, March 21, 2023, at 30:2-11 ("A. I was banking on there being a short squeeze. Q. Do you mean, like, in your own investing, you were assuming or hoping that there was going to be a short squeeze? A. Yes. Q. And you were going to make a profit from that? A. I was hoping to. Yes.").

15. Deposition of Brendan Clarke, March 24, 2023, at 41:7-24 ("Q. And when you say it's your personal opinion that GameStop wasn't fairly valued anymore after this run-up, what do you mean by that? … A. But, like, you know, after it, you know, ran up even, like, just tripled in price, you know, I didn't really think that it was a fair value anymore. Q. Why is

As a result, individualized inquiry is required to determine which potential Class Members, if any, made their investment decisions relying upon the integrity of the market price.

III. DR. WERNER MAKES NO ATTEMPT TO DEMONSTRATE THAT POTENTIAL CLASS MEMBERS TRADED IN AN EFFICIENT MARKET DURING THE CLASS PERIOD

11. Plaintiffs alleged in their Complaint that they would demonstrate market efficiency "during the Class Period."[16] However, Dr. Werner performs his market efficiency tests during what he terms the "Relevant Period" – a period that does not cover the Class Period and is, in fact, a full year prior to the Class Period. As described in more detail below, Dr. Werner has not attempted and cannot demonstrate that potential Class Members traded in an efficient market during the Class Period.[17]

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that? A. Because, I mean, the company just wasn't … in a spot to grow organically at that point still."). Brendan Clarke purchased GME on January 27, 2021. *See* Complaint Exhibit A, at 7 and Robinhood's Named Plaintiffs' Trading Data.

16. Amended Consolidated Class Action Complaint, *In re: January 2021 Short Squeeze Trading Litigation*, United Stated District Court Southern District of Florida, Case No. 21 2989 MDL-ALTONAGA/Torres, January 17, 2023 ("Complaint"), ¶ 134.

17. In fact, Dr. Werner apparently concedes that the Affected Stocks did not trade in an efficient market during the Class Period. *See* Werner Declaration, ¶ 10 and fn. 1 stating, ("Plaintiffs allege that, from January 28, 2021, through and including February 4, 2021 (the 'Class Period'), Robinhood manipulated the prices of the Affected Stocks by engaging in conduct that artificially distorted the markets' supply and demand for these shares over six trading sessions" and "I chose to focus this one-year period on the year prior to the Class Period as this is the period that has not yet been affected by the alleged market manipulation."). But Dr. Werner ignores that the Affected Stocks also did not trade in an efficient market during what I refer to as the pre-Class Period, which is at the end of Dr. Werner's Analysis Period. The fact that many Class Members did not rely on the integrity of the market price and knowingly made purchases at artificially inflated prices at a time when the market was inefficient demonstrates that individualized inquiry is necessary preventing the current proposed Class to be certified. *See* Fischel Report, Section III and *supra* fn. 11 and 12. I also demonstrated in the Fischel Report that Dr. Werner's claim that Robinhood "manipulated" prices during the Class Period is incorrect. On the contrary, the artificial inflation caused by the short squeeze and social media speculation in the pre-Class

A. The Affected Stocks Did Not Trade in an Efficient Market During the Class Period

12. Maintaining Plaintiffs' claims on a class basis depends on the premise that the high prices of the Affected Stocks at the beginning of the Class Period are the result of an efficient market and the lower prices during the Class Period represent a movement away from these efficient prices as a result of the trading restrictions imposed by Robinhood.[18] Plaintiffs' premise is entirely backwards.

13. As demonstrated in the Fischel Report, the prices the day before the beginning of the Class Period were artificially high due to short squeezes and extreme social media-driven enthusiasm and the lower prices during the Class Period represent a movement away from the artificially high prices that existed during the pre-Class Period. As I demonstrated in the Fischel Report, price increases due to short squeezes are temporary and are followed by a return to lower prices.[19] However, the dissipation of the inflation in these stock prices during the Class Period, like the stock price movements in the pre-Class Period when the artificial price movements occurred, still does not satisfy the requirements for an efficient market.

14. As discussed in the Fischel Report, the key test for determining whether a market is efficient is establishing that there is a "cause and effect" relationship between movements in stock prices and revelation of unexpected value-relevant corporate events or financial releases. To do this, we used an event study analysis to test whether the stock price increases for the Affected Stocks were associated with the release of new, value-relevant company-specific information, and thus whether the Affected Stocks traded in an efficient market. In the Fischel Report, I found that

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Period began to dissipate during the Class Period, as price increases caused by short squeezes are temporary in nature. *See* Fischel Report, Section III.B.

18. Plaintiffs allege that "the price of the Affected Stocks [during the Class Period] were depressed by Robinhood artificially restricting demand." *See* Complaint, ¶ 124.

19. *See* Fischel Report, Section III.B.

the Affected Stocks failed this test because price increases during the pre-Class Period could not be explained by company-specific value-relevant information. Extending my analysis to the Class Period results in the same finding: price decreases during the Class Period cannot be explained by company-specific value-relevant information, indicating that the market for the Affected Stocks was inefficient during the Class Period.

15. **Table 2** below presents the event study results for the Class Period. Similar to Exhibit 3 in the Fischel Report, **Table 2** reports the residual returns for the Affected Stocks on each trading day during the Class Period. It highlights in grey all dates with statistically significant price reactions. The table shows a large number of statistically significant days during the Class Period, indicating that, if markets were efficient, the price movements on most if not all of these statistically significant dates should be due to value-relevant company-specific information. A review of the news shows that this is not the case.[20]

Table 2
Statistically Significant Days
January 28, 2021 – February 4, 2021

Date	AMC	BB	BBBY	EXPR	GME	KOSS	NOK	TR	TRVG
1/28/2021	-54.04%	-42.67%	-40.41%	-57.86%	-47.42%	-27.40%	-26.85%	-8.55%	-24.35%
1/29/2021	58.99%	-1.66%	9.30%	31.76%	69.79%	53.37%	-1.04%	3.77%	4.66%
2/1/2021	-2.35%	1.45%	-14.24%	-15.90%	-34.49%	-47.28%	4.83%	-5.19%	-7.06%
2/2/2021	-33.72%	-22.71%	-19.91%	-37.36%	-63.93%	-43.85%	-7.91%	-17.33%	-5.42%
2/3/2021	12.52%	3.76%	7.97%	2.96%	1.42%	23.73%	3.85%	3.48%	5.45%
2/4/2021	-19.86%	-0.33%	-7.87%	-12.92%	-45.65%	-27.82%	-8.40%	-2.23%	-7.33%
Total Cumulative Residual Return	-57.35%	-54.28%	-55.50%	-73.78%	-88.37%	-70.56%	-33.52%	-24.75%	-31.99%

Sources: Bloomberg, L.P.; CRSP.

16. In particular, most of the statistically significant price movements during the Class Period occurred without new value-relevant company-specific news and after Robinhood had

20. **Appendix 3** contains a listing of the company-specific news for the Affected Stocks. I use the same news search methodology I implemented in the Fischel Report. *See* Fischel Report, ¶ 36.

lifted its restrictions on that stock's trading. For example, as of late in the evening on January 30, 2021, Robinhood had lifted all its restrictions on BBBY.[21] Yet BBBY continued to experience statistically significant price declines after that date on February 1, 2, and 4, 2021. The statistically significant movements on these days are not explained by new value-relevant company-specific information. *See* **Appendix 3**. Dr. Werner provides no analysis of market efficiency during the Class Period and therefore he also provides no explanation for the movements on these days.

17. As I also demonstrated in the Fischel Report, economic literature along with market commentary recognize that market manipulations such as short squeezes cause temporary artificial price increases followed by a return to a lower price.[22] I also documented that market participants commented during the Class Period on the predictability of these price decreases given the artificial nature of the price increases for the Affected Stocks.[23] My analysis and the economic literature are evidence that the Affected Stocks did not trade in an efficient market during the Class Period due to the ongoing and predictable dissipation of inflation existing during the pre-Class Period.

B. Dr. Werner's Market Efficiency Analyses and in Particular His "News vs. No-news" Test Prove Nothing

18. Dr. Werner purports to analyze whether the Affected Stocks satisfied the fifth Cammer Factor (i.e., whether prices for the Affected Stocks reacted to new company-specific value-relevant information) during the year leading up to the Class Period.[24] Despite recognizing the

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21. RHMDL00047970.

22. Fischel Report, Section III.B.

23. Fischel Report, ¶ 29.

24. Werner Declaration, ¶ 67. ("In order to test [for the existence of a cause-and-effect relationship] one must first examine ether or not a stock's price reacts differently on days in which new information is revealed ('news days') versus all other days ('non-news days').")

importance of assessing stock price reactions to new value-relevant information, what Dr. Werner actually tests is whether the number of articles generated by a search for certain terms in two databases is "high" or "low."[25, 26] Dr. Werner identifies "high information flow" days for each of the Affected Stocks as the top 10 percent of days with "the most news articles published" during the Werner Analysis Period.[27] After performing his "news vs. no-news" test, Dr. Werner concludes that "[t]he results of these statistical tests support the conclusion that the stock prices for eight of the nine

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25. Werner Declaration, ¶ 78.

26. Dr. Werner fails to follow the recommendations of the academic literature he relies upon, rendering the results of his analysis unreliable and meaningless. *First*, Dr. Werner cites an *Amici Curiae* brief in *Halliburton II* which states that testing should be performed on "expected" news dates, not just any date with news or no news. Dr. Werner does not identify any dates that would correspond to "expected" news in his analysis. *See* Werner Declaration, ¶ 74 and Brief of Testifying Economists as *Amici Curiae* in Support of Respondent, *Halliburton Co. and David Lesar, Petitioners, v. Erica P. John Fund, Inc., FKA Archdiocese of Milwaukee Supporting Fund, Inc.*, *Respondent.*, No. 13-317, February 5, 2014, at 10. *Second*, despite repeatedly citing Ferrillo et al. (2004), Dr. Werner does not follow the recommendations of its authors to inspect the Affected Stocks for bubbles and overreactions. The authors clearly state that one "of the simplest sets of tests for whether a stock behaved in an efficient manner include inspection of the stock price patterns over the class period to see whether fad and overreaction elements are present." In case bubbles are present, as was the case here, the authors suggest a "[m]ore rigorous testing" that "would include statistical estimates of the autocorrelation structure, an examination of the variance of returns over time, and various assessments of whether there has been overreaction or underreaction in either price increases or price decreases." *See* P. Ferrillo, F. Dunbar, and D. Tabak, "The 'Less Than' Efficient Capital Markets Hypothesis: Requiring More Proof From Plaintiffs In Fraud-On-The-Market Cases," *St. John's Law Review*, Vol.78:81, 2004, at 118. *Third*, Dr. Werner fails to review the news articles in his news searches to identify whether the news was relevant to the Affected Stocks. Ferrillo et al. (2004), which Dr. Werner relies upon, state that for their "news vs. no-news" test they "examined whether there was a news story *about the company*, excluding those stories that simply reported on prior price movements." *See* Ferrillo, et al. (2004), at 121 (emphasis added).

27. Werner Declaration, ¶ 70.

Affected Companies reacted to information during" his Analysis Period.[28] However, this analysis proves nothing and Dr. Werner's conclusion is wrong.[29]

19. Irrespective of the flaws in Dr. Werner's analysis described below, Dr. Werner doesn't apply this test to the Class Period, but rather to his Analysis Period, which consists of the year *prior* to the Class Period. As a result, it cannot be informative about whether the Affected Stocks traded in an efficient market *during* the Class Period.

20. In addition, Dr. Werner's finding that large price movements occur on the same day as numerous articles documenting large price movements is circular and therefore meaningless as a basis for concluding that the Affected Stocks traded in efficient markets. Specifically, Dr. Werner's "news vs. no-news" test is inappropriate in this case because it is well established in the academic literature that a test that relies on simply counting the number of articles during a particular time period would lead one to conclude that markets are efficient even when price bubbles are present.[30]

21. For example, Bhattacharya et al. (2009) analyze the role of media in the Internet IPO bubble. They define the intensity of media coverage as the number of news items about a sample firm during a specific period. They find that "Compared to the non-Internet sample, the

28. Werner Declaration, ¶ 79.

29. Dr. Werner's analysis of the remaining Cammer and Krogman factors for each of the Affected Stocks for the year ended January 27, 2021 is similarly uninformative for determining whether the Affected Stocks traded in efficient markets prior to the implementation of Robinhood's restrictions as much of the analysis covers a period months before the artificial prices of the pre-Class Period.

30. Market participants acknowledged and Dr. Werner's own news search showed that the Affected Stocks were examples of classic price bubbles. For example, the Wall Street Journal commented: "GameStop is the platonic ideal of a stock bubble. …GameStop's soaring stock – and similar moves in BlackBerry, Nokia and others – is a bubble in microcosm…" *See* "GameStop Is a Bubble in Its Purest Form; It is tempting to see GameStop's soaring stock as merely the result of clownish behavior in a chat room. That would be a mistake," *The Wall Street Journal*, January 27, 2021.

Internet sample had significantly higher media coverage in terms of all three measures (total number of news items, good news, and bad news), during all time periods (pre-peak and post-peak, event or calendar time)."[31] In addition, Li et al. (2022) find that "media coverage can act as a driver of Bitcoin returns during bubbles, providing support to Shiller's argument [that news media are fundamental propagators of speculative price movements] and advancing understandings of the formation of bubbles and influences of media coverage."[32] Thus, simply counting news articles, as Dr. Werner has done, cannot establish market efficiency.

22. Finally, Dr. Werner ignores the question of whether the Affected Stocks reacted to new value-relevant company-specific information and merely tests whether the Affected Stocks experienced large price movements on the same day as numerous articles that contain the company's name are published.[33] That analysis is particularly problematic in this case where many of the articles he counts only contain commentary on the fact that the Affected Stocks were trading

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31. *See* U. Bhattacharya, N. Galpin, R. Ray, and X. Yu, "The Role of the Media in the Internet IPO Bubble," *Journal of Financial and Quantitative Analysis*, Vol. 44, No. 3, June 2009, pp. 657-682, at 658 & 665.

32. *See* Y. Li, W. Chang, A. Urquhart, and P. Wang, "The role of media coverage in the bubble formation: Evidence from the Bitcoin market," *Journal of International Financial Markets, Institutions & Money*, Vol. 80, 2022, at 1.

33. Dr. Werner's news search contains numerous articles that are clearly not related to the Affected Stocks. The most egregious examples include: Blackberry: news stories reporting on food/cooking recipes using blackberries and local news about muggings and shoplifting in Blackberry Township; Bed Bath & Beyond: news articles reporting wedding registries, real estate and local news incidents near a Bed Bath & Beyond store; Express: news articles about other companies that contain "Express" in their names, including: Panda Express, GDS Express, Wine Express, Heartland Express, Volunteer Express, MAPCO Express, Pineapple Express, International Money Express, PetMed Express, United Group Express, American Eagle Express, Logipal Express, Nippon Express, Western Petroleum Express, Sierra Mountain Express, Hearing Help Express, Electronic Express, Auto Master Express, Western Flyer Express, Campbell's "66" Express; Nokia: news articles reporting on the rapper "Princess Nokia" and basketball team "BC Nokia" and news articles about HMD Global which licenses the branded Nokia phones.

at artificial prices resulting from short squeezes and extreme social media driven enthusiasm.[34] We reviewed the articles generated by Dr. Werner's searches and, consistent with the findings in the Fischel Report, found that Dr. Werner's news search includes numerous articles, including some by the companies themselves, documenting the lack of the value-relevant news.[35] For all these reasons, Dr. Werner's market efficiency analyses and his "news vs. no-news" test prove nothing and provide no basis to determine market efficiency.

IV. DR. WERNER'S ATTEMPT TO DEMONSTRATE THE EXISTENCE OF A COMMON METHODOLOGY TO CALCULATE DAMAGES IS ECONOMICALLY INCOHERENT

23. Dr. Werner opines that "damages for a defrauded seller can be measured as the difference between the market value of the Affected Companies' shares' prices at close of trading on January 27, 2021 (before Robinhood first implemented various alleged restrictions), and the prices at which Class Members sold their shares during the Class Period, reduced by non-Robinhood related price deflation."[36]

24. Dr. Werner's proposed methodology is economically incoherent, as it measures damages as the distance away from the extremely high, manipulated prices on January 27, 2021 – the highest price for each of the Affected Stocks during Dr. Werner's Analysis Period. As a result, his proposed method concludes that the greater the dissipation of the artificial inflation in the Affected Stocks during the Class Period, the greater the damages. Thus, Dr. Werner's proposed damages methodology finds that Class Members are entitled to damages simply because they did not sell at the artificially high closing price on January 27, 2021.

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34. Fischel Report, Section III.

35. *See* **Appendix 4** for examples of such articles.

36. Werner Declaration, ¶ 95.

25. As established in the Fischel Report, the January 27, 2021 closing prices were artificially inflated as a result of short squeezes and social media-driven enthusiasm. There is therefore no way of knowing whether and to what extent the artificial prices would have continued to exist, or when and to what extent the inflation would have dissipated. As such, and as discussed in the Fischel Report, there is no way to know whether, absent Robinhood's and other brokers' actions, prices would have kept rising, how long they would have remained artificially high, and if and how quickly they would have fallen.[37] The closing price on January 27, 2021 therefore cannot serve as the basis for a class-wide damages model.

26. In the typical securities case, damages are measured as the difference between the actual inflated/deflated price at purchase/sale and the "true value" on that date. But even if the "true value" of the Affected Stocks could serve as an appropriate starting point in this case, that "true value" would be the value after all of the artificiality caused by the short squeezes and extreme social media-drive enthusiasm had dissipated. Using Plaintiffs' liability theory and logic, the "true value" for each of the Affected Stocks would be the price after the Class Period, when all of Robinhood's restrictions were removed. However, the "true value" is likely even lower that the actual sale prices by the proposed Class Members. As shown in **Table 3**, the price levels of the Affected Stocks immediately after the Class Period on February 5, 2021 were lower for all but one of the Affected Stocks than the average volume-weighted prices during the Class Period. Thus, immediately after the trading restrictions were lifted, the prices for eight of the nine Affected Stocks did not bounce back to a higher level, as Plaintiffs' liability theory (if it were true) would suggest.[38]

37. Fischel Report, ¶¶ 38-39.

38. Plaintiffs claim that Robinhood's manipulative restrictions caused stock prices to fall. If that were true, under the facts and circumstances of this case, one would expect stock prices to rise after the restrictions were lifted. That did not occur.

Plaintiffs therefore cannot present a class-wide damages model consistent with their theory of liability.

Table 3
Comparison of Trading Prices During
the Class Period vs. the Day After the End of the Class Period

Affected Stock	Volume-Weighted Average Price Class Period [1]	February 5, 2021 [2]	% Difference [3]
AMC	$11.32	$7.21	-36.3%
BB	$14.68	$12.94	-11.8%
BBBY	$33.65	$26.98	-19.8%
EXPR	$5.15	$3.23	-37.3%
GME	$179.57	$67.17	-62.6%
KOSS	$50.49	$20.62	-59.2%
NOK	$4.88	$4.27	-12.5%
TR	$37.58	$31.42	-16.4%
TRVG	$2.51	$2.56	2.1%

Notes:
[1] Based on daily price data from 1/28/2021 to 2/4/2021.
[2] Based on daily price data on 2/5/2021.
[3] Equals [3]/[2]-1.
Source: Bloomberg, LP.

27. Finally, there is no way of knowing whether or how any potential Class Member's trading behavior in the but-for world would have differed from their actual trading. Individualized inquiry would be necessary to determine a Class Member's trading behavior in Plaintiffs' but-for world. As a result, Plaintiffs cannot provide a common methodology to calculate damages, if any.

Daniel R. Fischel
March 28, 2023

Appendix 1
Materials Considered

Court Documents

Amended Consolidated Class Action Complaint, *In re: January 2021 Short Squeeze Trading Litigation*, United Stated District Court Southern District of Florida, Case No. 21-2989-MDL-ALTONAGA/Torres, January 17, 2023

Expert Reports

Expert Report of Daniel R. Fischel, February 16, 2023 and backup

Declaration of Dr. Adam Werner, February 16, 2023 and backup

Depositions

Deposition of Abraham Huacuja, March 21, 2023

Deposition of Brendan Clarke, March 24, 2023

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Bhattacharya, U., N. Galpin, R. Ray, and X. Yu, "The Role of the Media in the Internet IPO Bubble," *Journal of Financial and Quantitative Analysis*, Vol. 44, No. 3, June 2009, pp. 657-682

Ferillo, P., F. Dunbar, and D. Tabak, "The 'Less Than" Efficient Capital Markets Hypothesis: Requiring More Proof From Plaintiffs In Fraud-On-The-Market Cases," St. John's Law Review, Vol.78:81, 2004

Li, Y., W. Chang, A. Urquhart, and P. Wang, "The role of media coverage in the bubble formation: Evidence from the Bitcoin market," *Journal of International Financial Markets, Institutions & Money*, Vol 80, 2022

Other Documents

Brief of Testifying Economists as *Amici Curiae* in Support of Respondent, *Halliburton Co. and David Lesar, Petitioners, v. Erica P. John Fund, Inc., FKA Archdiocese of Milwaukee Supporting Fund, Inc., Respondent.,* No. 13-317, dated February 5, 2014

Bates Stamped Documents

P00000765 - Marcel Poirier December 2020 TFSA Account Statement

P00000786 - Marcel Poirier January 2021 TFSA Account Statement

P00000807 - Marcel Poirier February 2021 TFSA Account Statement

P00000924 - Thomas Cash February 2021 Account Statement

P00000942 - Thomas Cash January 2021 Account Statement

P00001405 - Thomas Cash December 2020 Account Statement

RHMDL00047970 – Robinhood Trading Restrictions

News Articles and Press Releases

"GameStop Is a Bubble in Its Purest Form; It is tempting to see GameStop's soaring stock as merely the result of clownish behavior in a chat room. That would be a mistake," *The Wall Street Journal*, January 27, 2021

News articles in backup materials to Declaration of Dr. Adam Werner, February 16, 2023

News Articles, SEC Filings, and Analyst Reports Listed in Appendix 3

AMC Entertainment Form 8-K, January 28, 2021, 06:02 AM

Bed Bath & Beyond Form 8-K, February 1, 2021, 04:43 PM

Express, Inc Form 8-K, February 3, 2021, 8:26 AM

Nokia Oyj Form 6-K, February 4, 2021, 9:14 AM

Nokia Oyj Form 6-K, February 4, 2021, 2:30 PM

"Strong finish helped by one-offs, 2021 still challenging," *Barclays*, February 4, 2021

"4Q weak beneath surface; FY21 guidance soft, focus on turnaround plans," *Bank of America Securities*, February 4, 2021

"Press Release: Nokia to publish fourth-quarter and full-year 2020 report on 4 February 2021," *Dow Jones Newswire*, January 28, 2021, 01:00 AM

"4 Analysts Downgrade Bed Bath & Beyond Amid Short Squeeze, and Two More Numbers to Know -- Barrons.com," *Dow Jones Newswire*, January 28, 2021, 04:59 AM

"Bed Bath & Beyond Cut to Market Perform From Outperform by Telsey Advisory Group," *Dow Jones Newswire*, January 28, 2021, 06:18 AM

"Bed Bath & Beyond Cut to Neutral From Buy by B of A Securities," *Dow Jones Newswire*, January 28, 2021, 08:49 AM

"Press Release: GameStop Earns Top Marks in Human Rights Campaign's 2021 Corporate Equality Index," *Dow Jones Newswire*, January 28, 2021, 10:00 AM

"Fitch Lowers Loan Default Forecasts For Next Two Years -- Market Talk," *Dow Jones Newswire,* January 28, 2021, 10:14 AM

"Press Release: Koss Corp. Releases Second Quarter Results," *Dow Jones Newswire*, January 28, 2021, 5:15 PM

"*S&PGR Raises AMC Entertainment Hldgs 1stLn Rtg To 'CCC' (RR:2)," *Dow Jones Newswire*, January 29, 2021, 12:07 PM

"Bed Bath & Beyond Cut to Underweight From Sector Weight by KeyBanc," *Dow Jones Newswire,* February 1, 2021, 04:45 AM

"Nokia Upped To Buy After Ericsson Results -- MarketWatch," *Dow Jones Newswire*, February 1, 2021, 08:23 AM

"AMC's Stock Gain Diverges From the Reality of Its Debt Level, Analyst Says," *Dow Jones Newswire*, February 1, 2021, 12:01 PM

"*Bed Bath & Beyond Inc. Successfully Completes $225 Million Accelerated Share Repurchase Program Started In October 2020 >BBBY," *Dow Jones Newswire*, February 1, 2021, 04:30 PM

"Press Release: Nokia and StarHub partner to expedite standalone 5G services for Singapore customers," *Dow Jones Newswire*, February 1, 2021, 09:00 PM

"Press Release: Nokia ships its 100 millionth fiber solution helping TDS to introduce 10G speeds," *Dow Jones Newswire*, February 2, 2021, 09:00 AM

"*Express Inc. Regains Compliance With NYSE Listing Standards," *Dow Jones Newswire*, February 3, 2021, 06:47 AM

"Press Release: GameStop Appoints Chief Technology Officer," *Dow Jones Newswire*, February 3, 2021, 09:00 AM

"Bed Bath & Beyond Raised to Buy From Hold by Odeon Capital," *Dow Jones Newswire*, February 3, 2021, 10:36 AM

"AMC: Citi sees 'dramatically reduced' bankruptcy risk for AMC," *Bloomberg L.P.*, February 4, 2021 6:24 AM

News Articles and SEC Filings Listed in Appendix 4

Nokia Oyj SEC Form 6-K, January 27, 2021, 03:10 PM

Press Release: BlackBerry Comments on Trading Activity at Request of the Industry Regulatory Organization of Canada (IIROC)," *Dow Jones Newswire*, January 25, 2021, 11:08 AM

"Reddit WallStreetBets: who are the trolls operating on the Wall Street stock exchange," *CE Noticias Financieras*, January 27, 2021

"AMC Entertainment Stock Surges, Fueled by Traders on Reddit," *The Hollywood Reporter*, January 27, 2021

"Koss, Express, Blackberry Also Caught in Epic Short Squeeze," *Investing.com*, January 27, 2021

"AMC Entertainment Stock Turbocharged Thanks to Reddit Hypesters," *Variety*, January 27, 2021

Data

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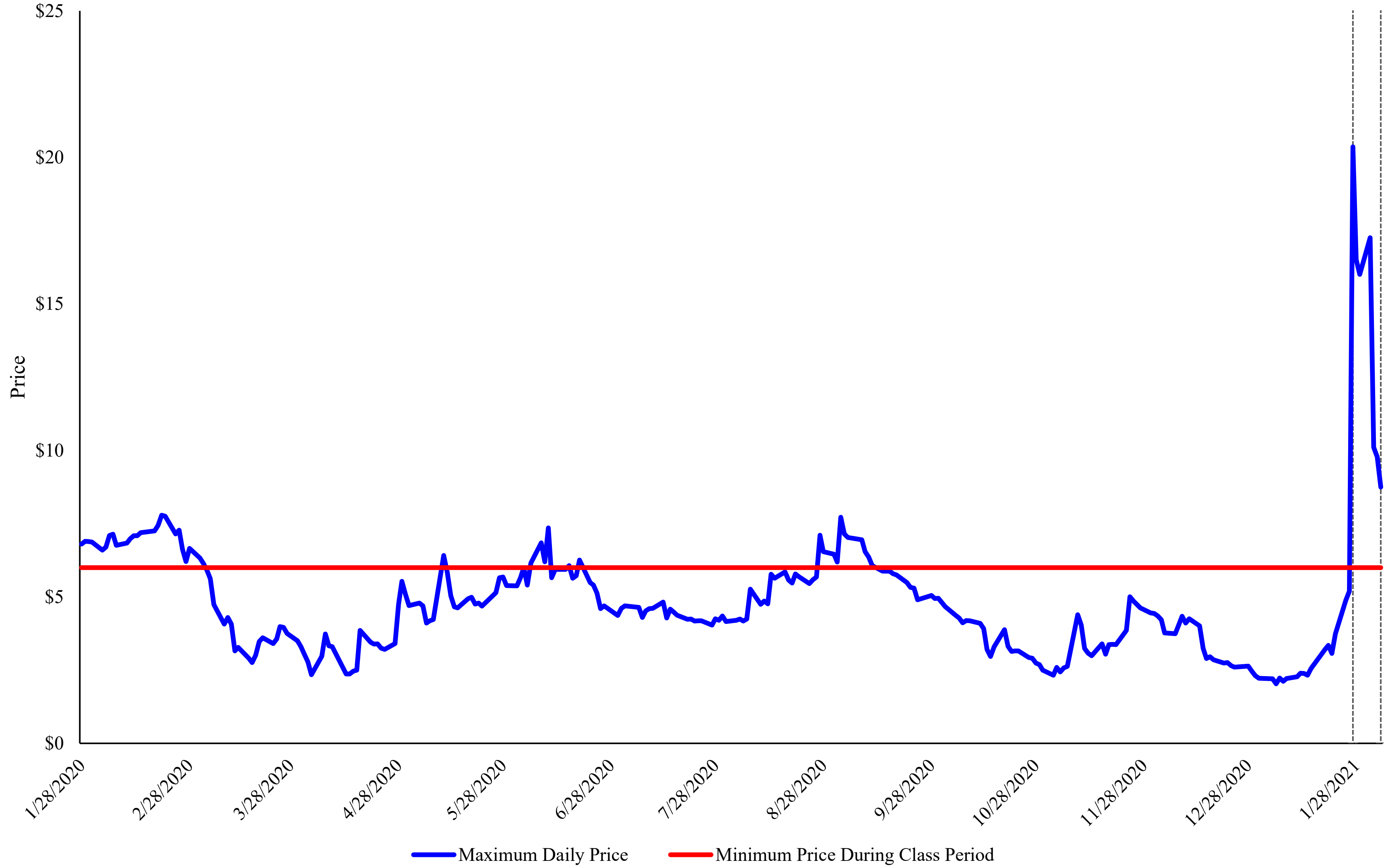
Bloomberg, L.P.

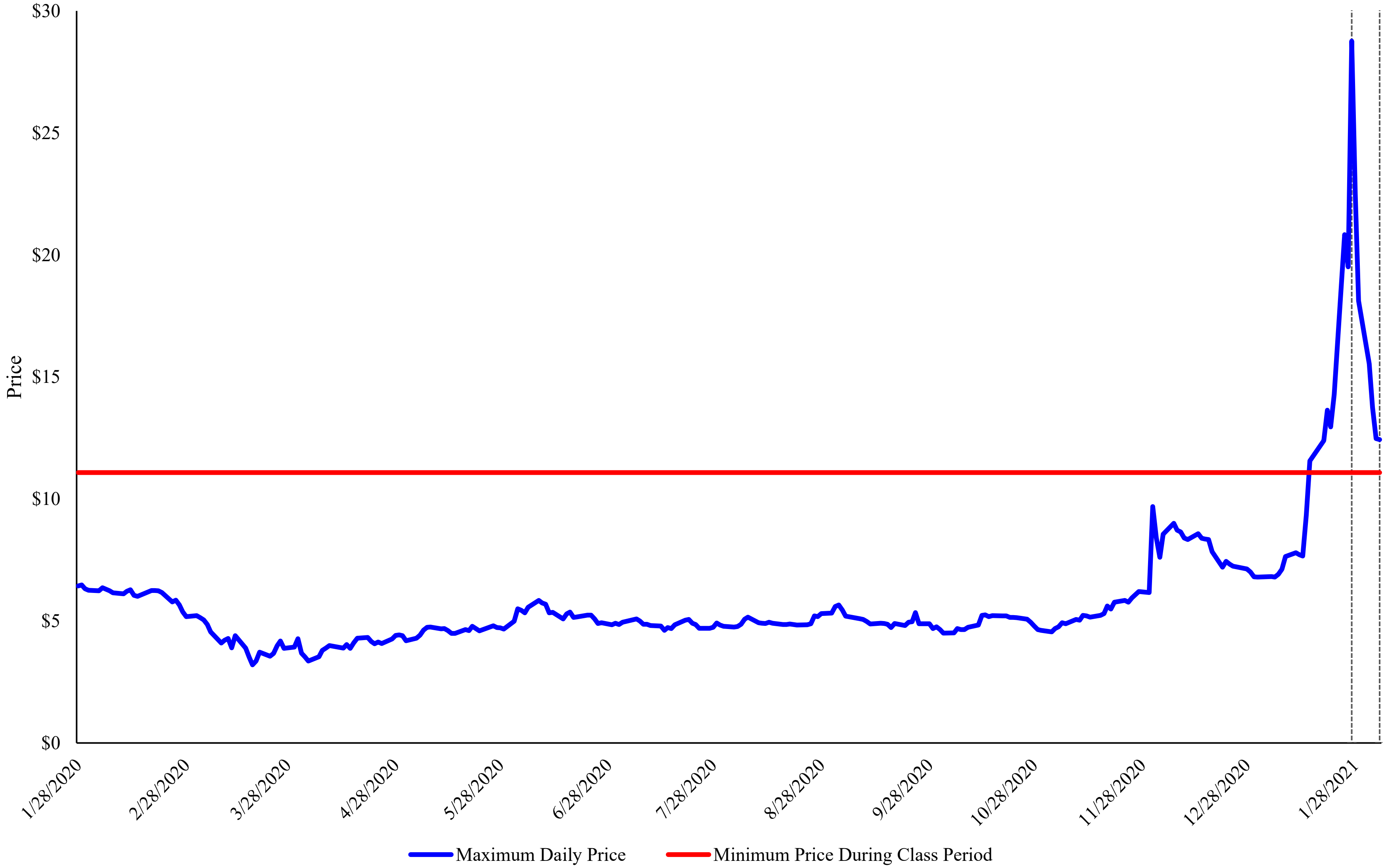
Robinhood Named Plaintiffs' Trading Data and account statements for Marcel Poirier, Thomas Cash, Sandy Gar-Lun Ng, and Santiago Gil Bohórquez

Appendix 2
Comparison of Daily High Price to Class Period Minimum Price for AMC
January 28, 2020 - February 4, 2021



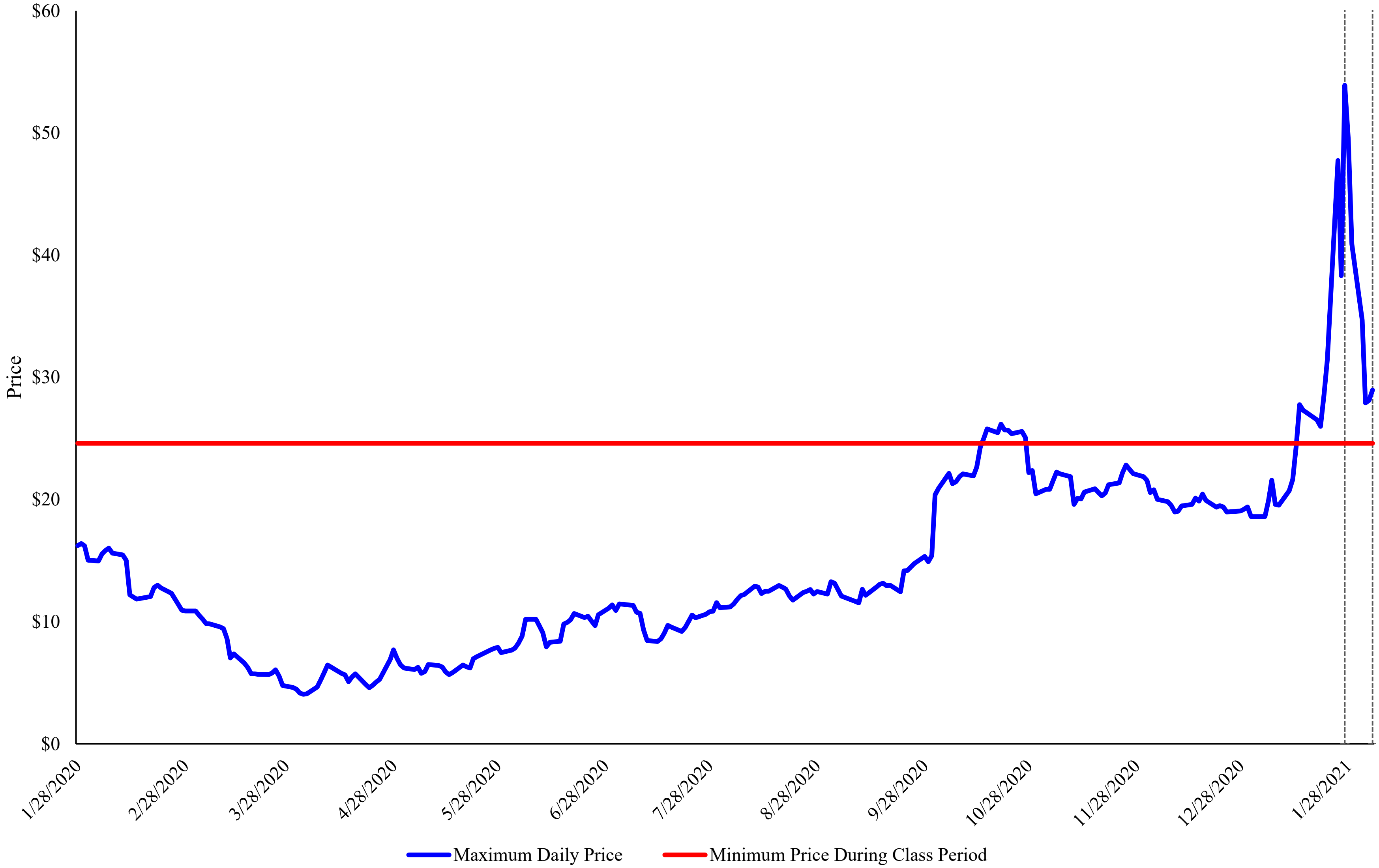
Sources: Bloomberg L.P.
Notes: Dashed lines indicate the start and end of the Class Period. The date range displayed is equal to Werner's Analysis Period plus the Class Period.

Appendix 2
Comparison of Daily High Price to Class Period Minimum Price for BB
January 28, 2020 - February 4, 2021



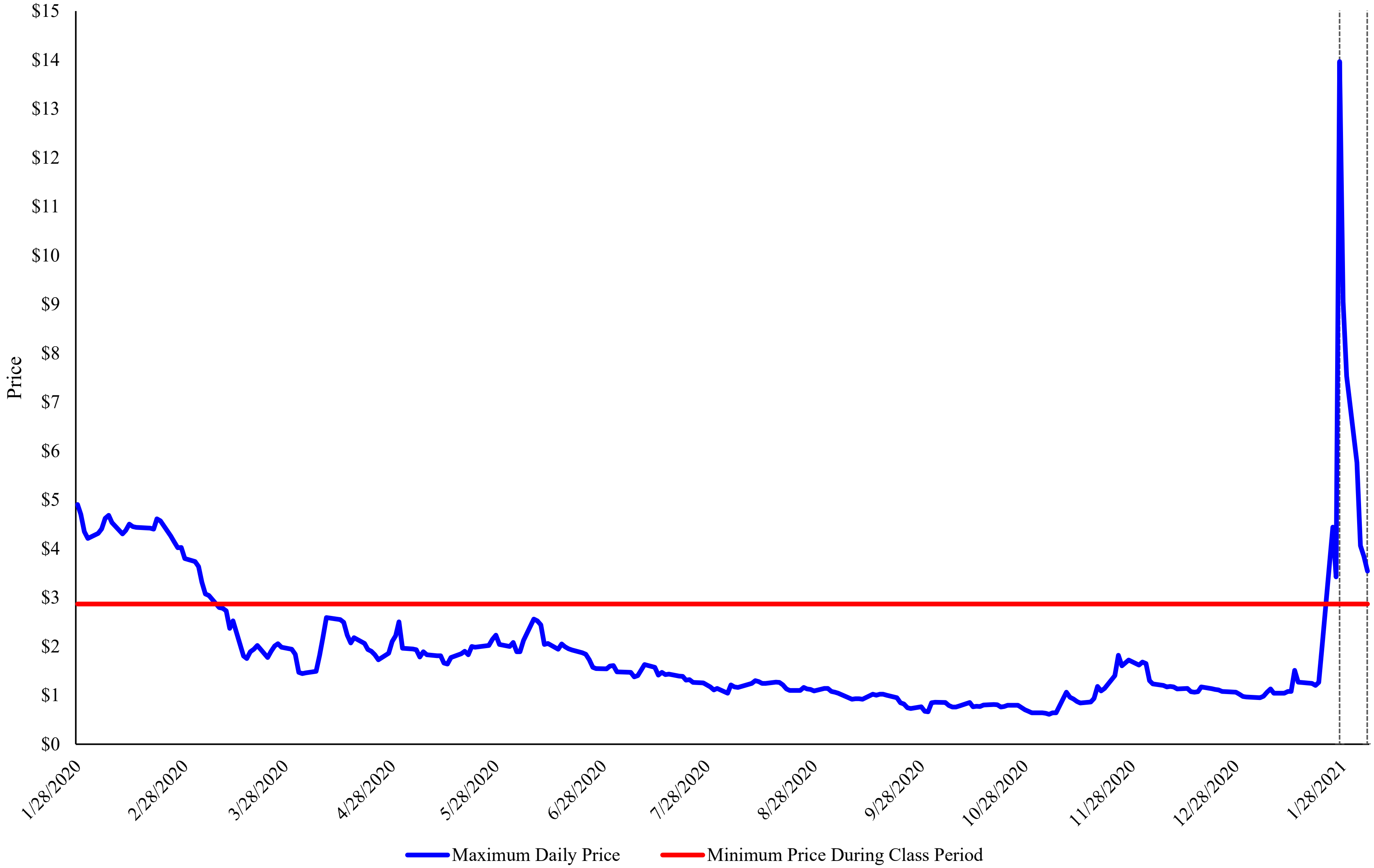
Sources: Bloomberg L.P.
Notes: Dashed lines indicate the start and end of the Class Period. The date range displayed is equal to Werner's Analysis Period plus the Class Period.

Appendix 2
Comparison of Daily High Price to Class Period Minimum Price for BBBY
January 28, 2020 - February 4, 2021



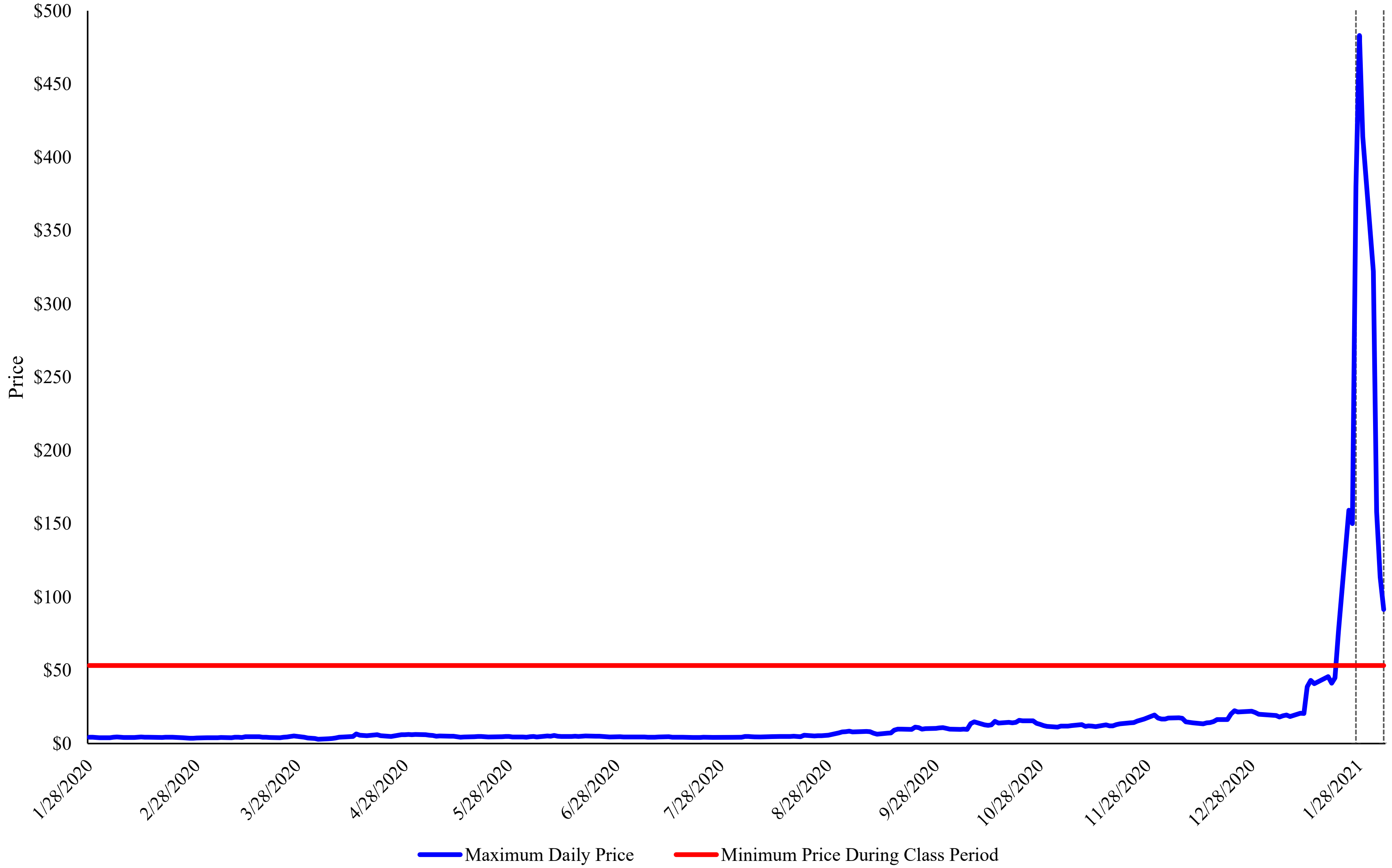
Sources: Bloomberg L.P.
Notes: Dashed lines indicate the start and end of the Class Period. The date range displayed is equal to Werner's Analysis Period plus the Class Period.

Appendix 2
Comparison of Daily High Price to Class Period Minimum Price for EXPR
January 28, 2020 - February 4, 2021



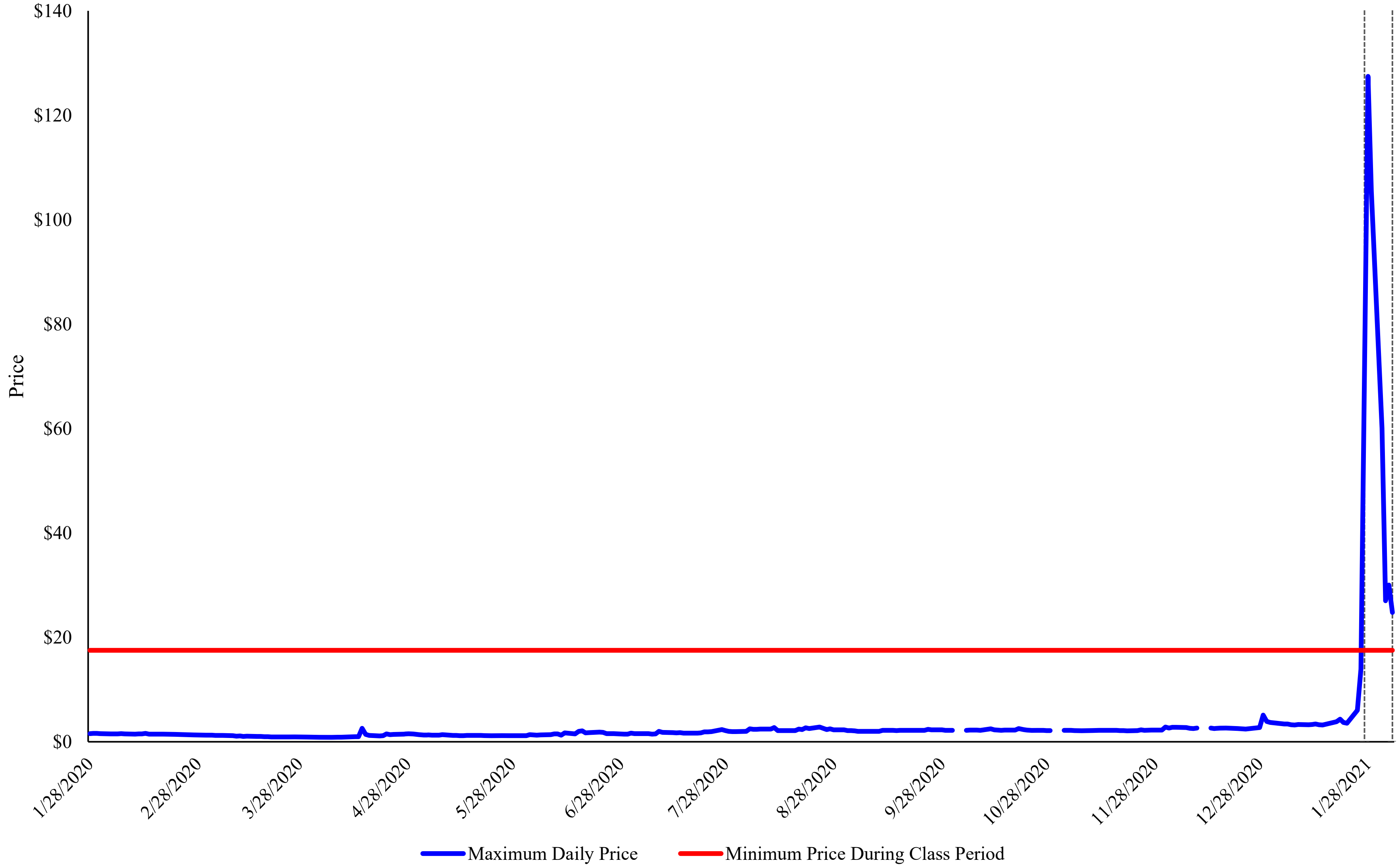
Sources: Bloomberg L.P.
Notes: Dashed lines indicate the start and end of the Class Period. The date range displayed is equal to Werner's Analysis Period plus the Class Period.

Appendix 2
Comparison of Daily High Price to Class Period Minimum Price for GME
January 28, 2020 - February 4, 2021



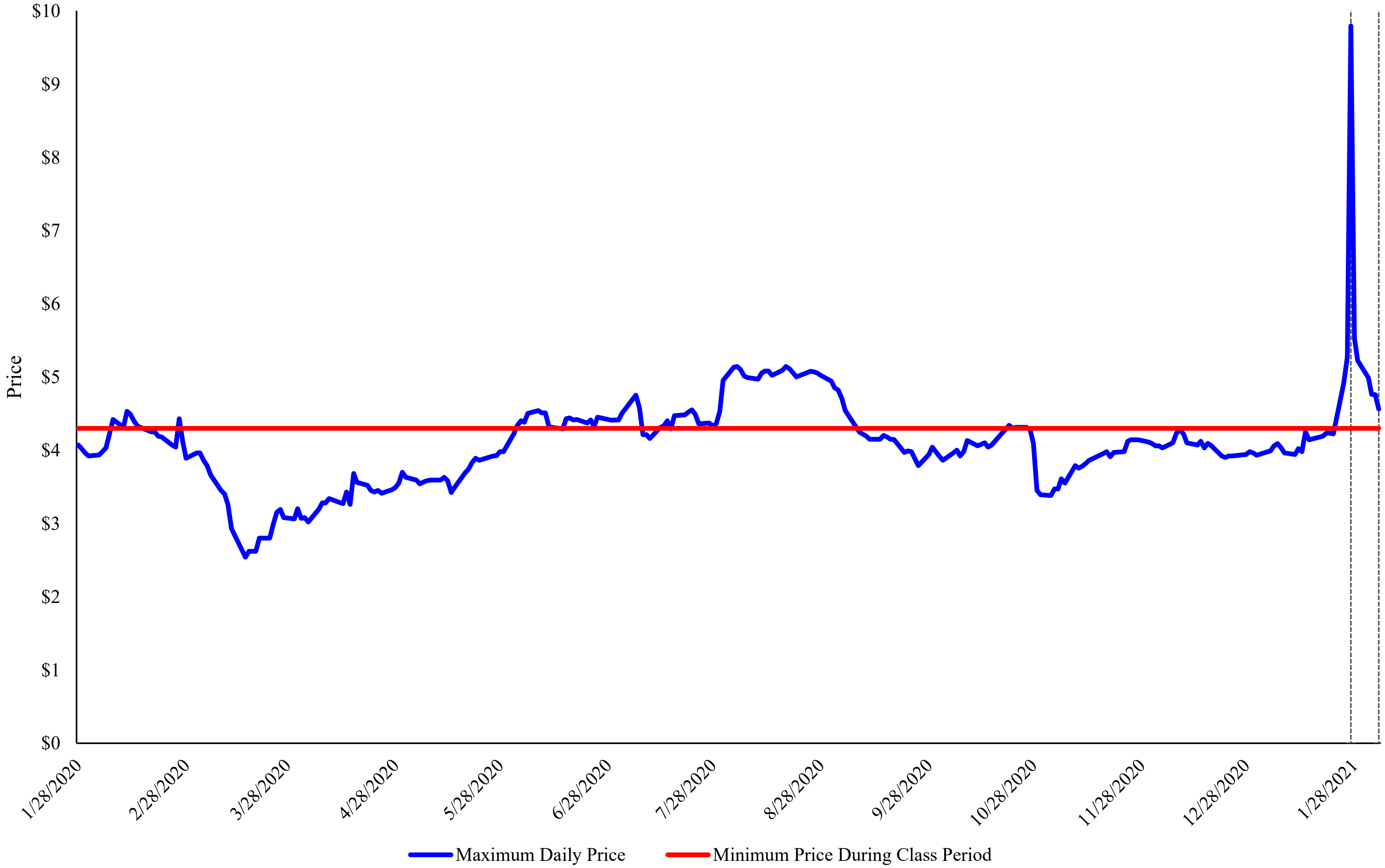
Sources: Bloomberg L.P.
Notes: Dashed lines indicate the start and end of the Class Period. The date range displayed is equal to Werner's Analysis Period plus the Class Period.

Appendix 2
Comparison of Daily High Price to Class Period Minimum Price for KOSS
January 28, 2020 - February 4, 2021



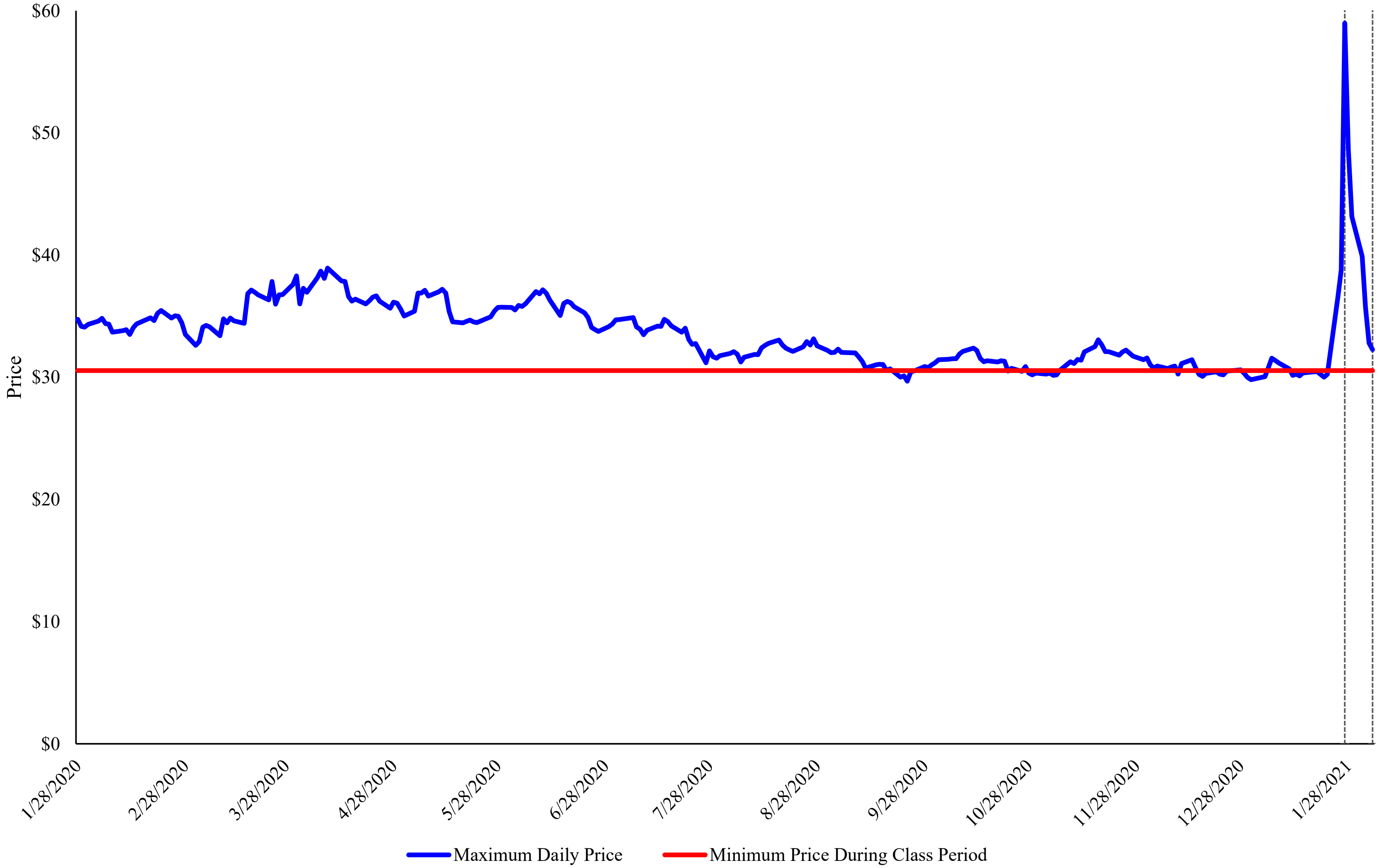
Sources: Bloomberg L.P.
Notes: Dashed lines indicate the start and end of the Class Period. The date range displayed is equal to Werner's Analysis Period plus the Class Period.

Appendix 2
Comparison of Daily High Price to Class Period Minimum Price for NOK
January 28, 2020 - February 4, 2021



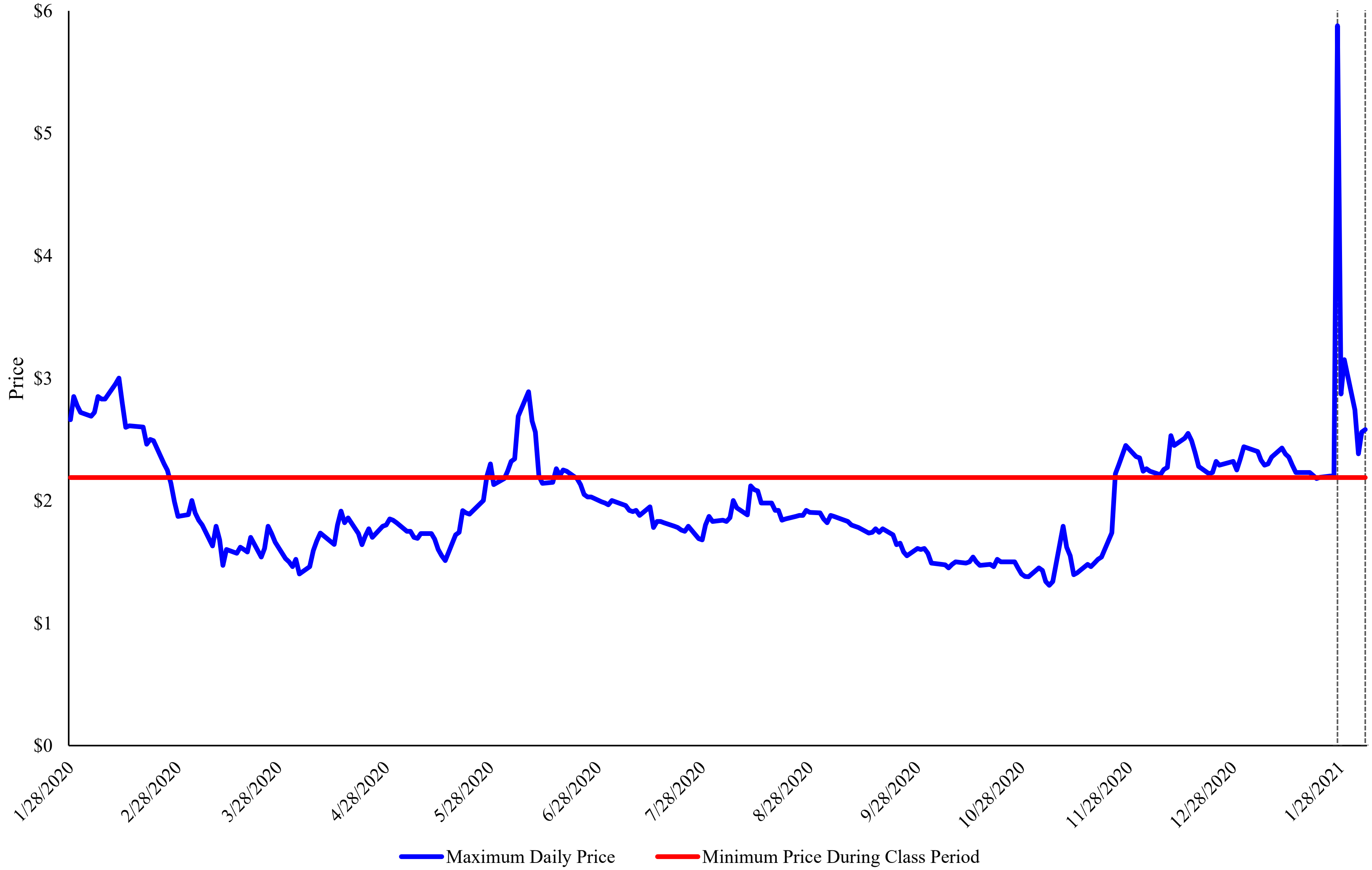
Sources: Bloomberg L.P.
Notes: Dashed lines indicate the start and end of the Class Period. The date range displayed is equal to Werner's Analysis Period plus the Class Period.

Appendix 2
Comparison of Daily High Price to Class Period Minimum Price for TR
January 28, 2020 - February 4, 2021



Sources: Bloomberg L.P.
Notes: Dashed lines indicate the start and end of the Class Period. The date range displayed is equal to Werner's Analysis Period plus the Class Period.

Appendix 2
Comparison of Daily High Price to Class Period Minimum Price for TRVG
January 28, 2020 - February 4, 2021



Sources: Bloomberg L.P.
Notes: Dashed lines indicate the start and end of the Class Period. The date range displayed is equal to Werner's Analysis Period plus the Class Period.

Appendix 3

Summary of Company Specific News - AMC Entertainment

January 28, 2021 - February 4, 2021

Reaction Day	Previous Trading Day Close	Closing Price On Reaction Day	Actual Return	Abnormal Return	*t* -Stat		Company-Specific News
1/28/2021	$19.90	$8.63	-56.63%	-54.04%	-9.11	**	"On January 27, 2021, affiliates of Silver Lake Group, L.L.C.[] and certain co-investors [] elected to convert [] all $600.0 million of the Company's 2.95% Convertible Senior Secured Notes due 2026 into shares of the Company's Class A common stock at a conversion price of $13.51 per share. The Conversion is expected to settle on January 29, 2021 and will result in the issuance of 44,422,860 shares of the Company's Class A common stock to the Noteholders. The Conversion will also reduce the Company's first-lien indebtedness by $600.0 million. Pursuant to the Stock Repurchase and Cancellation Agreement [] with Wanda Entertainment America, Inc.[], dated as of September 14, 2018, 5,666,000 shares of the Company's Class B Common Stock held by Wanda will be forfeited and cancelled in connection with the Conversion." (AMC Entertainment Form 8-K, January 28, 2021 06:02 AM.) "Credit rating agency Fitch has lowered its US leveraged loan default forecasts for 2021 and 2022...Cineworld Cinemas, Travelport, AMC Entertainment, along with retailers Party City, Serta Simmons Bedding and Belk are among the companies on Fitch's top loans of concern list." ("Fitch Lowers Loan Default Forecasts For Next Two Years -- Market Talk," Dow Jones Newswire, Janury 28, 2021 10:14 AM.)
1/29/2021	$8.63	$13.26	53.65%	58.99%	9.94	**	"[]S&P Global Ratings today raised its issue-level rating on AMC Entertainment Holdings Inc.'s first-lien debt to 'CCC' from 'CCC-' and revised the recovery rating to '2' from '3'...AMC has benefitted from the elevated demand for its equity shares over the past few months, which has allowed it to raise additional capital and improve its liquidity. This culminated with the company's completion of its remaining at-the-market equity program authorization by raising an additional $305 million on Jan. 26, 2021..." ("*S&PGR Raises AMC Entertainment Hldgs 1stLn Rtg To 'CCC' (RR:2)," Dow Jones Newswire, January 29, 2021 12:07 PM.)

Appendix 3

Summary of Company Specific News - AMC Entertainment

January 28, 2021 - February 4, 2021

Reaction Day	Previous Trading Day Close	Closing Price On Reaction Day	Actual Return	Abnormal Return	*t*-Stat		Company-Specific News
2/1/2021	$13.26	$13.30	0.30%	-2.35%	-0.40		"AMC Entertainment Holdings' share price ignores the company's substantial debt obligations and massive stock sales over the last few months, according to MKM Partners. The analysts cut their rating to Sell from Neutral, setting a price target of $1 for AMC (ticker: AMC) despite its big bounce over the last week." ("AMC's Stock Gain Diverges From the Reality of Its Debt Level, Analyst Says," Dow Jones Newswire, February 1, 2021 12:01 PM.)
2/2/2021	$13.30	$7.82	-41.20%	-33.72%	-5.68	**	
2/3/2021	$7.82	$8.97	14.71%	12.52%	2.11	**	
2/4/2021	$8.97	$7.09	-20.96%	-19.86%	-3.35	**	"Citi sees 'dramatically reduced' bankruptcy risk for AMC Entertainment Citi analyst Jason Bazinet says the 'short squeeze' in AMC Entertainment is 'not enough' and he maintains a Sell rating on the shares with a $2 price target...The analyst reduced estimates given his outlook for the recovery of the U.S. box office. Over the past few months, AMC has improved its liquidity and altered its capital structure by raising over $1B through at-the-money equity offerings and two new debt raises, Bazinet tells investors in a research note. These actions have 'dramatically reduced the risk of bankruptcy,' says the analyst. However, Bazinet finds it hard to assess the magnitude of a potential U.S. box office recovery in 2021 or even 2022. Further, the trend of releasing movies directly to video on demand will likely continue, except for the big budget films, even when COVID-19 headwinds subside, says Bazinet. As such, he does not believe the U.S. box office will return to 2019 levels in 2021 or 2022. Bazinet says AMC is overvalued at 'prevailing levels under all the scenarios we tested.'" ("AMC: Citi sees 'dramatically reduced' bankruptcy risk for AMC," Bloomberg L.P., February 4, 2021 6:24 AM.)

Appendix 3

Summary of Company Specific News - Bed Bath & Beyond

January 28, 2021 - February 4, 2021

Reaction Day	Previous Trading Day Close	Closing Price On Reaction Day	Actual Return	Abnormal Return	*t*-Stat		Company-Specific News
1/28/2021	$52.89	$33.64	-36.40%	-40.41%	-10.39	**	"The company didn't report any bad news. Instead, analysts have cut their ratings on the home-goods retailer's stock because it rallied more than 80% in one week. ...But Wall Street is worried that the rally has gone too far, and analysts are responding with downgrades and words of caution. 85% of analysts now rate Bed Bath & Beyond at Hold or Sell, according to FactSet, up from 70% last month." ("4 Analysts Downgrade Bed Bath & Beyond Amid Short Squeeze, and Two More Numbers to Know -- Barrons.com," Dow Jones Newswire, January 28, 2021, 04:59 AM.) "28 Jan 2021 06:18 ET Bed Bath & Beyond Price Target Raised to $40.00/Share From $27.00 by Telsey Advisory Group." ("Bed Bath & Beyond Cut to Market Perform From Outperform by Telsey Advisory Group," Dow Jones Newswire, January 28, 2021, 06:18 AM.) "28 Jan 2021 08:49 ET Bed Bath & Beyond Price Target Raised to $55.00/Share From $31.00 by B of A Securities." ("Bed Bath & Beyond Cut to Neutral From Buy by B of A Securities," Dow Jones Newswire, January 28, 2021, 08:49 AM.)
1/29/2021	$33.64	$35.33	5.02%	9.30%	2.39	**	
2/1/2021	$35.33	$30.26	-14.35%	-14.24%	-3.66	**	"1 Feb 2021 04:45 ET Bed Bath & Beyond Price Target Announced at $24.00/Share by KeyBanc." ("Bed Bath & Beyond Cut to Underweight From Sector Weight by KeyBanc," Dow Jones Newswire, February 1, 2021, 04:45 AM.)

Appendix 3

Summary of Company Specific News - Bed Bath & Beyond

January 28, 2021 - February 4, 2021

Reaction Day	Previous Trading Day Close	Closing Price On Reaction Day	Actual Return	Abnormal Return	*t*-Stat		Company-Specific News
2/2/2021	$30.26	$25.38	-16.13%	-19.91%	-5.12	**	"Bed Bath & Beyond Inc. (Nasdaq: BBBY) announced today the successful completion of its initial $225 million accelerated share repurchase program which initiated on October 29, 2020. Under the agreement, a total of approximately 11 million shares of Bed Bath & Beyond common stock were repurchased at an average price of approximately $20.77. The Company also announced that, in consideration of recent stock market volatility, it has extended the maturity of its second accelerated share repurchase agreement for $150 million which initiated on January 11, 2021, to end no later than April 2021 instead of February 2021." ("*Bed Bath & Beyond Inc. Successfully Completes $225 Million Accelerated Share Repurchase Program Started In October 2020 >BBBY," Dow Jones Newswire, February 1, 2021, 04:30 PM.) "On January 29, 2021 Bed Bath & Beyond Inc.[] entered into an amendment to the $150 million accelerated share repurchase agreement dated January 7, 2021 [] with JPMorgan Chase Bank, National Association [], such amended ASR Agreement []. Pursuant to the terms of the Amended ASR Agreement, the Company and the Bank have agreed that the final settlement date will occur no later than April 2021, with the settlement date determined at the Bank's option within an agreed range and that the exact number of shares repurchased under the Amended ASR Agreement will be calculated using a purchase price per share determined based on the daily volume- weighted average stock price over the term of the Amended ASR Agreement, subject to adjustments." (Bed Bath & Beyond Form 8-K, February 1, 2021 04:43 PM.)
2/3/2021	$25.38	$28.02	10.40%	7.97%	2.05	**	"Bed Bath & Beyond Raised to Buy From Hold by Odeon Capital." ("Bed Bath & Beyond Raised to Buy From Hold by Odeon Capital," Dow Jones Newswire, February 3, 2021, 10:36 AM.)
2/4/2021	$28.02	$27.01	-3.60%	-7.87%	-2.02	**	

Appendix 3

Summary of Company Specific News - BlackBerry

January 28, 2021 - February 4, 2021

Reaction Day	Previous Trading Day Close	Closing Price On Reaction Day	Actual Return	Abnormal Return	*t* -Stat		Company-Specific News
1/28/2021	$25.10	$14.65	-41.63%	-42.67%	-12.30	**	
1/29/2021	$14.65	$14.10	-3.75%	-1.66%	-0.48		
2/1/2021	$14.10	$14.63	3.76%	1.45%	0.42		
2/2/2021	$14.63	$11.55	-21.05%	-22.71%	-6.55	**	
2/3/2021	$11.55	$12.00	3.90%	3.76%	1.09		
2/4/2021	$12.00	$12.15	1.25%	-0.33%	-0.09		

Appendix 3

Summary of Company Specific News - Express Inc.

January 28, 2021 - February 4, 2021

Reaction Day	Previous Trading Day Close	Closing Price On Reaction Day	Actual Return	Abnormal Return	*t*-Stat		Company-Specific News
1/28/2021	$9.55	$4.70	-50.79%	-57.86%	-8.76	**	
1/29/2021	$4.70	$6.00	27.66%	31.76%	4.81	**	
2/1/2021	$6.00	$5.00	-16.67%	-15.90%	-2.41	**	
2/2/2021	$5.00	$3.38	-32.40%	-37.36%	-5.66	**	
2/3/2021	$3.38	$3.56	5.33%	2.96%	0.45		"*Express Inc. Regains Compliance With NYSE Listing Standards." ("*Express Inc. Regains Compliance With NYSE Listing Standards," Dow Jones Newswire, February 3, 2021 06:47 AM.) "On February 1, 2021, Express, Inc. [] received notification from the New York Stock Exchange [] that the Company has regained compliance with the continued listing standard set forth in Section 802.01C of the NYSE Listed Company Manual. The Company regained compliance under Section 802.01C on January 29, 2021 after the Company's common stock had a closing share price of at least $1.00 and had maintained an average closing share price of at least $1.00 over the 30 trading-day period ending on that date." (Express, Inc Form 8-K, February 3, 2021 8:26 AM.)
2/4/2021	$3.56	$3.28	-7.87%	-12.92%	-1.96		

Appendix 3

Summary of Company Specific News - Koss Corp.

January 28, 2021 - February 4, 2021

Reaction Day	Previous Trading Day Close	Closing Price On Reaction Day	Actual Return	Abnormal Return	*t*-Stat		Company-Specific News
1/28/2021	$58.00	$41.96	-27.66%	-27.40%	-4.01	**	
1/29/2021	$41.96	$64.00	52.53%	53.37%	7.81	**	"[Koss] ... reported its second quarter results for the quarter ended December 31, 2020. Sales for the second quarter were $4,929,789, which is an 18.4% increase from sales of $4,162,659 for the same three month period one year ago. The three month net income was $508,890, compared to a net loss of $215,713 for the second quarter last year. Diluted and basic income per common share for the quarter was $0.07 compared to a loss per common share of $0.03 for the same three month period one year ago." (“Press Release: Koss Corp. Releases Second Quarter Results,” Dow Jones Newswire, January 28, 2021, 5:15 PM.)
2/1/2021	$64.00	$35.00	-45.31%	-47.28%	-6.92	**	
2/2/2021	$35.00	$20.00	-42.86%	-43.85%	-6.42	**	
2/3/2021	$20.00	$25.59	27.95%	23.73%	3.47	**	
2/4/2021	$25.59	$18.80	-26.53%	-27.82%	-4.07	**	

Appendix 3

Summary of Company Specific News - GameStop

January 28, 2021 - February 4, 2021

Reaction Day	Previous Trading Day Close	Closing Price On Reaction Day	Actual Return	Abnormal Return	*t*-Stat		Company-Specific News
1/28/2021	$347.51	$193.60	-44.29%	-47.42%	-6.13	**	"GameStop proudly announced today that it has received a perfect score of 100 on the Human Rights Campaign Foundation's 2021 Corporate Equality Index, the nation's foremost benchmarking survey and report measuring corporate policies and practices related to LGBTQ workplace equality. This marks the eighth consecutive year that GameStop has earned top marks in the annual workplace campaign." ("Press Release: GameStop Earns Top Marks in Human Rights Campaign's 2021 Corporate Equality Index," Dow Jones Newswire, January 28, 2021 10:00 AM.)
1/29/2021	$193.60	$325.00	67.87%	69.79%	9.02		
2/1/2021	$325.00	$225.00	-30.77%	-34.49%	-4.46	**	
2/2/2021	$225.00	$90.00	-60.00%	-63.93%	-8.26	**	
2/3/2021	$90.00	$92.41	2.68%	1.42%	0.18		"GameStop Corp. (NYSE: GME) [] today announced that it has appointed Matt Francis to the newly-created role of Chief Technology Officer." ("Press Release: GameStop Appoints Chief Technology Officer," Dow Jones Newswire, February 3, 2021 09:00 AM.)
2/4/2021	$92.41	$53.50	-42.11%	-45.65%	-5.90	**	

Appendix 3

Summary of Company Specific News - Nokia

January 28, 2021 - February 4, 2021

Reaction Day	Previous Trading Day Close	Closing Price On Reaction Day	Actual Return	Abnormal Return	*t*-Stat		Company-Specific News
1/28/2021	$6.55	$4.69	-28.40%	-26.85%	-11.28	**	"Nokia will publish fourth-quarter and full-year 2020 report on 4 February 2021 at approximately 8 a.m. Finnish time (EET)." ("Press Release: Nokia to publish fourth-quarter and full-year 2020 report on 4 February 2021," Dow Jones Newswire, January 28, 2021, 01:00 AM.)
1/29/2021	$4.69	$4.56	-2.77%	-1.04%	-0.44		
2/1/2021	$4.56	$4.89	7.24%	4.83%	2.03	**	"Nokia (NOKIA.HE) was upgraded to buy from sell at DNB Markets, which also lifted its price target to EUR4.80 ($5.80) from EUR4. Analyst Frank Maao said the share price has come down after the retail frenzy last week, the read-across from Ericsson's (ERIC-B.SK) fourth quarter suggests there is 5G cycle strength in Northeast Asia excluding China, the capital markets day in March could be another catalyst and there could be increasing order momentum from those looking to diversify away from Chinese gear." ("Nokia Upped To Buy After Ericsson Results -- MarketWatch," Dow Jones Newswire, February 1, 2021, 08:23 AM.)
2/2/2021	$4.89	$4.53	-7.36%	-7.91%	-3.32	**	"Six months after launching Singapore's first non-standalone 5G services for consumers and enterprises, longstanding partners, StarHub and Nokia have teamed up again to deploy a new cloud-native 5G core network to manage 5G standalone (SA) bandwidth demand that has been projected to grow rapidly and tremendously." ("Press Release: Nokia and StarHub partner to expedite standalone 5G services for Singapore customers," Dow Jones Newswire, February 1, 2021, 09:00 PM.) "Nokia today announced that it has reached 100 million fiber broadband shipments. This marks another milestone for Nokia in the North America fiber market after achieving world firsts for large GPON deployments, Gigabit cities and 10 Gigabit rollouts. Nokia has commemorated this latest milestone by awarding a golden Optical Network Terminal (ONT) to TDS Telecommunications LLC, the recipient of the 100 millionth unit." ("Press Release: Nokia ships its 100 millionth fiber solution helping TDS to introduce 10G speeds," Dow Jones Newswire, February 2, 2021, 09:00AM.)
2/3/2021	$4.53	$4.70	3.75%	3.85%	1.62		

Appendix 3

Summary of Company Specific News - Nokia

January 28, 2021 - February 4, 2021

Reaction Day	Previous Trading Day Close	Closing Price On Reaction Day	Actual Return	Abnormal Return	*t*-Stat		Company-Specific News
2/4/2021	$4.70	$4.37	-7.02%	-8.40%	-3.53	**	"Nokia Board of Directors resolved to issue shares to the company and resolved on a directed share issuance for the settlement of shares under previous Nokia Equity Programs. Nokia's Board of Directors has resolved to issue 21,575,000 new shares in a directed share issuance without consideration to Nokia Corporation to be later used to fulfil the company's obligations primarily under its equity plans that vest in 2021 and in the first quarter of 2022. [] Additionally, the Board of Directors has resolved on a directed issuance of a maximum number of 21,575,000 Nokia shares [] held by Nokia Corporation, as a result of the above-mentioned issuance to itself, to settle its commitments under the 2020 Employee Share Purchase Plan, 2018 Performance Share Plan and various Restricted Share plans that vest in 2021 and in the first quarter of 2022. The shares are issued without consideration. Each share delivery would be published separately by a stock exchange release. Both resolutions to issue shares are based on the authorization granted to the Board of Directors by the Annual General Meeting on May 27, 2020." (Nokia Oyj Form 6-K, February 4, 2021 9:14 AM.) "Nokia delivered a solid Q4 to end 2020 at the high end of our Outlook range. We saw healthy gross margin and operating margin performance for both Q4 and full year 2020, supported by a regional mix shift towards the higher margin North America region and by our ongoing R&D efforts to enhance product quality and cost competitiveness. ...The healthy close to the year does not change our earlier communicated view for Nokia-level operating margin expected in 2021. Net sales for Q4 were down 5% on a reported basis and up 1% in constant currency and for full year 2020 they were down 6% on a reported basis and down 4% in constant currency. Nokia delivered strong cash performance in Q4 and full year 2020, benefitting from a large customer payment that had been expected in Q1 2021, marking the third consecutive quarter of positive free cash flow. Additionally, our liquidity position continues to be solid." ("Nokia Oyj Form 6-K, February 4, 2021 2:30 PM.)[1]

Appendix 3

Summary of Company Specific News - Nokia

January 28, 2021 - February 4, 2021

Reaction Day	Previous Trading Day Close	Closing Price On Reaction Day	Actual Return	Abnormal Return	*t*-Stat	Company-Specific News

Note:

[1]: The earnings results announced on February 4, 2021 were mixed. According to analysts, Nokia beat guidance with the help of one-time items, such as early recognition of certain revenue. Analysts also recognized that Nokia was facing several headwinds such as FX impacts, market share loss, and price erosion. *See* "Strong finish helped by one-offs, 2021 still challenging," *Barclays* , February 4, 2021 ("Nokia delivered a stronger than expected 4Q at top and bottom line, albeit helped by a few one-time items, and guided 2021 sales below consensus while maintaining its margin target."); *see also* "4Q weak beneath surface; FY21 guidance soft, focus on turnaround plans," *Bank of America Securities,* February 4, 2021 ("Nokia reported 4Q revenue/EPS of €6.57bn/14c versus the Street's €6.41bn/11c. While revenues came in above expectations, EPS benefitted from a one-time benefit of €250mn which boosted EPS by ~4c. Management issued FY21 revenue guidance of €21 .20bn, below the Street's €21.44bn, citing several headwinds such as FX impacts, share loss in North America and China, and price erosion, which are expected to weigh on 2021 results.").

Appendix 3

Summary of Company Specific News - Tootsie Roll Industries

January 28, 2021 - February 4, 2021

Reaction Day	Previous Trading Day Close	Closing Price On Reaction Day	Actual Return	Abnormal Return	*t* -Stat		Company-Specific News
1/28/2021	$42.85	$38.78	-9.50%	-8.55%	-7.37	**	
1/29/2021	$38.78	$39.58	2.06%	3.77%	3.25	**	
2/1/2021	$39.58	$37.26	-5.86%	-5.19%	-4.47	**	
2/2/2021	$37.26	$31.00	-16.80%	-17.33%	-14.94	**	
2/3/2021	$31.00	$32.03	3.32%	3.48%	3.00	**	
2/4/2021	$32.03	$31.42	-1.90%	-2.23%	-1.93		

Appendix 3

Summary of Company Specific News - Trivago

January 28, 2021 - February 4, 2021

Reaction Day	Previous Trading Day Close	Closing Price On Reaction Day	Actual Return	Abnormal Return	*t* -Stat		Company-Specific News
1/28/2021	$3.19	$2.48	-22.26%	-24.35%	-5.64	**	
1/29/2021	$2.48	$2.52	1.61%	4.66%	1.08		
2/1/2021	$2.52	$2.38	-5.56%	-7.06%	-1.64		
2/2/2021	$2.38	$2.33	-2.10%	-5.42%	-1.26		
2/3/2021	$2.33	$2.51	7.73%	5.45%	1.26		
2/4/2021	$2.51	$2.40	-4.38%	-7.33%	-1.70		

Appendix 4
Examples of News Articles from Dr. Werner's News Search on "High News Flow Days" Acknowledging the Artificial Prices in the Affected Stocks

<u>January 27, 2021 - Nokia[1]</u>

- "Nokia is issuing this stock exchange release to comment on recent trading activity of its stock. Nokia is not aware of any material, undisclosed corporate developments or material change in its business or affairs that has not been publicly disclosed that would account for the recent increase in the market price or trading volume of its shares."[2]

<u>January 25, 2021 - BlackBerry[3]</u>

- "The Company is not aware of any material, undisclosed corporate developments and has no material change in its business or affairs that has not been publicly disclosed that would account for the recent increase in the market price or trading volume of its common shares."[4]

Other examples of commentary about the Affected Stocks' artificial prices included in Dr. Werner's news search include:

- "GameStop Corp (NYSE:GME) and AMC Entertainment Holdings Inc (NYSE:AMC) aren't the only stocks soaring on Wednesday even as the Dow Jones Industrial Average sheds 300 points. BlackBerry Ltd (NYSE:BB) jumped 24%, to above $23, Koss Corporation (NASDAQ:KOSS) jumped 222%, to $32.25, and Express Inc (NYSE:EXPR) rose 247%, to $10.57, all seemingly part of a short squeeze pitting professional and retail traders against each other. There isn't much else to explain the big gains in these stocks. The volatility forced exchanges to halt

1. Dr. Werner counted articles repeating the contents of this statement at least a dozen times in his news search.
2. Nokia Oyj SEC Form 6-K, January 27, 2021, 03:10 PM.
3. Dr. Werner counted articles repeating the contents of this statement at least a dozen times in his news search.
4. "Press Release: BlackBerry Comments on Trading Activity at Request of the Industry Regulatory Organization of Canada (IIROC)," *Dow Jones Newswire*, January 25, 2021, 11:08 AM.

trading in the stocks several times on Wednesday, and trading activity also picked up in the options around these names."[5]

- "[GameStop] is a company that some analysts basically canceled a yearago *[sic]*, which has been closing hundreds of stores, which has struggled for years to regain importance in the era of Amazon.com Inc. But GameStop's actions are no longer rooted in business reality after Reddit fans pushed them to stratospheric levels, part of a well-documented phenomenon that has spread to AMC Entertainment Holdings Inc. and Tootsie Roll Industries Inc."[6]
- "Shares in the movie theater giant AMC Entertainment surged Wednesday, driven by casual traders spurred on by Reddit's "r/Wallstreetbets" community, TikTok and other social platforms. 'SaveAMC' was one of Twitter's top trending topics Wednesday morning, driven by users of those platforms... The online community r/Wallstreetbets, where casual investors trade tips, show off winning trades and use memes to promote their stock picks, has been in the news this week for its pumping of shares in GameStop. The retailer, best known for selling video games and gaming accessories in malls, was trading at under $20 per share at the end of 2020. On Tuesday, less than a month later, it closed at $148 per share, despite there being no new or relevant change to its fundamental business."[7]
- "Shares of beleaguered movie theater chain AMC Entertainment soared on Wednesday, driven by a frenzied rescue effort by users on Reddit, TikTok and other social media platforms to buy the stock."[8]

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5. "Koss, Express, Blackberry Also Caught in Epic Short Squeeze," *Investing.com*, January 27, 2021.
6. "Reddit WallStreetBets: who are the trolls operating on the Wall Street stock exchange," *CE Noticias Financieras*, January 27, 2021.
7. "AMC Entertainment Stock Surges, Fueled by Traders on Reddit," *The Hollywood Reporter*, January 27, 2021.
8. "AMC Entertainment Stock Turbocharged Thanks to Reddit Hypesters," *Variety*, January 27, 2021.