# Distorting the Shorts<sup>1</sup>

A refutation of Joshua Mitts' "Short and Distort" (2020)

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This white paper details material misrepresentations, omissions of fact, lack of academic integrity, and consistently incorrect statements by Joshua Mitts in his research paper "Short and Distort." We explain why Mitts' conclusion that pseudonymous short sellers are manipulating stocks through untruthful articles and manipulative options trading on a widespread basis is without basis. Moreover, we show that Mitts' own data actually evidences pseudonymous activist short sellers' articles are largely perceived as correct, despite Mitts' claim to the contrary, and that their trading does not drive price declines. While debunked academic research is not a new phenomenon, Mitts' significant — and often obscured — conflicts of interest raise the prospect that his conduct rises to the level of academic fraud.

Mitts has extensive conflicts of interest through his consulting practice, M Analytics, through which he regularly consults for companies and managements that are subjects of short activist campaigns.<sup>2</sup> We understand that his billing rate approximates \$900 per hour.<sup>3</sup> (Given that Mitts does not work for a law firm, seemingly all of his fees accrue to his personal benefit.) Mitts' public statements about short selling during this time have changed to polemics. At the time Mitts formed M Analytics in 2018, his thenrecently published "Short and Distort" labeled the authors he studied as either "trustworthy" or "nontrustworthy." However, the 2020 version of the paper has replaced all 32 uses of the word "trustworthy" with the word "liar." ("Trustworthy" has become "non-liar.") In April 2019 he said of activist short selling that "[i]t's not a problem to build up a position and then target a company and benefit from the price decline so long as the report is accurate and the price decline is driven by the market trading on the basis of the information that we're getting in the short report." Two years later, Mitts publicly decried the "activist short-selling machine" that launches "short attacks aimed at retail investors on social media" and has "taken advantage of ordinary Americans who sought to share in the rewards of entrepreneurship and economic growth by investing in public companies." What changed during this time? His data set is the same, and so are the conclusions. The only variable we can see is that Mitts' consulting practice has grown on the back of clients hostile to short sellers. A barber would not have a viable business without cutting hair, and we question whether Mitts could have a lucrative consulting practice without often – if not always – concluding that short sellers have manipulated stocks.

Ironically, as Mitts' conflicts and vitriol toward short sellers have increased, his transparency about his conflicts has decreased.

Mitts' "Short and Distort" badly misrepresents the underlying data, which we think rises to the level of fraud. Despite repeatedly labeling pseudonymous activist short sellers "liars" and concluding that they manipulate markets on a widespread basis through trading and "spreading baseless rumors", Mitts' own

<sup>&</sup>lt;sup>1</sup> Credit for the title belongs to the New York Times' DealBook, which used it on February 12, 2022 (https://www.nytimes.com/2022/02/12/business/dealbook/are-activist-short-sellers-misunderstood.html)

<sup>&</sup>lt;sup>2</sup> Public records and reporting have identified as Mitts / M Analytics clients Farmland Partners Inc., Burford Capital PLC, former Banc of California CEO Steven Sugarman, and Neovasc Inc.

<sup>&</sup>lt;sup>3</sup> A reporter who has interviewed Mitts informed us that this is the billing rate that the Department of Justice pays Mitts for consulting work.

<sup>&</sup>lt;sup>4</sup> "The Great Shorting Debate" https://www.law.berkeley.edu/research/business/events/previous-events/events-2019/fraud-in-the-bull-market-2/fraud-in-the-bull-market-videos/

https://clsbluesky.law.columbia.edu/2021/02/01/a-reddit-rebellion-in-the-robinhood-era/

data set only evidences that 21% of the articles he analyzed were written by authors who were actually short the stock. In other words, Mitts' research attacks short sellers despite effectively not having analyzed short sellers. In fact, analyzing Mitts' data for authors who were actually short shows that their research is highly credible. Mitts also grievously errs by not excluding publications around earnings releases, which typically result in elevated volatility. The 507 publications within 10 calendar days of earnings drive substantially all of the "V pattern" that Mitts states evidences widespread stock manipulation.

We suspect that Mitts backfitted his data to his preconceived conclusion. Mitts claims to find a "V" shaped trading pattern that indicates market manipulation. However, this pattern only emerges because he limits his data set to mid- and large-cap companies. In actuality, activist short sellers mostly report on micro- and small-cap universe. Lowering his arbitrary limitation to \$1.5 billion market cap erases any (claimed) indication of manipulation.

Mitts trumpets that his research has identified \$20.1 billion of "mispricing" caused by purportedly manipulative authors. Putting aside the myriad other problems, this amount might sound significant, but it represents only 0.02% of the combined market value of these events. To put that in context, a 0.02% loss is the equivalent of someone worth \$100,000 experiencing a loss of \$20.

In other words, Mitts claims to have studied short sellers, but in fact studied almost entirely something else. He chooses a market cap cutoff that produces a "V" pattern. Mitts misattributes the "V" to report authors (let alone short sellers) when it is clearly driven by earnings announcements. He then trumpets \$20.1 billion of mispricing (that doesn't exist) as showing the significant damage that short sellers are supposedly doing when – forgetting all of the other problems with his analysis – this number is a drop in the ocean of his data. However, the problems with his research extend beyond just these.

Mitts misrepresents his only anecdotal example of purported "Short and Distort", and in the process comes to a breathtakingly wrong conclusion. In discussing a 2016 article by a pseudonymous activist short seller called "SkyTides", Mitts claims the "V" pattern of the subject stock is "evidence that [the company's] stock price was subjected to manipulative options trading alongside the publication of the article." However, Mitts omits to disclose a critical fact about the article – that it was not the first article SkyTides had published as part of its campaign. This is important because follow up articles tend to have less impact. Despite Mitts having a finance PhD, he seemingly fails to ask the most basic of finance questions "Was the stock's movement driven by the market?" The answer is resoundingly "Yes", and given Mitts' extensive conflicts of interest, it is valid to question whether this omission was merely negligent or actually intentional. Regardless, Mitts should consider himself lucky that the statute of limitations for SkyTides to bring a defamation action has lapsed.

Mitts seems to have made a habit of being discredited. His research in service of a client was excoriated by a court in the United Kingdom. The English High Court called Mitts' analysis on behalf of his client Burford Capital PLC "fundamentally flawed." The court elaborated that "...data analysis simply does not support the claims Prof Mitts made...In truth, there is no substantial evidence of that at all; Prof Mitts' data analysis leaves Burford, and the court, in the dark as to whether spoofing or layering might really

<sup>7</sup> Cite research for elevated put buying and volatility around earnings.

<sup>&</sup>lt;sup>6</sup> "Baseless Rumors" – Mitts "Short and Distort" p. 330.

have occurred." <sup>8,9</sup> One might reasonably conclude that Mitts is more interested in raising his media profile and earning consulting fees than in searching for the truth.

Substantially every print media mention of Mr. Mitts in connection with his campaign against activist short selling notes that he is a professor at Columbia University. Mitts has seemingly weaponized the Columbia moniker and its associated credibility in pursuing his clients' interests. Mitts pursues his clients' interests in part by attempting to shape the regulation of activist short selling in both the United States and Canada. Despite Mitts not having actually studied short selling, in 2020, Mitts' research was used as the basis for a petition to the SEC to enact rules on activist short selling that we believe would significantly curtail the industry. In 2021, numerous short sellers were served with search warrants and subpoenas in what appears to be a wide-ranging Securities and Exchange Commission and Department of Justice investigation into activist short selling. On February 7, 2022, the recently departed former chairman of the SEC, Jay Clayton, explained in a CNBC interview that this investigation "would be looking at as a regulator. First of all, there's 'short and distort." Businesses and lives are being turned upside down by this investigation, which is seemingly catalyzed by Mitts' misrepresented, error-filled research. The ultimate casualty of a misguided investigation will be market accountability and investor protection.

#### **Background**

"Short and Distort" concludes that "[p]seudonymous attacks on public companies are followed by stock price declines and sharp reversals. These patterns are likely driven by manipulative stock options trading by pseudonymous authors. Among 1,720 pseudonymous attacks on mid- and large-cap firms from 2010-2017, I identify over \$20.1 billion of mispricing." Mitts' illustrates his case graphically by comparing the stock price performance around Seeking Alpha articles by pseudonymous and non-pseudonymous authors. The pseudonymous data set produces a semi "V pattern" from T= -1 (one day before publishing the article). Mitts states that these "reversals" are evidence that the market found the reports lacking in merit. Below is the graph, with the shaded area representing the "mispricing": 12

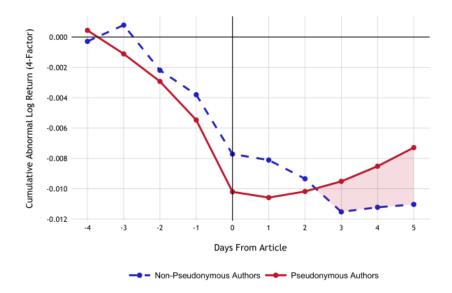
<sup>&</sup>lt;sup>8</sup> Burford v London Stock Exchange [2020] EWHC 1183 (Comm) (decision available at <a href="https://www.burfordcapital.com/media/1763/20200515-burford-capital-v-london-stock-exchange-approved-judgment.pdf">https://www.burfordcapital.com/media/1763/20200515-burford-capital-v-london-stock-exchange-approved-judgment.pdf</a>) at paragraph 93.

<sup>&</sup>lt;sup>9</sup> See id at Paragraph 95.

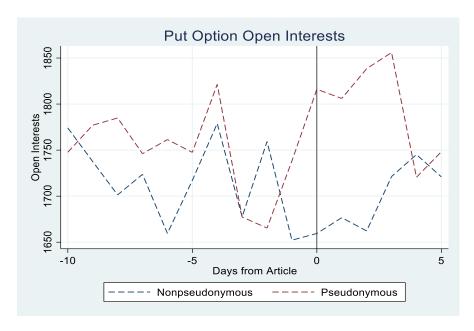
<sup>&</sup>lt;sup>10</sup> Pellegrini, Christina The Globe and Mail January 29, 2019 "SEC, OSC Narrowing in on Abusive Short-Selling Practices Against Public Companies" <a href="https://www.theglobeandmail.com/business/article-sec-osc-narrowing-in-on-abusive-short-selling-practices-against/">https://www.theglobeandmail.com/business/article-sec-osc-narrowing-in-on-abusive-short-selling-practices-against/</a>

<sup>&</sup>lt;sup>11</sup> "Short and Distort" p. 287.

<sup>&</sup>lt;sup>12</sup> "Short and Distort" Figure 5.



Mitts concludes that the non-pseudonymous authors' initial price declines are driven by manipulative atthe-money put buying by the authors: "On the day of publication, two measures of options trading—so-called "open interest" (number of outstanding contracts) and total trading volume—rise for put options written on the target of a pseudonymous article, as compared to call options. While I cannot prove that the pseudonymous author is trading, the universe of potential traders is small: only that author, his or her tipees, or possibly the Seeking Alpha editorial staff, know an article is forthcoming." Elsewhere, Mitts makes the pithier statement that pseudonymous authors purchase put options to "mechanically crash the price" of subject companies. We can see from the at-the-money put open interest in Mitts' 1,720 sample that put buying crescendos on the publication dates (T=0) – we generated the below graph of open at-the-money put interest from his data:



<sup>&</sup>lt;sup>13</sup> Pellegrini, Christina The Globe and Mail January 29, 2019 "SEC, OSC Narrowing in on Abusive Short-Selling Practices Against Public Companies" <a href="https://www.theglobeandmail.com/business/article-sec-osc-narrowing-in-on-abusive-short-selling-practices-against/">https://www.theglobeandmail.com/business/article-sec-osc-narrowing-in-on-abusive-short-selling-practices-against/</a>

In this report, we show that none of the above is accurate.

# Fraudulent Misrepresentation of Data

Mitts' representation that his data show stock manipulation by short sellers is fraudulent because Mitts purports to have drawn his conclusions from data of short sellers. The reality is that actual short sellers comprise a small portion of his data set.

Mitts purports to have studied short sellers. "Short and Distort" refers to the actions of selling a stock short and then releasing false information. Among many statements in the paper making clear that Mitts purportedly had studied short sellers, he writes "Unlike Zhao (2018), I consider the link between pseudonymous short attacks and market manipulation, and do not consider why activist short sellers might target certain firms and not others." Mitts' media and lobbying campaigns that cite his paper focus on the acts of short selling shares (by authors). One example is the SEC petition to which Mitts is a signatory titled "Petition for Rulemaking on Short and Distort." Mitts' research is the intellectual basis for the proposed rules, which focus on selling shares short. The petition asks (emphasis added) i) "the Commission to impose a duty to update promptly a voluntary short position disclosure which no longer reflects current holdings or trading intention", and ii) "the Commission to clarify that rapidly closing a short position after publishing (or commissioning) a report, without having specifically disclosed an intent to do so, can constitute fraudulent scalping in violation of Rule 10b-5." The petition defines the activity to be regulated as (emphasis added) "The typical negative activist opens a large short position; disseminates sometimes aggressive negative opinion about a public company (often stopping just short of factual falsehoods) on Twitter and elsewhere, which induces a panic and run on the stock price; and rapidly closes that position for a profit, prior to the stock price partially or fully rebounding." It provides the anecdote of the Markopolos GE report as a "recent example" of this. The petition then reads (emphasis added) "Research shows that the GE-Markopolos episode is not a one-off phenomenon. A study of pseudonymous short attacks on public companies by one of us has found that these attacks are followed by price declines and sharp reversals. These data suggest that these patterns are likely driven by manipulative stock options trading. Among 1,720 pseudonymous attacks on mid- and large-cap firms from 2010-2017 there is over \$20.1 billion of mispricing. These reversals seem to persist because pseudonymity allows manipulators to switch identities without accountability."

However, Mitts' data set shows that only 20.9% of the authors were actually short the stocks on which they wrote. Mitts' data is available for download at <a href="https://www.journals.uchicago.edu/doi/suppl/10.1086/711119">https://www.journals.uchicago.edu/doi/suppl/10.1086/711119</a>. There are numerous columns in his spreadsheet, which contain report data that he obtained from Seeking Alpha. We first sorted Mitts' data to arrive at his data set of 1,720 pseudonymous short authors by "pseudonym" (Column AU), Market Value ≥ \$2.000 Billion (Column ES), and removing observations not matched with the non-pseudonymous counterfactual group in the Propensity Score Matching process. Seeking Alpha generally requires authors to disclose at the end of each article whether they have a position in the stock, what direction the position is (i.e., long or short). If the author has no position, the disclaimer at the end states this. Column Z of the spreadsheet notes whether the author disclosed a short position – "1" means "yes" and "0" means "no." Column AA notes whether the disclaimer stated no position. Below are two images of how these columns appear when the data is converted to Excel format – one showing authors who are short and one in which the authors have no positions:

<sup>14</sup> https://www.sec.gov/rules/petitions/2020/petn4-758.pdf

<sup>&</sup>lt;sup>15</sup> See https://seekingalpha.com/submission/disclosures/5699372

	E	1	L	Z AA		AU	ES
1	author	ticker	article_writtendat	is_short	no_position	author_anon	mkvalt
2	Radiant Research	FUEL	11/11/14 10:57	1	0	pseudonym	2018
3	Convex Strategies	QLIK	12/21/11 5:15	1	0	pseudonym	2037
4	Faloh Investment	GRUB	12/28/16 14:32	1	0	pseudonym	2057
5	Shareholder Watchdog	SBNY	9/28/11 5:54	1	0	pseudonym	2070
6	Lambda Research	CXRX	10/4/16 8:19	1	0	pseudonym	2082
7	The Capitolist	CXRX	8/23/16 9:07	1	0	pseudonym	2082
	E			7	AA	AU	ES

	E	1	L	Z	AA	AU	ES	
1	author	ticker	article_writtendate	is_short	no_position	author_anon	mkvalt	
367	Beaucage	FUEL	8/8/14 13:59	0	1	pseudonym	2018	
368	Kraken	DRYS	8/24/11 14:28	0	1	pseudonym	2029	
369	Kumquat Research	FEYE	6/23/17 9:32	0	1	pseudonym	2038	
370	WestEnd511	SOHU	7/28/15 11:20	0	1	pseudonym	2048	
371	Short Only	JCP	3/6/17 12:42	0	1	pseudonym	2050	
372	Orange Peel Investments	INSY	6/13/16 7:38	0	1	pseudonym	2059	

Only 359 of the 1,720 are coded "1" in "is\_short", which is 20.9%. 338 of the 1,720 are neither coded "is\_short" or "no\_position", which is 19.7%. We did not attempt our own scrape of the reports for which positions are missing, but spot checking indicated that the substantial majority of these authors had no positions. Regardless, even if we were to assume that all of the missing position fields should have been coded for short positions, short authors would have still only comprised 40.6% of the data set. Despite claiming to have studied authors who are shorting stocks, at best a sizable majority were not actually short. Because Mitts' own data showed that such a small percentage was short (or could in the best case be considered short), we therefore consider the premise that Mitts studied pseudonymous short sellers fraudulent.

An independent database on activist short selling, called "AiShorts" provides highly detailed information on short activist reporting, including the types of allegations the activist short seller is making. From speaking with a former AiShorts employee, we learned that a significant portion of the campaigns AiShorts tracks include articles published on Seeking Alpha. However, AiShorts considers only a small portion of Seeking Alpha articles coded "Short" as actual activist short articles. One of the criteria for inclusion during most of the period that Mitts studied was that the author must actually hold a short position. AiShorts' written standards at the time for including Seeking Alpha articles were "[AiShorts employees] should go through any and all articles listed [in Seeking Alpha] and see if they are something we should cover. The vast majority will not be. Most don't hit our threshold for being original, holding a short position, being sufficiently in-depth, and influencing the stock price. When considering new adds, pay attention to how many articles the profile has already released. If it's more than a few a month, does the majority of their research meet our threshold for an "activist short-seller"? Sometimes individuals' articles will seem compelling, but that profile will release an article every other day. We do not want to cover this kind of short-seller." Paugam and Stolowy (2020) corroborate these inclusion standards – they write that "Activist short sellers attack suspicious, publicly-listed companies by disseminating reports primarily developed to denounce fraud, corporate malpractices, financial misreporting and flawed business models. Activist short sellers conduct deep investigative work and perform fundamental analysis on the public firms they attack."

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<sup>&</sup>lt;sup>16</sup> The former employee left around when the database was sold to its current owner in 2016.

Mitts recently responded to these facts in a quote he gave to the New York Times. His defense of the sparse inclusion of disclosed short sellers in his data set is that some of the authors "could by lying." However, thorough analysis of Mitts' data set makes clear that this is not the case.

No. They Are Not Lying

Analyzing Mitts' data in a more precise way yields the following observations, which contradict Mitts' assertions:

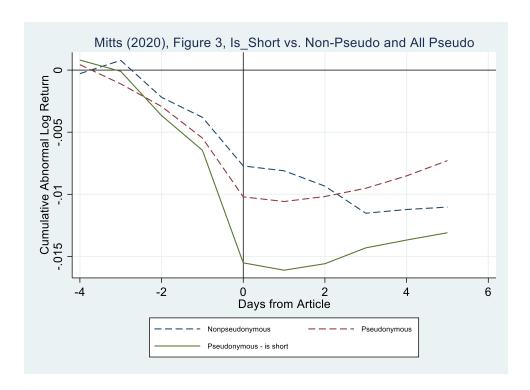
- 1. Actual short sellers the Is Short Group did not experience a "V", and per Mitts' criterion for determining manipulation, did not manipulate stock prices.
- 2. Once eliminating actual short sellers and articles around earnings announcements, the remaining Noise Group is a collection of non-impactful (i.e., harmless) articles.
- 3. Forgetting the market cap limitation issue, earnings announcements drove Mitts' "V", and showed a put buying pattern inconsistent with manipulation.

The performance of disclosed shorts in Mitts' data set did not meet Mitts' criteria for manipulation. Keeping in mind that the crux of Mitts' argument is "V patterns" and elevated at-the-money put buying evidence manipulative trading, our first line of inquiry was to examine how the 20.9 % coded as short (the "Is Short Group") performed relative to the entire 1,720 data set and the non-pseudonymous authors. As shown in the graph below, the Is Short Group did not "V", and it outperformed even the non-pseudonymous authors. The Is Short Group is not responsible for V patterns. (In a later plot, we will show that the Is Short Group plot further flattened after removing articles within 10 days of earnings announcements from the Is Short Group.)

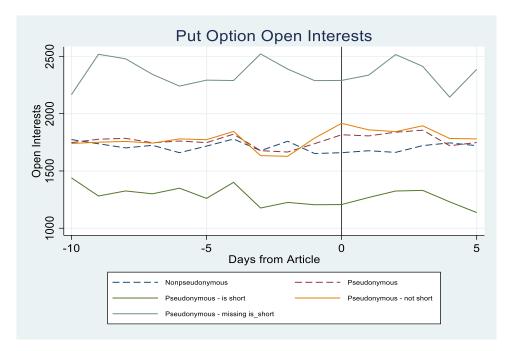
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 $<sup>^{17}\</sup> https://www.nytimes.com/2022/02/12/business/dealbook/are-activist-short-sellers-misunderstood.html$ 

<sup>&</sup>lt;sup>18</sup> We find the same result after rematching non-pseudonymous group.



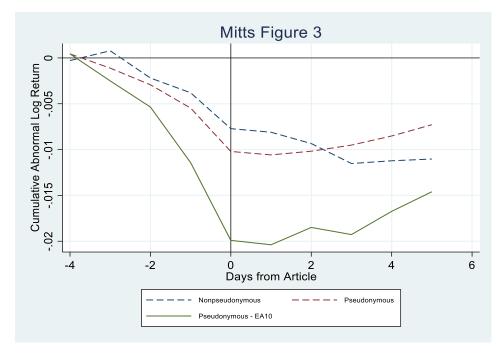
Short activists can use puts to lever their returns, yet, Mitts' data do not show elevated at-the-money put buying by the Is Short Group prior to their articles:



Note that we understand raw open interest plots do not take into consideration that characteristics associated with pseudonymously targeted firms can drive changes of open interest, i.e. selection bias,

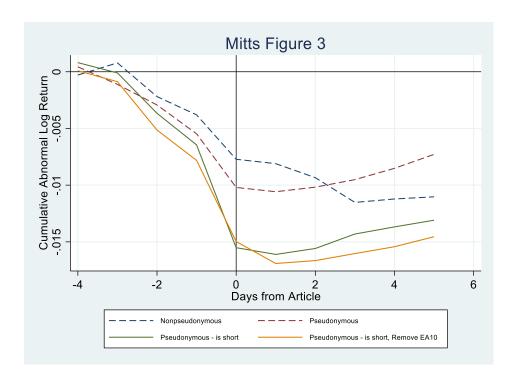
while in Mitts (2020) Figure 5, Mitts uses non-pseudonymous as counterfactual. Because we do not observe any results in the treatment group alone, we do not find a counterfactual group is necessary.<sup>19</sup>

Substantially all of the "V" pattern in Mitts' (market cap limited) data set is due to articles published close to earnings announcements. In general, periods surrounding earnings announcements often display elevated volume, volatility (Dechow, Sloan, and Zha 2014), and options activity. We separated from the remaining (non-Is Short Group) articles that were published within 10 calendar days on either side of an earnings announcement (the "EA 10 Group"), which yielded 402 articles. We can see that the EA Group displays the "V" from T= -1 that Mitts shows for the overall pseudonymous sample – earnings announcements clearly drive his analysis:

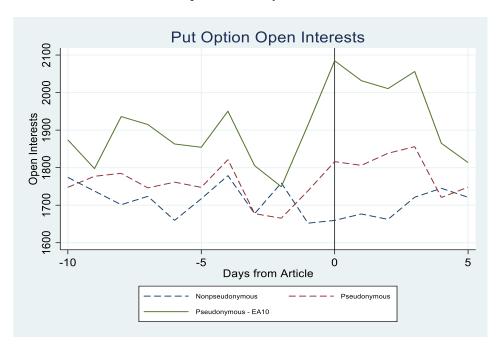


Moreover, the previously shown insignificant reversal in Is Short Group is even weaker after removing around earnings announcement articles:

<sup>&</sup>lt;sup>19</sup> Even if we find significant results after adding a counterfactual group, the results can only be attributed to counterfactual group.

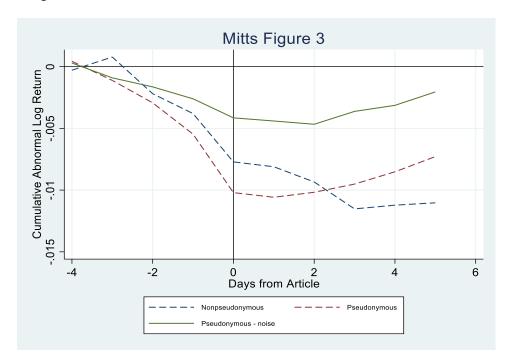


In our opinion, it is not uncommon for long holders of a stock to hedge short-term drops in prices caused by earnings reports by purchasing puts ahead of the announcements, and there are market participants that take negative views on earnings through puts. However, the graphs below show put buying on publication dates that is elevated compared to the preceding days, but depressed relative to subsequent days – this is inconsistent with Mitts' manipulation theory:

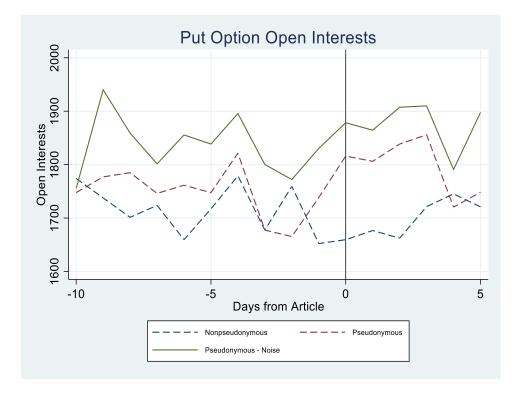


We will call the articles remaining after removing the Is Short and the EA 10 Group the "Noise Group." The Noise Group, which consists of 959 articles and is the largest group in the data set (55.8% of the set) barely moved – the cumulative abnormal log return from day -1 to day +1 is -0.27%, which is not

economically significant nor statistically significant (t = -1.79). This corroborates that Mitts' "V" is driven by earnings announcements:



The at-the-money put option buying in Mitts' data on the dates of Noise Group was in line with preceding days, indicating that authors were not buying puts in anticipation of their articles being published:



An earlier version of "Short and Distort" provides a sample of 10 pseudonymous authors from the 1,720 data set.<sup>20</sup> This sampling also confirms that Mitts did not study activist short sellers, as none of the authors seemingly could be deemed an activist short seller. Not one of the authors is in the AiShorts database. A review of these authors' Seeking Alpha profiles and publications reinforces that they are not even close cousins of Short Activists. Short Activist reports are similar to traditional investigative journalist reports. They inform the reader of important facts that are not widely known, usually because company management has not been forthright in some manner. A review of nine of the ten authors in Prof. Mitts' table yields the following observations:<sup>21</sup>

- Midnight Trader authored 1,559 articles, which prima facie shows this is not a short activist. The Seeking Alpha profile describes it as "is a single-source provider of real time pre-market, regular session and after-hours stock news and trading ideas through its popular Live Briefs stock market news service. This real-time and historical analysis of corporate announcements and subsequent market reaction information provides insight into what is likely to have a substantial effect on the current and future trading price of a company's stock."<sup>22</sup> The author's description makes clear that it publishes nothing akin to activist short research.
- Bargain Bin authored 112 articles.<sup>23</sup> The most recent bearish one (from 2014) is titled "Buying Chipotle is Almost Certainly a Terrible Idea."<sup>24</sup> While that might sound aggressive, the author's

<sup>&</sup>lt;sup>20</sup> "Short and Distort" February 13, 2020 by Joshua Mitts, table 1, p. 52 (available at https://papers.csm.com/sol3/papers.cfm?abstract\_id=3198384).

<sup>&</sup>lt;sup>21</sup> The tenth firm was not able to be found on Seeking Alpha.

<sup>&</sup>lt;sup>22</sup> https://seekingalpha.com/author/midnight-trader

<sup>&</sup>lt;sup>23</sup> https://seekingalpha.com/author/bargain-bin

<sup>&</sup>lt;sup>24</sup> https://seekingalpha.com/article/2389165-buying-chipotle-is-almost-certainly-a-terrible-idea

thesis is that it is a "wonderful company with fantastic margins and growth prospects...however, the valuation has risen to nonsensical levels, and an investment at today's prices is unlikely to lead to satisfactory results. A few possible scenarios show that Chipotle is best avoided at these levels"

- Alpha Generator authored 69 articles.<sup>25</sup> The most recent bearish article (from January 5, 2022) is titled "Avoid Fortinent for Now."<sup>26</sup> This thesis reads "The company is of high quality and management has proven their ability to execute. At a >\$50 billion market capitalization, investors should avoid the equity shares until a more attractive entry price presents itself."
- Follow the Data is a perplexing entry, as it took work to find an article that it has written on Seeking Alpha. Follow the Data has commented on the site 14 times though, with the most recent being in 2014.<sup>27</sup> Its comments only elicited one "Like." The only article found is about a company that had a \$340 million market cap at the time, and therefore should not have been in Mr. Mitts' data set.<sup>28</sup>
- Tweakerlabs has six articles and 17 blog posts, the most recent of which was in 2012.<sup>29</sup> The most recent bearish article was "Don't Get Burned by Margin-Squeezed Chipotle."<sup>30</sup> This article focuses on Chipotle's high valuation, opining that it needs "higher margins and / or growth to justify valuation." It then speculates that over the ensuing two years, gas prices "could hit \$5.00 nationwide", which could squeeze margins.
- Disruptive Investor has 768 articles and is presently active.<sup>31</sup> Its most recent (March 2021) bearish article is "Reasons to Avoid Carnival Stock at Current Levels."<sup>32</sup> This thesis states "Cruise industry recovery to pre-COVID levels is unlikely before 2023 or 2024. The company's debt will continue to increase as cash burn sustains. Leveraging coupled with equity dilution is likely to keep the stock depressed after a meaningful rally."
- Vatalyst wrote 784 articles between 2011 and 2012, making clear it is not an activist short seller.<sup>33</sup> Its most recent bearish article in 2012 was "Human Genome Sciences: Avoid This Sinking Ship." According to the article, HGSI had recently rejected a takeover bid from GSK, and GSK was waging a proxy contest for board seats. Vatalyst is concerned that absent a takeover, HGSI's primary drug has had "disappointing sales." It states that the company's explanation that the disease (lupus) has an "ebb and flow nature" is possibly not the reason for the disappointment "...I consider it equally likely that poor marketing and the cost of around \$35,000 annually have played a large part in the lagging sales."
- Efficient Alpha wrote 353 articles and 15 blog posts between 2011 and 2015.<sup>34</sup> The most recent bearish article is from 2014 and titled "General Motors Problems Are About to Get Worse."<sup>35</sup> This thesis read that GM's recent "Strong sales may be a result of customers coming into the dealerships and big discount programs both unsustainable over the long-term. Not only are high sales numbers likely unsustainable, the company has had to issue stop-sell orders on many new models which may further hurt its reputation."
- BumbleBayGoombeeFluor also took work to find its article, as only its 72 comments with 32 likes is listed. It wrote negatively on Blackberry in 2017. The thesis reads "Many here are

<sup>&</sup>lt;sup>25</sup> https://seekingalpha.com/author/alpha-generator

<sup>&</sup>lt;sup>26</sup> https://seekingalpha.com/article/4478090-avoid-fortinet-for-now

<sup>&</sup>lt;sup>27</sup> https://seekingalpha.com/user/10813031/comments

<sup>&</sup>lt;sup>28</sup> https://seekingalpha.com/article/1725312-reald-still-has-farther-to-fall-get-out-now-and-short-the-shares

<sup>&</sup>lt;sup>29</sup> https://seekingalpha.com/author/tweakerlabs/instablogs

<sup>&</sup>lt;sup>30</sup> https://seekingalpha.com/article/401691-dont-get-burned-by-margin-squeezed-chipotle

<sup>31</sup> https://seekingalpha.com/author/disruptive-investor

<sup>32</sup> https://seekingalpha.com/article/4414499-reasons-to-avoid-carnival-stock-current-levels

<sup>&</sup>lt;sup>33</sup> https://seekingalpha.com/author/vatalyst

<sup>34</sup> https://seekingalpha.com/author/efficient-alpha

<sup>35</sup> https://seekingalpha.com/article/2566675-general-motors-problems-are-about-to-get-worse

bullish on BlackBerry (BBRY). I cannot for the life of me understand such flawed thinking when the stock keeps falling. Given that the stock is currently below the 7 dollar mark, now would be a good time to consider the reverse stock split and the potential negative impact it will have on those who are unfortunate enough to still own shares in this company."

These observations of authors and articles make clear that they are not activist short sellers because their articles offer little otherwise unknown information or accusations of unethical conduct.

## Critical Omission, Defamation, and Incompetence in Anecdotal Example

Mitts does analyze one article written by an actual pseudonymous short activist, but Mitts' analysis is borderline – if not outright – fraudulent. It is almost certainly defamatory. Mitts discusses a pseudonymous short activist called SkyTides and its campaign on a then-\$2 billion market cap emerging medical device company called Insulet Corp. (PODD). Mitts describes this case in Part 2 of his report, titled "Anecdotal Example." This is the only detailed anecdotal example in Mitts' paper, and at first blush provides support for his supposedly empirical conclusions. Scratching the surface provides a much different picture though.

Mr. Mitts describes a series of events in which SkyTides published an article on Seeking Alpha on November 29, 2016:

"However, immediately following the posting of SkyTides' article on November 29, 2016, the price of Insulet's stock fell by over 7% from \$35.21 on November 28 (the day before the article's publication) to \$32.77 on December 1 (two days after the article's publication). One might conclude that SkyTides was simply right – perhaps Insulet had some serious problems, and the market recognized this by bidding down the price of Insulet's stock. Indeed, SkyTides proudly touted this decline on their homepage. But then a curious thing happened: Insulet's price climbed right back up on December 5<sup>th</sup> (four trading days after publication), and rose higher than where it closed before SkyTides's article was posted. Figure 3 shows how Insulet's stock price displays a "V" pattern centered on the publication of SkyTides' article on 11/29..."

Mitts misleads in his description of the facts. SkyTides published its first Insulet article on November 15, 2016, which was two weeks earlier.<sup>37</sup> This factual omission is critical because subsequent short activist reports have significantly less impact than initial reports. Ljungqvist and Qian (2016) calculate that the mean price decrease the day an Activist Short report is released is -7.51% while follow on reports' mean price decrease is -3.10%. It is therefore curious that SkyTides' follow-on report seemingly generated such outperformance.

Amazingly for a finance PhD holder, Prof. Mitts omits to consider market movements as an explanation for Insulet's stock price move, which is a critical error. S&P Capital IQ, which is a leading provider of fundamental company data, lists 10 companies as comparable to Insulet. Below is a table showing the stock prices and percentage changes on the date Mitts references of Insulet (PODD) and its 10 comparables (described by stock tickers). The group as a whole experienced a material price decline from November 28<sup>th</sup> through December 1<sup>st</sup>. As a group, they then experienced reversals from December 1<sup>st</sup> through December 5<sup>th</sup>.

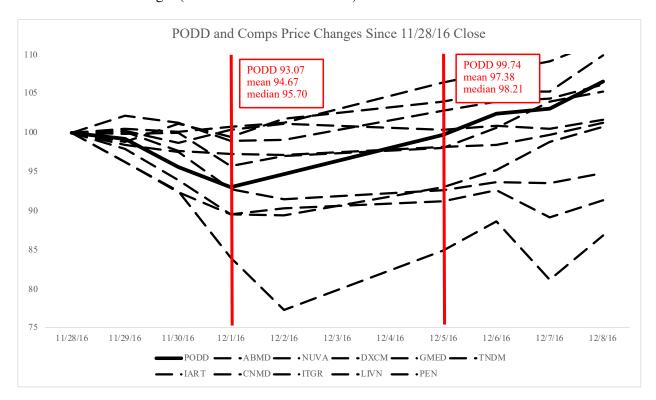
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<sup>&</sup>lt;sup>36</sup> "Short and Distort" by Joshua Mitts, p. 9.

<sup>&</sup>lt;sup>37</sup> See https://seekingalpha.com/article/4022932-insulet-life-threatening-especially-for-children-undisclosed-patient-deaths-price-target-15

	PODD	ABMD	NUVA	DXCM	GMED	TNDM	IART	CNMD	ITGR	LIVN	PEN
28-Nov-16	35.21	112.22	64.07	70.71	21.62	26.5	41.42	42.16	27.95	44.87	65.95
1-Dec-16	32.77	107.39	63.41	63.34	21.77	22.25	38.42	41.01	27.8	45.02	59.05
% Change	-6.9%	-4.3%	-1.0%	-10.4%	0.7%	-16.0%	-7.2%	-2.7%	-0.5%	0.3%	-10.5%
5-Dec-16	35.12	109.95	65.86	64.45	23.01	22.5	38.39	41.41	29.05	45.04	61.3
% Change since 12/1	7.2%	2.4%	3.9%	1.8%	5.7%	1.1%	-0.1%	1.0%	4.5%	0.0%	3.8%
% Change since 11/28	-0.3%	-2.0%	2.8%	-8.9%	6.4%	-15.1%	-7.3%	-1.8%	3.9%	0.4%	-7.1%

The chart below shows that substantially all of the companies experienced a "V pattern" chart, as did the mean and median averages (PODD is the solid black line):



From the above, it is clear that industry co-movements drove a significant portion of the returns in Insulet's stock during this time.

Watching videos of Mitts presenting "Short and Distort" is shocking because of the unbridled certitude with which he speaks. When he discusses the SkyTides example, Mitts outright defames SkyTides by accusing it of crashing the stock price through manipulative trading while shamelessly distorting the facts even further. One example is a March 13, 2019 presentation at the Columbia University News and Finance Conference.<sup>38</sup> Mitts begins his description of the facts with "SkyTides attacked a publicly traded company on November 29<sup>th</sup>, 2016 by the name of Insulet." At no time did Mitts state that SkyTides had published a prior report on Insulet just two weeks earlier. Mitts showed the price graph, which included several trading days leading up to November 29<sup>th</sup>. The general pattern of those trading days was a decline, which made for a clear "V" on Mitts' chart with the nadir December 1<sup>st</sup>. Mitts pointed out the decline before the publication of the (second) article and stated

"It also fell before the article. Alright, and this is a key part of the story. We're going to see this over and over again. It fell before the article. Not surprising to those who research news and finance because we know that pretty much every major news event is preceded by leakage of

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<sup>&</sup>lt;sup>38</sup> The presentation is available at https://www.youtube.com/watch?v=bfTtO2ZZkSs

some kind. My colleagues at the law school were fascinated by this yesterday when I presented this paper, and they said 'How can it be?' and I said 'Well, my friends, there are in fact theories in financial economics that suggest that if you have information, you will trade on it.' Yeah. And that's what happens. [laughs] And. And uh to the law faculty this is kindof, you know, supposed to be illegal. [laughs] Um, actually it's not illegal, right, because this is not inside information obtained from the firm. So this trading is not illegal. In fact I'm going to document this trading for you and show you in a second it's happening, it's real, and it's moving the price. Um, and so the price is falling because of some informed trading before, uh and, that's, that's pretty much what every short seller will tell you 'we short, and then we tell you what we've shorted' right? Clearly they want to make money and their shorting activity is moving the price. So it definitely fell...So SkyTides did a pretty good job inducing a 'V', inducing a price reversal. And in talking to the short sellers, they all tell me 'yes, of course we sell, close out our position here because we don't really know what the market's going to think, alright, and we might in fact get caught in the wrong place.' Well, you know, what I'm going to show you is they do more than that. They close out their position and they also switch positions, right. And they like to ride the expected V right all the way back up. Is it manipulation legally? Well that's an interesting question. Is it a problem from a policy standpoint? Is it 'manipulative?' Ouite possibly. Quite possibly."

Mitts then goes on to show put options data that "just as you might expect" shows open interest in near-dated at-the-money puts slightly increasing before the November 28<sup>th</sup> report and then declining afterward.

We contacted SkyTides in mid-February 2022 to ask him about his trading, and he stated that he had never heard of Mitts or his research. It's unfortunate that Mitts didn't attempt to contact him prior to inferring so much about his trading activity. With no hesitation, SkyTides informed us that he only traded a few thousand dollars of put options around the time of his Insulet reporting. Approximately five minutes after hanging up, he sent us the below snapshot from his 2016 Form 1099, which shows that he traded a comically miniscule 14 put contracts on Insulet. The trades were prior to his initial report, as opposed to timed to his subsequent report (the subject of Mitts' example). SkyTides generated profits of \$1,369.91 on the trades.

#### Box 6: Gross Proceeds Subtotals 10.00000 \$0.00 \$210.35 \$0.00 \$0.00 (\$210.35) PUT PODD 11/18/16 35 CUSIP: 8KQHKC1 7.00000 11/14/2016 11/15/2016 \$2,021.21 \$1,021.26 \$0.00 \$0.00 \$999.95 Original Basis: \$1,021.26 Box 6: Gross Proceeds \$369.96 Original Basis: \$1,021.26 Box 6: Gross Proceeds 7.00000 11/14/2016 11/15/2016 \$1,391.22 \$1,021.26 \$0.00 \$0.00 Subtotals 14.00000 \$3,412,43 \$2,042.52 \$0.00 \$1,369.91 0

Photo of SkyTides' partial 2016 form 1099 (provided by SkyTides):

The author confirmed that he had no outside capital provider nor informed any third party of the upcoming report. He provided the following statement addressing Mitts' allegations:

"I checked my brokerage statements for 2015, 2016 and 2017. The only transactions in Insulet securities I found were 2 put contracts with a total cost basis of \$2,042.52. I have never been long any Insulet securities at any point. My reports on Insulet and others were written and published primarily because I loved doing that type of research. It is very challenging and I still feel that officers of public companies should be called out when they lie to investors, which Insulet's officers did many times - in my opinion. Unfortunately, as you know, it is very difficult to actually profit from publishing these types of reports. That is why I am focused on other business opportunities."



Joshua Mitts animatedly spewing errata about SkyTides and Insulet

One of the ironies of Mitts' omitting SkyTides' first report was actually on November 15, 2016 is that the stock actually closed up the day of the report – by +5.6%. Apparently, 14 at-the-money put contracts is not quite enough to "mechanically crash" the stock.

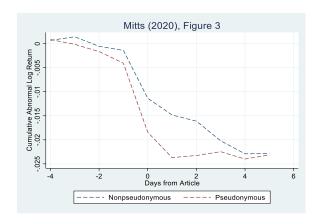
In our opinion, Mitts has misrepresented the facts surrounding SkyTides' reporting on Insulet. Regardless, it is hard to be more wrong than Mitts was in his analysis of the facts. We are incredulous that a Columbia finance PhD holder could have failed to query whether Insulet's price movements were driven by concurrent industry co-movements, unless he was acting in bad faith. At the very least, Mitts' failure to ask an elemental finance question should rise to the level of academic malpractice.

## **Findings Fabricated by Sample Selection**

Limiting the data set to only companies with \$2 billion and larger market caps is the exact level at which Mitts' data set produces a "V". Is it a coincidence that Mitts found his (nonsensical to us) intellectual justification for a limitation at this exact point? Or did Mitts backfit his analysis to support a preconceived outcome?

The graphs below show the impact of Mitts' selection on the outcome:

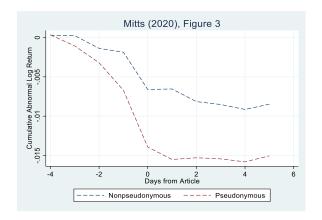
No Market Cap Limitation:



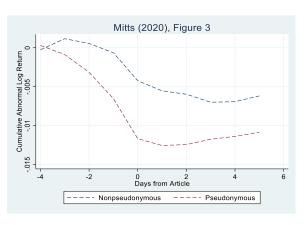
Minimum \$1 billion Market Cap Limitation:



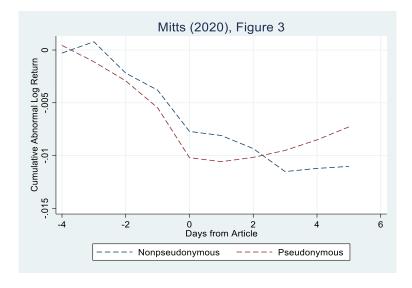
Minimum \$500 million Market Cap Limitation:



Minimum \$1.5 billion Market Cap Limitation:



As shown above, there was no "V" present below \$2 billion market cap (measured in increments of \$500 million). Here is Mitts' "V", finally present at \$2 billion cap:



Interestingly, if we increase the market cap value of the sample limitation above \$2 billion, the "V" generally becomes sharper (more pronounced) as the limitation increases. As we have seen, Mitts' "V" is driven by earnings announcements. We therefore postulate that as market caps increase, institutional ownership and emphasis on earnings similarly increases, at least for Mitts' sample.

Mitts' claimed justification for limiting his analysis to larger companies borders on the absurd, as he effectively assumes that all companies that are subjects of Seeking Alpha articles are equally inefficient and susceptible to manipulation on publication dates; but, only the larger companies can become efficiently priced right afterward. He writes that "[T]he inclusion of small- and micro-cap stocks is problematic, as prices are often much slower to respond, and their relative illiquidity and lower nominal prices leads to much greater return volatility. For this reason, it is difficult to detect price reversals with the same power in this group...Put differently, for small cap firms it is difficult to assume relatively strong market efficiency, which is necessary to form a null hypothesis of no expected reversals within a short time window, thereby facilitating a comparison between reversals and non-reversals. Small caps are very much worth studying but may require different methods which are not as dependent on rapid price efficiency, and for that reason, I plan on addressing these in a subsequent project." The irony is that, in our opinion, the inefficiency of micro- and small-caps is precisely why activist short sellers focus on them, as we show infra.

Had Mitts really wanted to study short activism, his decision to only examine articles on companies with market caps of \$2 billion or more prima facie is a poor choice for another reason. As we have seen, had Mitts not limited his pseudonymous data set to \$2+ billion market cap companies, there would have been no "V." The substantial majority of short activism takes place in the micro- and small-cap universes, so (forgetting all other issues) Mitts' choice is not representative of short activism.

The AiShorts database shows that only approximately 26% of the activist short selling campaigns during the relevant time frame focused on companies with market caps of at least \$2 billion. Of the 1,329 campaigns in the AiShorts database during this time, approximately 345 covered companies of market cap greater than or equal to \$2 billion. In our opinion, most short activism focuses on the smaller company space because those companies generally have weaker governance structures, fewer (relatively sophisticated) institutional shareholders, and are easier for "pump and dump" artists to manipulate due to their smaller floats. In other words, small and microcap pricing is less efficient than for larger companies, making it the most fertile ground for activist short sellers. If one really wanted to study short activism, small and microcap stocks would be the more appropriate data set.

## **Mispricings**

Mr. Mitts' conclusion that "short and distort" is pervasive based on "\$20.1 billion of mispricing" is grossly unfounded. \$20.1 billion is a rounding error for 1,720 reports on mid- and large cap stocks – it amounts to 0.02% (two basis points) of the combined market value of \$88.7 trillion. This is equivalent to a person with a \$100,000 trading account losing \$20. Apple Inc. is in Mitts' data set, and is shown as the largest company in the set with a market cap of \$626.6 billion. A single day move of Apple's stock of only 3.2% would have equated to the entirety of Mr. Mitts' purported mispricing. Mitts' data set contains 35 articles on Apple.

<sup>&</sup>lt;sup>39</sup> "Short and Distort" by Joshua Mitts, p. 18.

<sup>&</sup>lt;sup>40</sup> We used Bloomberg data to measure market cap as of the end of the fiscal year prior to the initiation of the campaign, which is similar to Mitts' market cap methodology. In addition, there were 94 campaigns for which Bloomberg could not provide historical market cap data.

<sup>&</sup>lt;sup>41</sup> The combined market value of \$88,658.0 billion is the sum of company all market values in Mitts' data set for each of the 1,720 reports.

#### Mens Rea

Mr. Mitts' revisions to "Short and Distort" show him becoming more manipulative as his consulting practice seemingly grew. Earlier versions of Mitts' "Short and Distort" referred to some short activists in his dataset having the perception of being "trustworthy." In his 2018 version, there were 32 mentions of "trustworthy" and zero uses of the word "liar" to describe activist short sellers. In his 2020 version of "Short and Distort," the data set was not updated, yet **all of the mentions** of "trustworthy" were deleted and 32 references to "liar" were added and used to describe short sellers. ("Trustworthy" became "non-liar.")

Mr. Mitts' bespoke research on behalf of his clients has crumbled under judicial scrutiny. We are aware of only one instance in which his research was reviewed by a court, and it is notable for the degree to which the court excoriated Mitts' research. Mr. Mitts provided research purporting to show that the stock of his client, Burford Capital Ltd., was manipulated through improper trading surrounding the release of an activist short report that my firm published in 2019. Burford sued the London Stock Exchange for granular trading and account data, submitting two reports from Mr. Mitts to support its claim. The English High Court found significant flaws with Mr. Mitts' research. In dismissing Burford's claim, the court wrote:

"No explanation for or science behind [Mitts'] claim was provided. It is another example (as in paragraph 81 above) of imprecision or over-statement from Prof Mitts, as is clear from the paragraph of Mitts 1 that makes the claim."

"[F]irst, it is a valid criticism that Prof Mitts stated an unjustified conclusion; second..."44

"[Mitts' argument] is overly simplistic, and obviously so, as it fails to have regard to the wide range of lawful execution strategies to maximize profits (or minimize losses) that might be adopted in the face of a rapidly moving price targets."

"...data analysis simply does not support the claims Prof Mitts made, and therefore Burford made to found this Claim, that there is strong evidence of spoofing or layering in this case. In truth, there is no substantial evidence of that at all; Prof Mitts' data analysis leaves Burford, and the court, in the dark as to whether spoofing or layering might really have occurred; the case that it did is speculative. It has taken me some time to explain why that is so because of the complexity of the subject matter, not because, once that complexity has been taken on board, it takes more than a careful first look at the claims made to find them wanting."

"Furthermore, echoing paragraph 81 above, if Prof Mitts had taken care in formulating his basic propositions, it should more naturally have led him to qualify his later claims..."<sup>47</sup>

"[Mitts'] conclusion was not asserted by reference to any empirical assessment..."48

<sup>&</sup>lt;sup>42</sup> Burford v London Stock Exchange [2020] EWHC 1183 (Comm)

<sup>&</sup>lt;sup>43</sup> *id* at Paragraph 87.

<sup>&</sup>lt;sup>44</sup> *id* at Paragraph 95.

<sup>45</sup> id at Paragraph 93.

<sup>&</sup>lt;sup>46</sup> id.

<sup>&</sup>lt;sup>47</sup> *id* at Paragraph 97.

<sup>&</sup>lt;sup>48</sup> id at Paragraph 115.

The court also called Mitts' analysis "fundamentally flawed" and wrote that his second report "misunderstood the criticism and provided no answer to it." The court also stated that Mitts "was wrong" and "had no basis for making that claim". The court's criticism foreshadowed how Mr. Mitts' conflicted and shoddy research would be used to malign activist short sellers:

"Regrettably, in its determined insistence that its share price suffered at the hands of unlawful market manipulation on 6 and 7 August 2019, Burford made it part of its case in the Claim to launch a highly critical attack on the motivations and competence of the Stock Exchange and the FCA, questioning their seriousness, resources and aptitude in the battle to detect and take action against market abuse. I am not persuaded that any of those criticisms was justified." 51

When advocating for his clients publicly or to the government, Mr. Mitts frequently fails to disclose the existence of his conflicts of interest, which gives the false appearance that he is an unbiased seeker of truth. In reality, he appears to have a thriving consulting and lobbying practice through his firm M Analytics LLC.<sup>52</sup> Mr. Mitts initially published his Short and Distort paper in June, 2018, and then promptly formed M Analytics in New York in August 2018.<sup>53</sup> Mr. Mitts has only disclosed three of his paid engagements, while claiming that most of his engagements are confidential.

In the early days of Mr. Mitts' advocacy against activist short selling, he disclosed the existence of his conflicts. Mr. Mitts is a frequent contributor to The CLS Blue Sky Blog, which is Columbia Law School's blog on the capital markets.<sup>54</sup> His first commentary related to his short selling research was on November 13, 2018.<sup>55</sup> Mr. Mitts' disclosure at the end of this post reads "The author consults on regulatory and litigation matters related to short-and-distort campaigns, but has no financial interest in any of the cases studied in the article."

Fast forward to Mr. Mitts' February 1, 2021 article titled "A Reddit Rebellion in the Robinhood Era", which opens with the sensational claim "For over a decade, hedge funds and other sophisticated traders have taken advantage of ordinary Americans who sought to share in the rewards of entrepreneurship and economic growth by investing in public companies." Mr. Mitts continues taking the side of the common man when he writes "The GameStop short squeeze was a predictable consequence of the SEC's failure to update its rules to protect ordinary investors from predatory hedge funds. The fact that Redditers decided to take matters into their own hands in the face of yet another short-seller onslaught shows the dangerous consequences of policy inaction when it comes to enacting rules that safeguard against manipulative short selling in the social media era." And yet, his disclaimer entirely omits any hint that Mr. Mitts has a conflict of interest. The disclaimer now reads in its entirety "This post comes to us from Joshua Mitts, associate professor of law and Milton Handler Fellow at Columbia Law School."

The last time Mr. Mitts saw fit to imply that there could be a conflict of interest on the CLS Blue Sky Blog was his October 2020 article "Short Selling and Plaintiffs Firms: A Symbiotic Ecosystem" in which he generically disclosed "This post comes to us from Joshua Mitts, who is an associate professor at Columbia Law School and consults on litigation and regulatory matters involving short sellers and market

<sup>&</sup>lt;sup>49</sup> *id* at Paragraph 95.

<sup>&</sup>lt;sup>50</sup> *id* at Paragraph 96.

<sup>&</sup>lt;sup>51</sup> *id* at Paragraph 31.

<sup>52</sup> https://www.linkedin.com/in/joshuamitts/

<sup>&</sup>lt;sup>53</sup> New York Secretary of State searchable database.

<sup>&</sup>lt;sup>54</sup> www.clsbluesky.law.columbia.edu

<sup>55</sup> https://clsbluesky.law.columbia.edu/2018/11/13/short-and-distort/

<sup>&</sup>lt;sup>56</sup> https://clsbluesky.law.columbia.edu/2021/02/01/a-reddit-rebellion-in-the-robinhood-era/

manipulation."<sup>57</sup> While this disclosure is less unethical than the February 2021 (lack of) disclosure, it can reasonably interpreted as meaning something other than Mr. Mitts has a business that focuses on generating fees from companies that are subjects of Activist Short Selling campaigns.

Mr. Mitts appears to be misleading the public and U.S. regulators about his objectivity. The short gap between publishing "Short and Distort" and forming M Analytics implies that Mr. Mitts had planned to form a consulting practice catering to companies subject to activist short selling campaigns. His curriculum vitae on the Columbia Law faculty site states "[Mitts] has extensive experience supporting the Department of Justice." Given Mr. Mitts' "extensive experience" with the DOJ, it is unsurprising that when Bloomberg broke news of the investigation, it partly focused on Mr. Mitts' research. It appears that Mr. Mitts' research is being taken seriously by the Department of Justice, when it is clear that (a) Mr. Mitts has had an economic interest that is adverse to activist short selling industry since 2018, and (b) his research is greatly flawed, possibly to the point of being fraudulent.

#### Conclusion

Mitts' "Short and Distort" (2020) is a non-empirical, conflict-laden polemic based on misrepresentation, selective presentation of data, and lack of academic integrity. Its conclusion that pseudonymous activist short sellers manipulate mid- and large-cap stocks is contradicted by Mitts' own data. If Mitts had written a short report on a company with comparable lack of rigor and misrepresentation, he would likely have significant legal exposure.

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<sup>&</sup>lt;sup>57</sup> https://clsbluesky.law.columbia.edu/2020/10/14/short-sellers-and-plaintiffs-firms-a-symbiotic-ecosystem/

<sup>&</sup>lt;sup>58</sup> https://www.law.columbia.edu/sites/default/files/2020-08/joshua-mitts-cv august 2020.pdf

<sup>&</sup>lt;sup>59</sup> https://www.bloomberg.com/news/articles/2021-12-10/hedge-funds-ensnared-in-expansive-doj-probe-into-short-selling