UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF FLORIDA

In re:
JANUARY 2021 SHORT SQUEEZE TRADING LITIGATION

Case No. 21-2989-MDL-ALTONAGA

April 12, 2023
10:11 a.m.

DEPOSITION of DANIEL R. FISCHEL, taken by Plaintiffs, pursuant to Notice, held at the offices of CRAVATH, SWAINE & MOORE LLP, 825 Eighth Avenue, New York, New York before Wayne Hock, a Notary Public of the State of New York.

APPEARANCES:

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* * *

DANIEL R. FISCHEL, having been first duly sworn by a Notary Public of the State of New York, upon being examined, testified as follows:

EXAMINATION BY
MR. ROSEN:

Q. What is your current address?
A. 332 South Michigan Avenue, Chicago, Illinois 60604.
Q. Good morning, Mr. Fischel.
A. Good morning.
Q. Could you just state your name for the record.
A. Daniel Robert Fischel.
Q. And could you state which organizations you are employed by or currently affiliated with?
A. An economics consulting firm by the name of Compass Lexecon, and also University of Chicago.
Q. And what's your role at Compass Lexecon?
A. I'm the president and chairman

of the firm.
Q. And what's your role at the university of Chicago?
A. I'm currently the Lee and Brena professor of law and business emeritus at the University of Chicago Law School.
Q. Are you still teaching there?
A. Well, it's sort at my discretion. But in the last couple of years I haven't, although they always ask me to, because I've just gotten too busy.
Q. So you spend most of your time running Lexecon or Compass Lexecon?
A. I wouldn't say running, but I would say, for all practical purposes, Compass Lexecon really takes up my entire time devoted to professional activities.
Q. And are you -- I assume you're not -- you didn't take any medication or anything, you don't have any medical conditions that would interfere with your cognition or memory or ability to testify today?
A. No, correct.

Q. So you are a lawyer?
A. Trained lawyer, not a practicing lawyer.
Q. Are you admitted to any Bars, state Bars?
A. I was. I haven't had any connection to law practice since I think 1980.
Q. But you practiced for some time?
A. I practiced for less than a year after clerking before beginning my academic career.
Q. And you're familiar with the federal securities laws?
A. That's sort of an overbroad question. I'm not sure how to answer it.
Q. Have you taught classes covering the Securities Exchange Act of 1934?
A. I've actually never taught a course in securities regulation. I've taught many courses dealing with, in one way or the other, the economics of financial markets which covered certain aspects of securities regulation. I've

D. R. Fischel

also written in that area as well.

Q. And do you consider yourself an expert on securities class action litigation under Section 10b of the Exchange Act?

MR. ORSINI: I object to form.

THE WITNESS: It's really the same answer as I just gave you. I'm not sure what you mean by that question, whether you're asking me for a legal opinion or some other kind of opinion.

Q. Well, you're here today as an expert; right?

A. I am.

Q. What's your expertise?

A. I have a number of areas of expertise, but for purposes of this course, I would say the economics of financial markets.

Q. Economics of financial markets.

And you've testified in a lot of 10b cases; is that right?

A. That's I think fair. I've

D. R. Fischel

testified in a lot of cases where there are allegations under the anti-fraud provisions of the securities laws.

Q. So did you offer an opinion in this case?

A. Yes, I did.

MR. ROSEN: So let's introduce Exhibit 113. That's your expert report, your opening expert report.

(Whereupon, a document entitled Report of Daniel R. Fischel was marked Exhibit 113 for identification.)

Q. Tell me, is that expert report your work?

A. Well, I don't know what the exhibit number is, but --

Q. It's Exhibit 113.

A. Well, if you're referring to my report dated February 16, 2023, yes, I did author this report.

Q. Now, what opinions do you offer in your report?

A. They're stated on page ten in paragraph nineteen.

D. R. Fischel

Do you want me to read them?

Q. Well, let me see.

So paragraph nineteen contains all of the opinions in the report?

MR. ORSINI: Objection. Vague.

THE WITNESS: I would say they're my principal opinions in the case. There's a lot of paragraphs that I guess you could say contain opinions.

Q. But that's a concise summary of your opinions?

A. Those are my principal opinions in the case.

Q. Now, did anyone assist you in forming your opinions?

A. I would say there was a team of people who were working under my direction and supervision who worked with me in the case, but of course the opinions are my own.

Q. And how many people were on your team?

A. I would say the principal

D. R. Fischel

members of the team were maybe three or four people.

Q. And what are their names?

A. You know, in no particular order, I would say Jessica Mandel, Laura Yergesheva, Jonathan Polonsky, and Alex Rinaudo.

Q. Alex, what's his last name?

A. Rinaudo.

And there were research assistants and other lower level professionals as well who worked on the matter. But the people that I mentioned were the people that I coordinated with directly.

Q. And what was Jessica Mandel's role?

A. What I just described, working on the matter with me under my direction and supervision.

Q. Did all of them share the exact same responsibilities, or did some have responsibilities for certain aspects of the opinion and others for different

aspects of the opinion?
A. I would say a fair description would be they all worked on the case, all aspects of the case with me.
Q. And as part of your opinion, you ran a regression analysis; is that right?
A. That's right.
Q. Who ran the regression analysis?
A. Well, it's done by a computer, so I'm not sure how to answer the question.
Q. Well, somebody hit the keys on the computer and told it what to do; right?
A. Yes. I'm not sure who actually hit the keys on the computer. The design of the regression analysis was, as I said, done by me under my -- with the assistance of others working under my direction and supervision.
Q. So to run a regression, you need a certain software package that has that function in it; correct?
A. Correct.

Q. What software package did you use to run the regression?
A. I'd have to check.
Q. And what did you do to ensure that the regression analysis was conducted correctly by your team?
A. It's a very standard type of event study regression. We do make an attempt to check all of our findings from the event study or otherwise, so I would say that's what we did.
Q. But what did you personally do to check to make sure that your team ran the regression properly?
A. I gave direction as to what to do, looked at the results, had the results checked.
Q. But you didn't personally check the results to make sure they were accurate?
A. Not other than what I've already described.
Q. Now, as part of your regression analysis, you also -- well, as part of

your event study, you did an event study; correct?
A. Correct.
Q. And as part of your event study, there were a substantial number of news articles that were identified and reviewed to determine if there were news that might cause the stock prices of these nine affected stocks to move up or down; correct?
A. I'm sorry, can you repeat that question? I don't know what you mean by "nonaffected stocks."
Q. Nine.
A. Nine, sorry, I misheard you.
Q. I'll lay a proper foundation.
So this case involves nine stocks that are traded publicly and they are GameStop, AMC Entertainment, Bed, Bath and Beyond, BlackBerry, Trivago, Tootsie Roll, but you know the nine stocks I'm talking about; right?
A. I do.
Q. Koss I think is another one.

So as part of this -- of your expert report and as part of the event study, you searched for and identified and reviewed a number of news articles during the period that your event study covers; right?
A. That's right.
Q. Now, who obtained the news articles?
A. The news articles were obtained from the sources that were identified.
Q. Do you know who on your team obtained the news articles?
A. Again, there's a data source called Factiva and Bloomberg. That's the sources for the news articles. What research assistant presumably got those articles from those sources I don't know without asking.
Q. And did you personally review each of those news articles that were obtained from Factiva and Bloomberg and elsewhere?
A. All of the news articles that

were referred to in my report I did look at.

Q. When you say referred to in your report, is that every news article that was obtained that was published about these companies during the class period?

A. I would say that it would be the articles that fit the description in the report from the sources that are referred to. There were instances where the same article was published multiple times, so it probably didn't include the duplicates. But the basic idea was to have a certain set of search criteria from a set of sources and to be inclusive with respect to those sources and the article contained in those sources.

Q. So let's go to paragraph thirty-six of your report.

It says, "accordingly, we searched news articles for mentions of company names of the affected stocks in the headline and lead paragraphs of Dow Jones and Wall Street Journal articles, as

well as Bloomberg News for each of the companies between January 4 and January 27 to determine whether any value-relevant specific news was disclosed that could have impacted the price of the affected stocks on days when a statistically significant price movement occurred".

So you wrote that paragraph; correct?

A. I don't remember if the exact words in this paragraph were written by me. But as I've mentioned several times, the entire report was prepared under my direction and supervision.

Q. And then it says, "we supplemented the news articles searches by also searching for any SEC filings for the affected stocks' companies over the same period". And then it says, "This review demonstrates that the vast majority of the price increases for all nine affected stocks cannot be explained by new value-relevant company-specific information".

So I guess the first question is: Is it true that someone in your office -- you can't say who as we sit here today -- but someone at Compass Lexecon created a set of news articles between January 4, 2021 and January 27, 2021 that had the name of the nine affected stocks in the headline or lead paragraphs; is that right?

MR. ORSINI: When you say "created", I assume you mean compiled?

MR. ROSEN: Right.

THE WITNESS: I mean, if what you're asking is what's said in the sentence that you just read, I would say correct.

Q. Now, that collection of news articles that was compiled, did you read each article in that compilation of news articles?

A. I would say all or part of each article that is referred to in the various event studies for the different stocks, and this paragraph only refers to the

articles in the event study, which is not the sum total of all the articles.

Q. Right.

So who went about to determine which of these articles that were compiled that you would actually review? Because someone actually did a first pass and determined which ones were relevant and which ones were not relevant; is that fair to say?

A. No, that's not fair to say.

Q. So all of the articles from Dow Jones, Wall Street Journal, Bloomberg, and SEC filings you took a look at?

A. The articles that are referred to in this particular paragraph concluding with appendix D, all the articles in appendix D I looked at.

Q. What about the articles that are not in appendix D, did you look at those articles?

MR. ORSINI: Objection. Vague.

THE WITNESS: Paragraph thirty-six is for a particular

D. R. Fischel

purpose. There are other articles that are referred to in the report that are not contained in paragraph thirty-six because they were compiled for a different purpose.

Q. So the articles in appendix D are a small subset of the total number of articles that were identified by your staff as containing news about the nine affected stocks; correct?

A. Not really correct the way you're phrasing the question.

Q. Well, appendix D does not contain the articles that were reported in Wall Street Journal, Bloomberg, Dow Jones, and SEC filings listed in paragraph thirty-six; right?

A. That's right. There are a lot of articles mentioned in the report that are not contained in appendix D, because appendix D was, as I've just said, compiled for a particular purpose.

Q. So explain how you narrowed the articles, the number of articles, and the

D. R. Fischel

specific articles from the greater set from all the articles reported about the nine affected stocks and those articles you mentioned in appendix D, how did you go from the larger subset to the smaller subset? How was that done?

A. Well, at a high level I would say appendix D was for the purpose of listing articles which mentioned the name of companies in connection with information about those companies as distinguished between -- as distinguished from, I should say, articles about the effect of perceived short squeezes or other causes of -- other potential causes of artificial prices. Those articles are discussed separately in the report but would not be included in appendix D.

In addition, with respect to appendix D itself, as I mentioned, there were instances of just repetition of articles -- the same article was repeated multiple times. We tried to only include one mention as opposed to multiple

D. R. Fischel

mentions of the exact same article.

Q. So there's two sets of news articles, a larger one and a smaller one; correct?

A. You have to be a little bit more specific.

Q. So let's -- there was a set of news articles between January 4, 2021 and January 27, 2021 that your staff collected that either mentioned the one of the nine affected stocks in the headline or discussed it in the lead paragraphs; correct?

A. You're talking about appendix D?

Q. No, it would be the third sentence of paragraph thirty-six in your report.

A. The third sentence, the "accordingly" sentence?

Q. Yes.

So that is a larger set of news articles that is in appendix D; correct?

A. Well, in context, the sentence refers to the articles in appendix D. You

D. R. Fischel

can see there are many other articles that are discussed in the report that are not contained in appendix D because they are not articles about potentially value-relevant company-specific news but rather articles about the lack of value-relevant -- potentially value-relevant company-specific news, rather the effective perceived short squeezes or other potential causes of artificial price movements.

Q. Let's focus on the question.

The question is there is a larger set of news articles that someone on your staff compiled, in fact, I believe you sent us a copy of them all. If you want, I can show them to you. It would make it easier.

But you will agree that someone on your staff compiled a set of news articles that contained the name of the nine affected stocks either in the headline or in the lead paragraph of the news articles, correct, between January 4,

D. R. Fischel

and January 27, 2021; right?

A. Yes, I would agree with that. But even the word "compiled" is a little bit ambiguous.

Q. So what did they do if they didn't compile them? They collected them? What word would you like to use?

A. They searched for articles referred to in the headlines or lead paragraphs of Dow Jones and the Wall Street Journal as well as for certain -- as well as Bloomberg in certain specific instances that were obtained from those sources that I just mentioned.

Q. And you didn't look at all those news articles; correct?

A. Again, as I've said, I looked at all of the articles referred to in appendix D as well as all of the articles contained in the report.

Q. Right.

I'm talking about what I just asked you about, which is the greater subset of news articles that were searched

D. R. Fischel

for and identified by your staff about the nine affected stocks that contained the name of the nine affected stocks in either the headline or the lead paragraph between January 4 and January 27, 2021. Let's call that the greater set of news articles. We'll define that as the greater set of news articles.

Are you with me?

A. Yes, but I just want to make sure -- because you're reading the sentence out of context, you're no longer referring to appendix D, you're just --

Q. Exactly. Thank you, thank you. I'm not referring to Exhibit D. I'm referring to the greater set of news articles that was compiled by your staff about the nine affected stocks during this period January 4 to January 27, 2021.

So you understand when I define the greater set of news articles, you know what I mean now; right?

A. Yes, but you're taking the sentence that you're reading out of

D. R. Fischel

context. That's the only point that I'm making.

Q. Did you personally review the greater set of news articles?

A. I attempted to review all of the articles that fit the description that I described that are contained in the report that come from these sources.

Q. So you did not review the greater set of news articles; isn't that true, Mr. Fischel?

A. I'm not sure that is true, that meet the criteria that I just described.

Q. I'm not talking about your criteria, I'm talking about my criteria, I'm talking about my criteria because I'm asking the questions.

I defined the greater set of news articles to be the larger set of news articles that contained the name of one of the nine affected stocks in the lead paragraph or in the headline between January 4 and January 27, 2021. We both understand what the greater set of news

D. R. Fischel

articles is; right?

A. Well, I assume any article, the way you're defining the question, any article where the name of the company was mentioned in the headline or the lead paragraph, so in Dow Jones or Wall Street Journal between January 4 and January 27, whether or not it met the criteria of appendix D.

Q. Correct.

So understanding that, isn't it true that you did not personally review each of the articles in the greater set of news articles that your staff compiled or collected?

A. I'm not sure it is true. You'd have to show me an article and I could tell you if I remember reviewing it or not reviewing it.

Q. So which articles -- so when you got -- at some point your staff gave you some articles to review; right?

A. Yes, by definition, that's correct.

D. R. Fischel

Q. And isn't it true that the only articles you reviewed were in appendix D?

A. No, that's not correct. That's what I've been trying to explain to you.

Q. So what different subset, if not the greater set of news articles as defined or appendix D, what other subset of news articles did you review?

A. There's a whole other set of articles, many of which are described in report, many of which were collected but not described in the -- just let me finish my answer, please -- that were not potentially value-relevant articles about the companies themselves but were the impact of perceived short squeezes or other causes of artificial price movements in the particular securities in question.

Q. Now, who went through the greater set of news articles and determined what was value-relevant?

A. With respect to Exhibit -- the articles on appendix D, there was an attempt to identify every article that was

D. R. Fischel

mentioned that was about the news about the company in terms of either disclosures by the company or SEC -- information from SEC filings about the company other than the articles which discussed the effect of potential short squeezes or other potential causes of artificial private movements for those securities during the particular period in question.

Q. So who made this attempt to identify every article that was mentioned about the companies in terms of disclosures by the SEC or SEC filings in the articles? Who did that first pass to determine what was value-relevant?

A. I didn't say they were value-relevant, I said articles which mentioned the name of the company other than articles that talked about the effect of potential short squeezes or other possible causes of artificial price movements that affected the prices of these nine securities during the relevant period, this period between January 4 and

D. R. Fischel

January 27.

Q. So someone on your staff went through the greater set of news articles and determined which articles to present to you; isn't that correct?

A. No, it's not correct. All the articles were presented to me and I reviewed them all.

Q. In the greater set?

A. All the articles that are contained in the report, whether or not they're in Exhibit D -- excuse me, appendix D, as well as many other articles that were collected that are not in the report because they just repeat the same sentiments as the ones in the report. So for example, there are paragraphs that talk about articles that are illustrative of particular points. The articles that are illustrative of particular points are a subset of the total number of articles that make the point in that particular paragraph, and those have been collected as well.

D. R. Fischel

Q. So somebody on your staff went through the greater set of articles and determined which ones to give to you to look at; is that correct?

A. If you mean somebody or maybe more than one person was responsible for collecting the articles from the data sources that were identified in the report, I guess by definition that's correct.

Q. And they filtered those articles and didn't give you all of the ones that they identified and collected; correct?

A. No, I don't think that is correct.

Q. So that means you read every single article that was part of the greater set of articles? Either they filtered it or you read them all. One or the other. Which is it?

A. I don't agree that those are the only two possible choices.

Q. If you didn't read all of them and you only read some of them --

A. I didn't say I only read some of them. I said if you think there's an article that fit the criteria that you think I didn't read, show it to you and I'll tell you if I remember reading it or not.

Q. So what was the criteria of articles that you read?

A. I think I've gone over this several times, but I'll say it again, the articles in appendix D as well as a set of other articles that mention the name of companies but not in connection with information that's potentially value-relevant about those companies but rather the effect of potential short squeezes and other possible causes of artificial price movements on those companies as an explanation for why those companies' stock prices were behaving the way they were.

Q. So who selected the articles that you read?

A. As I've also indicated several

times, the articles came from particular data sources and those data sources are part of data services that we subscribe to and I assume one or more research assistants downloaded the articles from the sources that I've identified.

Q. Did you read all of the articles in the greater set of news articles?

MR. ORSINI: Objection. Asked and answered.

THE WITNESS: I don't know how to --

Q. You can say yes or no. Either you read them all you didn't.

Did you read them all or did you not read them all?

A. I'll refer to answer the way --

Q. No, no, it's a yes or no question.

MR. ORSINI: He can answer the question the way he sees fit. He's already answered multiple times.

But go ahead, Mr. Fischel.

THE WITNESS: All of the

articles that are referred to in the report as well as many articles that are not referred to in the report I've read. If you think there are articles that I didn't read, show them to me and I'll tell you if I remember reading them or not. I'm not aware of any search criteria that identified articles other than what I've already identified in terms of just articles repeating the same point that comes out in multiple news services or something like that.

Q. So based on your answer, it's clear you did not read all of the articles in the greater set of news articles that were mentioned in paragraph thirty-six in the third sentence?

A. Well, now you're taking the sentence out of context again with respect to the articles that are referred to in appendix D. I tried to clarified that as best I can multiple times.

Q. Did you or did you not read all

of the articles; yes or no? The answer is no; correct?

A. No, it's not correct.

Q. You read all the articles, all of the articles that mentioned one of the nine affected stocks in the headline or the lead paragraph; is that right? Is that what you're telling me?

A. I'm telling you I looked at all or parts of all the articles that are referred to in appendix D as well as a wide set of other articles collected for a different purpose not mentioned in appendix D. I'm not aware of any set of articles that I did not review that met either of those criteria, but the only way to know for sure is if you show me whatever article you want me to look at and I'll tell you if I remember reading it or not reading it.

Q. So is it your testimony that you read every article that your staff identified that mentioned one of the nine affected stocks in the headline or lead

paragraph during this period January 4 to January 27, 2021?

A. I really can't add anything to what I've already said.

Q. Yes or no.

MR. ORSINI: He's already answered the question.

MR. ROSEN: No, he hasn't. He's avoiding the truth.

Q. And now is the time for the truth, Mr. Fischel. Please tell the truth.

MR. ORSINI: Let's let him ask a question instead of pontificating.

Q. I'll re-read it.

So is it your testimony that you read every article that your staff identified and mentioned -- identified that mentioned one of the nine affected stocks in the headline or lead paragraph during this period January 4 to January 27, 2021?

MR. ORSINI: Asked and answered.

THE WITNESS: You want me to

answer? I'll just repeat what I've said four times already.

Q. You can answer yes or no. Not obfuscate, not make things up, just yes or no?

MR. ORSINI: Stop with the argument. Ask a question.

MR. ROSEN: I've asked the question.

MR. ORSINI: Mr. Fischel has answered it multiple times already.

Q. Give us a straight answer, please.

A. I've attempted to look at in whole or in part every article that's referred to in appendix D as well as multiple articles that were collected for a different purpose. That's what I can say. I can't answer definitively whether I've read or looked at every single article without knowing what articles there are that you think I might not have looked at. If you show them to me, I can give you a more definitive answer if I

remember looking at them or not, but I'm not aware of any set of articles that I did not review that met any of the criteria that I've identified.

Q. Do you know who Steven Grenadier is?

A. Yes, I do.

Q. When is last time you spoke to him?

A. I spoke to him fairly recently, actually, about an unrelated engagement.

Q. You're aware that he's offered an opinion in this case?

A. I am aware of that.

Q. Have you read his report?

A. No.

Q. Has anyone discussed his report with you?

A. It's been mentioned, but other than that, I would say no.

Q. Who mentioned it?

A. I think -- oh, let me mention another individual who was part of the team, and your question reminded me. Adel

Turki. He didn't work with me on a day-to-day basis the way the others did, but he was certainly involved in the matter. And I think he was the first one that identified that Professor Grenadier was also submitting an expert report.

Q. Did he tell you what Grenadier was including in his report?

A. No, not that I recall.

Q. Did your staff coordinate your report with his staff?

A. I don't believe so, no.

Q. Have you ever purchased equity securities?

A. Ever? You mean individual stocks? Not that I can remember. I don't think so.

Q. Do you invest in mutual funds or ETFs?

A. I guess I would say indirectly, yes, I do.

Q. Indirectly in what respect?

A. That I don't choose them. Some of my retirement accounts have had mutual

funds in them.
Q. What are the allegations of misconduct in this case?
A. Well, my understanding of the allegations are contained in my report. Obviously they're not my allegations, so it's really a question better addressed to you than to me. But my understanding of the allegations is what's contained in my report.
Q. And do you know what the elements of the claims in this case are?
A. That sounds like a question asking for a legal opinion. I'm not offering any legal opinions.
Q. Now, in your report you mentioned that there are other brokerage firms that implemented restrictions on the purchase or sale of the stocks or options of one or more of the nine affected stocks; is that correct?
A. That's correct.
Q. How did you come to identify the names of those firms and the nature of the

restrictions and the timings of those restrictions?
A. From the sources that are identified in my report.
Q. And what did you do to check the accuracy of those sources?
A. I'm not sure we did anything to check the accuracy of the sources. If you're referring to the introduction basically, the background material, I think that refers to my understanding of the relevant background based on the sources that are referred to in that discussion in my report.
Q. So on January 28, 2021, the share prices of each of the nine affected stocks declined; is that correct?
A. Are you referring to something specific?
Q. The stock prices of the nine affected stocks.
A. I know that, but an exhibit or a chart or something like that? I haven't memorized the stock price movements on

every minute of every day.
Q. Are you familiar with your report?
A. I hope so.
Q. So within it you say that the share price declined for reasons other than the restrictions placed by Robinhood; right?
A. Why don't you show me what you're referring to.
Q. So paragraph twenty-three of your report, you assert that the affected stocks experienced large price increases during the preclass period; is that right?
A. Yes, that's the first sentence of the paragraph.
Q. And do you have an opinion as to what caused those price increases?
A. I think I discuss that at length in my report. I think there was certainly a perception of a short squeeze that was occurring as well as intensive social media speculation. That combination is based on the analysis that was conducted

contemporaneously at the time. I think that's the best explanation for the extreme artificial price movements during what I refer to as the preclass period.
MR. ORSINI: We've been going over an hour.
Do you want to take a break or do you want to go longer? It's your call.
THE WITNESS: I'm fine. I'm happy to go as long as convenient for others.
Q. So you said there was a perception of a short squeeze?
A. Correct.
Q. Do you know whether or not there was, in fact, a short squeeze for any of the nine affected stocks?
A. I don't have an independent opinion about that. I know there was widespread commentary about the existence of a short squeeze.
Q. So you didn't take any steps to confirm whether or not there was, in fact,

a short squeeze?
A. As I said, I didn't form any independent opinion about it other than forming an opinion about the causes of the artificial price movements.
Q. What's your --
A. Excuse me, during the preclass period that I've identified.
Q. You said you formed an opinion about the cause of the artificial price movements in the preclass period; is that correct?
A. That's right.
Q. What is your opinion about the cause of the artificial price movements in the preclass period?
A. What I said and what's discussed extensively in my report, the perception of a short squeeze combined with excessive social media speculation.
Q. Let's start with the short squeeze.
So is it your opinion that, even if there isn't a short squeeze, if there's

a perception of a short squeeze, that would cause the price of the affected stocks to increase?
A. My opinion is not an opinion in the abstract, it's an opinion based on the materials that I've reviewed as described in my report about the explanations that were given for the extreme artificial price movements during what I refer to as the preclass period.
Q. So are you answering my question with a yes?
A. I'm answering your question the way I answered it.
Q. Well, you didn't answer it.
Is it is it your opinion that, even if there is not a short squeeze, if there is merely a perception of a short squeeze, that would cause the price of the nine affected stocks to increase?
MR. ORSINI: Incomplete hypothetical.
THE WITNESS: Well, first of all, I didn't say there was or there

wasn't. I didn't say what would happen if there wasn't a short squeeze. I just said that the explanations given for the extreme artificial price movements during what I refer to as the preclass period were the perception of the existence of a short squeeze as well as excessive social media speculation.
Q. You used the term "artificial price movements".
What makes a price movement artificial?
A. In this particular context, the existence of extreme price movements that are not linked in any way to changes in information about the value of the -- the fundamental value of any of the affected companies and particularly price movements that are understood to be not just artificial but temporary precisely because there is artificial.
Q. Is it your opinion that because the stock prices moved and there was not,

in your opinion, news that would affect the fundamental value of the stocks, such price movement is, by definition, artificial?
A. You know, that's too broad of a statement. I was referring to the particular context of the facts and circumstances of this case and in the context of the facts and circumstances of this case where certain stocks went up by two thousand percent in a matter of weeks without any value-relevant explanation for those stocks -- for those stock price movements combined with all of the analysis and commentary that's contained in my reports during the preclass period, I would say that under those facts and circumstances I would say that those price movements were artificial and widely understood to be such.
Q. What does it mean to be artificial? There was a real price movement; right? It went from X dollars to Y dollars.

What makes it artificial?

A. What I just said, which is just a summary of what I've already described earlier and also described in my reports.

Q. The lack of value-relevant news, is that what makes it artificial?

A. I think, as I've just mentioned, my opinion is based on the facts and circumstances of this case, the extreme price movements in a very short period of time that were widely understood to be artificial and temporary as a product of a perceived short squeeze and excessive social media speculation.

Q. So you said there's two things that made the price movements artificial. One was the perceived short squeeze and the other was excessive media speculation; is that right?

A. No, that's not right.

Q. So the excessive social media speculation did not cause any artificial price movements in these nine affected stocks?

A. I didn't say that either.

Q. So what role did the perceived short squeeze have in the increase in these stocks in the preclass period?

A. It was widely attributed to be a cause of the extreme price movements.

Q. And is your opinion based on this wide attribution you're adopting as your opinion the attribution you found in the news media; is that right?

A. It's not just in the news media, but my opinions are what I've stated.

Q. But make any effort to determine what caused the prices of these stocks to increase in the preclass period?

A. Yes, the ones that I've described that are also contained in my report.

Q. So what efforts did you make to determine the cause of these price increases?

A. I analyzed all the publicly available information that I could find about the contemporaneous explanations for

the extreme artificial price movements during the class period as well as some I guess you could say after-the-fact explanations as well.

Q. Now, you say there were -- there was excessive social media speculation about the nine affected stocks in the preclass period?

A. Correct.

Q. How do you define excessive social media speculation?

A. Again, the explanations that were given contemporaneously for what was responsible for the extreme artificial price movements during the period.

Q. But what social media speculation? Can you give me an example of social media speculation?

A. I discuss the, for example, all of the commentary on social media sites such as Reddit about the possibility or the perceived short squeeze and the possible effect that had on prices and the ability of retail investors to take

advantage of the position the short sale created by institutional investors.

Q. Did you review any of the postings on Reddit?

A. I saw some referred to. I didn't make -- I did not make an attempt to review all the systematic -- I did not make a systematic review of all the commentary on Reddit.

Q. Did you review any specific postings on Reddit?

A. I saw some referred to in other documents that I referred to. That's what I recall.

Q. So you saw Reddit postings referred to in other news articles?

A. Or other sources, correct.

Q. But you never actually read any Reddit postings yourself; is that correct?

A. Well, I read them when they were contained in other postings or other articles or other sources that I reviewed.

Q. What other sources are you referring to?

A. I looked at a lot of pleadings, briefs, court opinions, analyst reports containing target prices.
Q. So you --
A. That's what I recall.
Q. -- relied on other sources to provide you with information about the social media?
A. Well, I wouldn't say that exactly, just the existence of a perception that what was going on in social media was one of the drivers of the artificial price movements. I also cited some academic studies that discussed the role of social media in terms of how they contribute to the existence of fads and bubbles and artificial price movements. That's also discussed in my report.
Q. Is it your opinion that each of the nine affected stocks were overvalued as of the close of business on January 27, 2021?
A. Well, I focused on -- I looked at all nine. I focused on seven more than

nine because of my understanding of the claims in the case and it's my opinion that certainly the seven and possibly the nine as well experienced artificial price movements for the reasons that I described during the -- what I referred to as the preclass period between January 4 and January 27, 2021.
Q. So just focusing on the seven, the seven stocks that Dr. Werner found to be efficient in the year prior to the class period? Is what the seven you're talking about?
A. Yes.
Q. So focusing on the seven, is it your opinion that those seven stocks were overvalued as of the close of trading on January 27, 2021?
A. To the extent the definition of "overvalued" means inflated by artificial price movements particularly as a result of the price movements on January 27, I would say yes, that is my opinion.
Q. And what was the true value for

each of those stocks on January 27, 2021, if not the market price?
A. Well, I would say one way to analyze that question is to look at the market prices subsequent to the class period. And I actually have an exhibit on that in my report. So I would say based on the analysis that I've done, that would be at least one estimate of a true value on January 27, although that's not -- those prices in my report are not -- they're as of a later date and there may be continued dissipation of article Fischel inflation subsequent to that day. But in terms of what I've analyzed, I would say that is a good estimate subject to those caveats of true value.
Q. What is your analysis?
A. I analyzed the relationship between prices on January 27 and during the class period and prices at the end of the class period. I have an exhibit about that.
Q. And which exhibit is that?

A. I'm trying to find which report it's in. It's here somewhere.
I'm flipping pages too fast. Sorry, I have to do this.
Q. No worries.
A. No wonder. I was looking at Grenadier's report.
It's table three on page fifteen of my rebuttal report.
Q. I was going to ask you about this. I might as well ask you about it now?
MR. ORSINI: To you want to mark his rebuttal?
MR. ROSEN: Sure.
We're going to mark the rebuttal report as Exhibit 114.
(Whereupon, a document entitled Rebuttal Report of Daniel R. Fischel was marked Exhibit 114 for identification.)
Q. So could you explain what Exhibit 1 on page -- I'm sorry, table three on page fifteen is in your rebuttal

report?
A. It's a comparison of trading prices during the class period measured in a particular way versus the price immediately after the class period again measured a particular way.
Q. So let's look at -- you're using volume-weighted average price?
A. That's right.
Q. So it's the volume-weighted average price as of what point in time? First explain what a volume-weighted average price is.
A. It's a price weighted by volume.
Q. For each trade in a day?
A. Well, the volume-weighted price per day is a statistic quoted by Bloomberg.
Q. So if there were a thousand shares traded and half were at a dollar and half were at $2, the volume-weighted price would be $1.50?
A. I assume so. I'm not exactly sure how Bloomberg calculates it, but it's

a data source that comes from Bloomberg.
Q. So that's a daily price, an average daily price, more or less; right?
A. Weighted by volume.
Q. Weighted by volume.
And then column one says class period, so is that an average of the volume-weighted average price for each day during the class period?
A. It's each day during the class period weighted by volume. In other words, you have six different volume-weighted prices for each day during a class period and those days themselves are then averaged based on volume during the class period.
Q. And then you have a February 5, 2021 price, and that's just the volume-weighted average price for that day; is that correct?
A. That's correct.
Q. And that's the day after the class period; is that right?
A. That's correct.

Q. Now, what do you believe this table shows then? What inference are you asking the reader to take from it?
A. It's an indication going back to paragraph twenty-six which really relates to the question that you asked me a couple of minutes ago about the difference between the alleged damages -- alleged model of Dr. Werner and the typical securities case where -- I'm just now paraphrasing paragraph twenty-six -- in the typical securities case inflation is measured as the difference between the prices paid and the true value to generalize at a very high level where the true value is measured based on what the price is absent the alleged wrongdoing. But in this case, the alleged wrongdoing, according to the plaintiffs as measured by Dr. Werner, are the actions that occurred during the class period. So therefore, one way to think about what the true value is is what prices are when those alleged wrongful activities cease, when they're no

longer occurring. And based on that analysis, you would look at the relationship between the sale prices and the price that existed subsequent to the alleged wrongful activities and you would conclude exactly the opposite of what Dr. Werner concluded.
In other words, you wouldn't measure damages by the difference between the sale price and the highest inflated price, which is what Dr. Werner does. You would instead measure damages or the existence of damages by comparing the sale price with a true value which in this case is lower than the sale price and would conclude there are no damages, and that's really the point of the exhibit and this particular paragraph. And that conclusion would be even stronger if you compared the prices on February 5 with the price on January 27, which is not on this exhibit but it's on other exhibits that are contained in my reports, and what you would see was that the price on February 5

D. R. Fischel

is dramatically lower than the price on January 27. And for all the reasons that I've stated, the price on February 5 is much -- is a much better and a much closer measure of true value than the maximum artificial inflated price on January 27.

Q. And the February 5 price is a better estimate of true value because, in your opinion, on February 5, when the last of the restrictions was lifted, the prices should have shot back up to the January 27 level?

A. I don't believe they should have shot back up, but I would say one test of the validity of Plaintiffs' claim, if the -- if Dr. Werner were correct and Plaintiffs were correct that the price on January 27 was the so-called true value of the stocks and they were manipulated away from their true value during the class period is whether or not there was a return to the January 27 price when the alleged wrongful conduct was no longer occurring. And what you observe is the

D. R. Fischel

exact opposite which, in my opinion, is a direct refutation of the plaintiffs' case as well as the damage -- the so-called damage model, which I describe as incoherent presented by Dr. Werner.

THE WITNESS: This is a good time for a break, if that's okay.

MR. ORSINI: Sure.

(Whereupon a break was taken)

Q. So in your rebuttal report, we were looking at that table on page fifteen, I think it was, and -- table three. And it shows that after January 27, the prices declined, is that right, for these nine stocks?

A. Yes. As I said, I have other exhibits which show that a little bit more directly.

Q. What exhibit would that be?

A. That would be --

Q. Table two?

A. Let me just find it.

Q. Page eight, table two of your rebuttal?

D. R. Fischel

A. Yes, exactly.

Q. So it shows the first column -- sorry, first row for January 28, 2021 matched against each column for each stock, it shows the decline on that specific day; is that right?

A. It shows the residual decline.

Q. And so AMC went down fifty-four percent on January 28?

A. Not the price but the product of the regression analysis, there was a decline by fifty-four percent.

Q. It says total -- so the residual return?

A. That's right, went down by fifty-four percent.

Q. When you take out market factors and industry factors, did you have an industry index, I assume?

A. Yeah.

Q. So the residual decline, firm-specific decline is fifty-four percent for AMC?

A. On January 28, that's correct.

D. R. Fischel

Q. Now, what caused that decline in AMC stock on January 28?

A. You know, I say in my report that it's very hard to disentangle the various possible causes of the decline. First of all, there was a huge increase on January 27 which is understood to be temporary, so there's going to be some decline at some point just by virtue of the nature of a temporary artificial price increase. In addition to that, there are all the actions that I describe in the background section of my report and one of the criticisms that I have of Dr. Werner's damage model and more generally whether it's possible to have a common method to analyze damages as all the different potential causes of the stock price decline. So that's what I would say.

Q. So on table two, does that go from closing prices on January 27 to closing price on January 28; is that right?

A. Adjusted for market and industry

D. R. Fischel

movements, correct.

Q. Now, you said there were two things that caused the price decline.

One was the temporary nature of the price increase on January 27; is that correct?

MR. ORSINI: I object to form.

THE WITNESS: That's not exactly what I said.

Q. I just want to make sure I understand it before I go further.

So what were the causes -- what were the potential causes of the price decline on February 28 for these stocks?

A. I think that's what I just said. There was going to be, in the absence of any actions by anyone, there was going to be some mean reversion at some point in time, particularly in light of the dramatic increase on residual return on January 27. I have another table that shows that.

In addition to that, there was a series of actions taken by different

D. R. Fischel

economic actors that are described in the background section of my report.

Q. Any others besides those two?

A. Well, to the extent that any part of the decline is explained by market and industry movements, but I wouldn't say that would come close to explaining declines in residual returns by fifty-four percent, since that's the one you were asking me about before the break.

Q. Presumably these residual returns have excluded the -- have taken into account the market industry factors; right?

A. Right.

Q. So we're left with this mean reversion and the actions of third parties and others; right?

A. Correct.

Q. So let's start with the mean reversion.

Where in your report do you describe this mean reversion or this temporary nature of the stock prices on

D. R. Fischel

January 27 that was bound to revert to a mean? Where is that described in your report?

A. I discuss several places in my report where I discuss the fact that the extreme artificial price movements that occurred in what I referred to as the preclass period were understood to be temporary. I also discuss academic literature that discusses the temporary nature of artificial price movements. And that's what I was referring to in my previous answers.

Q. Could you tell me what academic literature supports your assertion that the prices of these nine stocks were bound to decline at some point?

A. Well, the academic literature doesn't discuss these nine stocks, it's a more general discussion of the effect of, in this case, artificial price increases.

Q. Could you point me to where in your report this literature is mentioned?

A. (Reviewing).

D. R. Fischel

Academic literature is discussed in various places: In paragraph twenty-seven of my original report, in footnote twenty-six of my rebuttal report, paragraph twenty-one and footnote thirty-one, thirty-two --

Q. Say that again? Footnote twenty-six? Which academic literature talks about mean reversion of temporary stock price inflation? Which articles in footnote twenty-six of your rebuttal report are you referring to?

A. The Ferrillo article talks about the recommendations of authors to inspect the affected stocks for bubbles and overreactions. It's Ferrillo, Dunbar, and Tabak. That's what I was referring to in footnote twenty-six.

Q. So you're telling me that article states that if a stock price has increased greatly because of speculation, it will revert to its mean?

A. That's not what I said.

Q. Well, but you said that -- you

did say that one of the reasons the stock price declined was it was going to revert to the mean, meaning it was inflated and it was going to go back down to a lower price just by the nature of the inflation? Am I missing something?

A. That's not a real accurate characterization of what I said.

Q. Why don't you explain it then.

A. That fads and bubbles that are characterized by overreactions are by definition temporary. That's what it means to say there is a fad or a bubble. That's what I meant.

Q. And how temporary was this -- so are you saying the stock price on January 27, 2021 for these nine stocks were a bubble?

A. You could call them a bubble.

Q. I'm asking what you call them.

A. I call them what I said, extreme price inflation resulting in artificial prices which were widely understood to be temporary and therefore were going to

decline at some point in time.

Q. If there had not been any restrictions imposed by Robinhood or any other firm on the trading of these nine affected securities, would -- is it your opinion that the prices would have declined anyway on January 28 through February 4?

A. That's too specific. It's I think impossible to know what would have happened in a world that never occurred. But because of the nature of the extreme price increases, gains of two thousand percent in a couple of week period for some of the stocks with no connection to any change in fundamental value, those increases were understood to be temporary, widely commented on to be temporary, so that decline was going to occur inevitably at some point in time.

Q. It might have happened in a week, it might have happened in a month; right?

A. I think there's no way to --

because you're now asking a question about trying to predict what would have happened in a world which didn't exist, it's really impossible to pinpoint the time where the decline would have occurred other than saying that it was widely understood that the -- the increase was widely understood to be artificial, temporary, and was sure to decline at some point in time.

Q. So do you have any opinion as to when this inevitable decline for the nine affected stocks would have occurred?

A. No, that's just what I said. No specific opinion because there's no way to know other than I guess you could say the nature of these kinds of fads or bubbles are inherently short term, so they don't last forever. But beyond that, once you basically change the assumptions of what happened in the real world to ask what would have happened in a different world, there's no way to know what could have happened in a different world, other than to say it was widely understood and

commented upon about the price increases were artificial and temporary.

And just to complete the answer as I was describing before the break, the level of prices subsequent to the time of the alleged wrongful conduct, the fact that they did not rebound and were below the level of prices during the class period is illustrative of the temporary nature of the price increases to begin with.

Q. So let's talk about the second potential cause of the stock price declines on January 28 for these nine affected stocks.

You said that -- in your report in the background section, you mentioned some of the actions taken by Robinhood and third parties. Let's see if we can identify this.

Where in your report do you describe the actions of firms other than Robinhood that might have affected the stock prices on January 28?

D. R. Fischel

A. Again, that's not really an accurate description of what I said. But in response to where I discuss the actions of third party actors in response to the large increase in volatility and prices, that's discussed in multiple paragraphs it looks like beginning on paragraph ten.

Q. So there was some trading halts, according to you, on January 27 and January 28.

Did these trading halts cause an increase or a decrease in stock price of these companies?

MR. ORSINI: Objection.

THE WITNESS: I didn't separately calculate if it's even possible to separately calculate the effect of those particular actions versus all the other things that were happening during these particular days.

Q. Well, so footnote sixteen says NYSE halted trading in GME three times for a total of fifteen minutes on January 27.

D. R. Fischel

Did that cause an increase or a decrease in the stock price?

A. As I said, I didn't separately perform any calculations of those specific actions, recognizing that there are a lot of other things going on even during those minutes on January 27 and 28.

Q. So is it your opinion the NYSE trading halt on January 27 had an effect on these nine stocks or it didn't have an effect on the nine stocks' prices?

A. My opinion is what's stated in the report that these actions taken in response to the perceived volatility in price movements that were occurring in the meme stocks during this period and prior to this period in what I refer to as the preclass period.

Q. Do you have an opinion as to whether the trading halts on January 27 did or did not on effect on any of the nine affected stocks' prices?

MR. ORSINI: I object it form.

THE WITNESS: I think I've

D. R. Fischel

answered that to the best of my ability.

Q. And the answer is yes or no?

A. The answer is I didn't perform any separate calculation of those trading halts. And I think it's also important that I'm not sure how confident one could be in the conclusion because there was so many other things going on during those two days, including during those minutes where the trading halts occurred.

Q. And how about the trading halts on January 28? Do you have any opinion as to whether those trading halts had any effect on the prices of any of the nine affected stocks?

A. It's really the same answer again.

Q. And that answer is?

A. That other than knowing that on the twenty-eighth there were big declines across the board in the nine stocks, exactly what was responsible for those declines, trying to disentangle the effect

D. R. Fischel

of the mean reversion from the extreme price increases, artificial price increases on the twenty-seventh, the actions of all the economic actors that began to be imposed by all the different economic actors that I describe in my report, it's very hard if not impossible to try and disentangle.

Q. Do you have an opinion as to whether or not the mean reversion was a material cause of the stock price decline to the affected stocks on January 28?

A. Not that specifically for the reasons that I already said, other than that reversion was going to occur at some point in time.

Q. So you have no evidence that that mean reversion was the cause of any stock price declines for the nine affected stocks on January 28?

A. With respect to that specific day, I don't think it's possible to isolate in a factor from all the other factors in the same way it's not possible

to isolate the effect of all of the different economic actors versus all the other things that were going on during that period.

Q. And I appreciate the difficulty of isolating specific factors. But let's just focus on that one factor, mean reversion that you mentioned.

Do you have any evidence at all that mean reversion was a material cause of any of the stock price declines for the nine affected stocks on January 28?

A. As I said, I don't have an opinion about that specific day other than the artificial price -- the extreme artificial price increases were understood to be temporary. The most extreme price increase occurred on January 27 across the board, and that was understood to be temporary, and so a decline was going to occur at some point in time based upon the general -- both the contemporary literature as well as academic literature in the short term. But since you're

asking about something that's so specific to one day, whether prices would have continued to increase, whether they would have decreased, whether they would have decreased on the same day, on the same days, by the same amounts, there's no way to know precisely because there's so many different factors that were occurring at the same time.

Q. Could you cite one piece of evidence for the proposition that mean reversion was responsible for any of the share price declines for any of the nine affected stocks during the class period?

A. The evidence that I can cite is what I've stated, that there was widespread understanding both at the time and in the academic literature that the type of extreme price movements that occurred where some stocks went up by two thousand percent in a matter of weeks with no change in the information about their fundamental values is by definition temporary, and those prices were not going

to persist because they were temporary.

Q. So the evidence that the price declines are related to mean reversion is a, quote, widespread understanding in the news media and academic literature?

A. Exactly.

Q. Anything else?

A. Well, I think contemporaneous discussions combined with academic literature. That's what I would say.

Q. How would you define "extreme social-driven media enthusiasm"?

A. Well, the way I'm defining it is -- in response to your earlier questions of what the discussion was at the time of the reasons for the extreme artificial price movements as well as the -- again, the academic literature that I also discuss in my report that discusses the role of social media in creating artificial price movements in the form of bubbles or fads.

Q. So did you ever hear the term "diamond hands"?

A. Diamond hands?

Q. Yes.

A. No, I don't think I have, or at least I don't remember it.

Q. The social media enthusiasm for the nine affected stocks, was that -- what was that enthusiasm based on?

A. Well, as I mentioned, what I'm familiar with is the discussion of the short squeeze or the perceived short squeeze and the possible implications that that has on investment opportunities for retail investors.

Q. Now, if somebody wants to go long and squeeze short sellers, is that a long-term investment or is that an investment that has to be sold relatively quickly in order to profit and not lose money?

MR. ORSINI: I object to form.

THE WITNESS: I'm not sure I understand the question. But in order to profit, you have to sell at a higher price than what you paid. So

by definition, the horizon of the investment has to be at an expectation that you're going to be able to sell at a higher price than what you paid, assuming that -- if you're asking in the abstract, assuming that you're purchasing for investment purposes as opposed to for diversification or some other purpose.

Q. Now, the people that you're referring to who had extreme social media-driven enthusiasm, are those retail investors?

A. I think the social media-focused, at least my understanding based on what I've reviewed, focused on retail investors.

Q. And did all of these retail investors who are part of this social media-driven enthusiasm, were they all focused on making money as part of the short squeeze?

A. You'd have to ask them. I don't know. I was commenting on the commentary

in social media, not on the motivations of all retail investors, although I do think some of the testimony by the class representatives was, in my opinion, highly revealing as to what their reasons were for purchasing.

Q. Is it possible that there were many people who were part of this social media enthusiasm who intended to hold the nine affected stocks for the long-term as an investment?

A. You are you're asking me is it possible?

Q. Yes.

A. I can't comment on what's possible, only that in order to profit by purchasing at a knowingly artificial price, you have to expect that you're going to be able to sell at an even more -- an even higher artificially inflated price.

Q. Do you know whether or not there was a large contingent of people active in the social media who were purchasing and

advocating the purchase for the long-term to hold and never sell?

A. No, I don't. I think all kinds of things were being said on social media. My focus was on the class members specifically or the alleged class members.

Q. You mean the class representatives?

A. The class representatives and the class members.

Q. Well, how do you know who the class members are besides the people who are part of our lawsuit?

A. There's extended analysis of that in my reports as to not who they were by name but the timing of their investment decisions.

Q. Now, is it your opinion that the people who were buying shares of the nine affected stocks during the preclass period that you defined were manipulating the market for these stocks?

A. My opinion is what I stated, that -- in my report that they're going to

be members of the class who purchased at artificial prices knowing that the prices were artificial.

Q. Did everyone who's a member of the class purchase knowing the prices were artificial?

A. I don't have that opinion. My opinion is individualized inquiry is required to distinguish between those class members who purchased based on an awareness of the existence of artificial prices as several class members, in fact, testified. And with respect to those investors, they did not purchase based on a belief in the integrity of market prices but rather an attempt to profit by the lack of existence of an integrity of market prices, as I state in my report.

Q. And what questions would you ask class members to determine whether or not they relied on the integrity of the market price when they purchased?

A. Well, I'm not offering an opinion on what questions to ask, but --

D. R. Fischel

Q. You said individual inquiry is necessary.

What individual inquiry would you make? You say it's necessary so that presupposes you know what those necessary questions are.

A. I guess I would ask the questions that were asked -- if I were in that business, which I'm not, I guess I would ask the questions that were asked of the class representatives to see if they would give the same answers as the class members whose answers I reviewed based on their sworn testimony.

Q. But what question -- what evidence would show that someone did or did not rely on the integrity of the market price?

A. As I said, I would think I would copy the questions that were asked of the class representatives in the testimony that I reviewed because I thought those answers were very revealing.

Q. What answers are those?

D. R. Fischel

A. Well, I quote them in my report, which I can find if you want me to. And I also saw --

Q. What do they relate to? Does it relate to where they live? What's the issue that you think hinges on the integrity -- their reliance on the integrity of the market price?

A. You know, I think the simplest thing for me to do is to refer to the testimony that I quoted which was not based on where they live but rather based on why they purchased, what they understood when they purchased, and that to me demonstrated, with respect to those class members as well as an additional one that I became aware of subsequent to the time of my rebuttal report.

Q. What does it mean to rely on the integrity of the market price?

A. It means that market prices reflect the true value of the underlying securities or an expectation that they do.

Q. So to rely on the integrity of

D. R. Fischel

the market prices, is it your testimony that one has to believe that the underlying market price is the true value of the security?

A. Or no reason to disbelieve it, I guess is the -- I would phrase it that way.

Q. Why don't you rephrase it the way you think it's correct.

A. That there's no reason to believe that prices are distorted by fraud or misrepresentations or manipulations.

Q. So I'll make sure --

A. For example.

Q. -- I have this right, to rely on the integrity of the market price is to have no reason to believe that prices are distorted by fraud or misrepresentations or manipulations?

A. As an example, correct.

Q. Can you think of any other examples?

A. You know, maybe depending upon the context that the price is not

D. R. Fischel

sufficiently liquid, to be confident that the trading prices reflect fair market value. That's another example that comes to mind.

Q. So if -- as long as a purchaser has no reason to believe that prices are distorted by fraud, misrepresentation, manipulation, or illiquidity, they rely on the integrity of the market price; is that a fair statement?

A. No, I said those are examples of situations where --

Q. Well, let's just --

A. Let me just finish.

Those are examples where investors could, assuming that those things did not -- were not expected to distort market prices at the time of a purchase, that would be -- those would be examples of situations where investors could rely on the integrity of market prices.

Q. Now, let's put this in the context of our litigation here.

D. R. Fischel

A. Okay.

Q. With Robinhood.

When you are evaluating a class member's reliance on the integrity of the market price here, besides misrepresentations, fraud, manipulation, or illiquidity, are there any other things that could cause a class member not to rely on the integrity of the market price in this case?

A. Well, again, I would just quote the answers by the class representatives that believe prices have increased because of a short squeeze, believe that prices have increased so far without a reason and therefore are not expected to continue to increase for fundamental reasons. Those are the things that come to mind based on my recollection of the testimony of class members.

Q. And why does knowledge of a short squeeze -- why does knowledge of a short squeeze render a person's reliance on the integrity of the market -- why does

D. R. Fischel

it mean that they did not rely on the integrity of the market if they have knowledge of the short squeeze?

A. Well, more generally if they have knowledge of artificial prices, all the massive amount of publicity to that effect during the preclass period, what it means is that prices are inflated for those reasons and anybody who purchased at a time when they know that prices are inflated, then they are not purchasing based on the integrity of the market price, they're purchasing based on speculation of how long artificial prices are going to continue and whether they will be able to profit from those artificial prices by selling at an even higher artificial price than the price that they purchased, and that's why individualized inquiry is necessary to distinguish between class members like the class representatives who testified to what I just said versus other class members who do not fall into that

D. R. Fischel

category.

MR. ROSEN: I'm going to introduce a new exhibit.

(Whereupon, a Seeking Alpha article dated February 1, 2021 was marked Exhibit 115 for identification.)

Q. This is an article that you mentioned in footnote sixty-four of your opening report.

A. Okay.

Q. So paragraph twenty-eight in your report, you offer the opinion that artificial prices caused by short squeezes are temporary and tend to be unrelated to company news, performance, and prospects. And then you quote a commentator and there's a footnote.

Is this article introduced as Exhibit 114 the basis for your opinion in paragraph twenty-eight?

A. Paragraph twenty-eight of my opening report?

Q. Yes.

D. R. Fischel

A. That's the article that's cited at the end of the paragraph.

Q. Do you have any other support for the proposition that you make in paragraph twenty-eight other than this footnote sixty-four?

A. Yes. Squeezes are a form of distorted market prices. I should say squeezes have the capability to create distorted market prices and that's a widespread understanding, that's not just the product of this particular article.

Q. And is it your opinion that, in this case for these nine affected stocks, there was a short squeeze that caused these prices to go up?

A. I think I've discussed that at length earlier. There was certainly a perceived short squeeze, and even some of the class representatives talked about trying to profit from a short squeeze. So that's what I would say.

Q. And is it your opinion that the stock price declines for the nine affected

D. R. Fischel

stocks during the class period was caused in part by the dissipation or the end of the short squeeze?

A. I think I answered that again already. It's the existence of the extreme artificial prices that was caused in part by the perception of a short squeeze that was by definition temporary and therefore would result in those price increases declining, which is exactly what occurred.

Q. So you're saying that prices would decline even if there's a perception of a short squeeze whether or not there actually was a short squeeze?

A. No, I'm not saying that.

Q. Well, it says in paragraph twenty-eight, "short squeezes typically don't last long. The average short squeeze in this data set lasted approximately twelve days". And that "when a short squeeze eventually exhausts itself, the stock price declines by fifty percent within the next three to four

D. R. Fischel

days".

So why did you include that information in your paragraph twenty-eight?

A. Because I think it was important to highlight that artificial price movements such as the ones that occurred between January 4 and January 27, particularly on January 27, are by nature temporary, by definition temporary, and widely understood to be such. And that was not only widely understood at the time but also is something that's widely understood in the academic literature.

Q. So you want the court to make an inference that the perceived short squeeze as the cause of the price rise on the twenty-seventh and also the decline on the twenty-eighth; is that right?

A. No, it's not exactly right. First of all, I don't have any opinion about wanting the court to make inferences. I have an opinion on what I think occurred, which if asked I will

D. R. Fischel

communicate at the appropriate time.

Q. So did the termination of a short squeeze cause stock prices to decline on January 28, 29, or any other day during the class period?

A. I answered that question multiple times. I think there were a combination of things that occurred, various actions by different market actors that I describe in my report, as well as the inherent temporary nature of artificial price movements in this particular case where a perceived short squeeze was one of the main reasons at the time that was given to explain the extreme price movements and volatility that existed between January 4 and January 27, particularly on the day of January 27.

Q. I think my question was about whether the termination of the short -- of a short squeeze caused stock prices to decline during the class period.

MR. ORSINI: That's not a question, that's a statement.

D. R. Fischel

Q. And so I'll repeat the question for you.

Did the termination of a short squeeze cause stock prices to decline during the class period?

MR. ORSINI: Asked and answered repeatedly.

THE WITNESS: I'm just going to repeat what I said multiple times. I think there are multiple factors that occurred during the class period that resulted in a decline, the actions of a lot of economic actors plus the fact that the price increases in the preclass period were widely understood to be temporary and were inevitably going to dissipate over time.

Q. You said there were multiple factors that occurred during the class period that resulted in the decline of share prices.

True so far?

A. Correct.

Q. Let's list each factor.

D. R. Fischel

A. It's the actions by all the different economic actors that I described in my report, combined with the fact that the price increases that occurred, the artificial price increases that occurred between January 4 and January 27, particularly on the day of January 27 are by definition were temporary or widely understood to be temporary, widely commented on to be temporary, and therefore would inevitably dissipate over time and over some relatively short interval, as the article in paragraph twenty-eight reflects.

Q. Other than the article in paragraph twenty-eight, can you cite any specific evidence that the termination of a short squeeze caused share prices to decline during the class period?

MR. ORSINI: Mischaracterizes the document, and it's been asked and answered.

THE WITNESS: I don't really have anything to add to what I've

D. R. Fischel

already said multiple times.

Q. I guess that's a no. All right.

You said that the prices of these nine affected stocks was artificially inflated as of January 27; is that right?

A. Yes, that's what I said, particularly the seven that I focused on, but really all nine.

Q. What was the true value of those prices on January 27?

MR. ORSINI: We're going in circles here. You've asked that question three times.

THE WITNESS: You know, I've answered that as well. As I said, I didn't perform a specific calculation as of January 27, but the price subsequent to the end of the class period when the -- all the alleged wrongdoing ended is an indication of the true value a couple of days earlier on January 27. Not a perfect indication because there's remaining

D. R. Fischel

artificial inflation that gets dissipated over additional days, but as a starting position, as a first approximation those prices on February 5 are a good initial approximation of the true value on January 27.

Q. So Exhibit 115 is a Seeking Alpha post by a guy Hugh Akston; is that right?

A. I'm looking at it on the screen, a title of an article by Mr. Akston.

Q. Well, it actually says Hugh Akston Investments.

Do you know who wrote it?

A. No, I don't, I just know what's on the screen. Unless the text of the article which I don't have in front of me says something additional to what's on the screen.

Q. Was this article published in any academic journal or industry journal?

A. I actually don't know what the -- what Seeking Alpha, whether that's an

D. R. Fischel

industry or academic journal. I'd have to look.

Q. Did you make any effort to see if Hugh Akston Investments is actually a real money management firm?

A. No, I didn't. If I had it in front of me, I might be able to tell you, but I didn't make any independent investigation of that.

Q. Did the retail investors who were active on social media, you know, Reddit, Wall Street Bets, who were buying these nine affected stocks during the preclass period, did they manipulate the stocks?

A. Well, again, as I've indicated, I'm not making a commentary on everyone in the class. My analysis focuses on the existence of class members who suffered a loss and for that to occur when they had to purchase and the publicly available information during the time of those purchases coupled with the actual testimony of several of the class members

D. R. Fischel

all of which is described in my report.

And with respect to the testimony, I would say that some of the testimony indicates class members attempting to profit from a manipulation as opposed to themselves causing a manipulation.

Q. What was the manipulation?

A. The perceived short squeeze.

Q. So is it your opinion that, when investors purchase stock in the hope of causing it to go up or the hope that it will go up because of there being great short interest, that is manipulation?

MR. ORSINI: I object to form.

THE WITNESS: I mean, I don't know if that's meant to be a characterization of my previous answer, but if it is, it's not an accurate one. And the answer to your question is no, I would not say that by itself that's manipulation.

Q. Well, you say that there was testimony indicating class members

D. R. Fischel

attempted to profit from the manipulation.

What manipulation are you referring to?

A. The testimony itself -- I think rather than to continue to paraphrase it, I'll find it and read it to you.

Q. Please.

A. Actually, can we take a one-minute break?

MR. ORSINI: Why don't we break for lunch. It's been sitting out there for a while.

(Lunch recess taken at 1:01 p.m.)

D. R. Fischel

A F T E R N O O N S E S S I O N

April 12, 2023

1:56 p.m.

D A N I E L R. F I S C H E L, having been previously duly sworn by a Notary Public of the State of New York, upon being examined, testified as follows:

EXAMINATION CONTINUED BY MR. ROSEN:

Q. Earlier you said that the prices for the nine affected stocks were overvalued or artificially inflated as of January 27; is that correct?

A. Yes, basically correct. Overvalued in the sense that the price movements between January 4 and January 27 and particularly on January 27 were artificial price movements that were widely understood to be temporary in nature.

Q. And you also said that people purchasing during the preclass period between January 4 and -- well, you said

D. R. Fischel

people purchasing during the preclass period were aware that the prices were distorted or artificially inflated; is that right?

A. No, that's not right.

Q. Well, what was the basis for your statement that class members -- certain class members were not entitled to a presumption that they relied on the integrity of the market price?

A. Because -- and just to be clear, I was not making a statement about every class member as your previous question suggested -- but that if you look at the timing of when investors had to purchase in order to purchase at a loss, that a significant percentage of class members purchased during a time when there was extensive commentary about the existence of artificial prices because of a perceived short squeeze and the excessive social media speculation, and that was confirmed, at least with respect to several class representatives, by their

D. R. Fischel

testimony which I quote in my rebuttal report where they describe the reasons why they purchased and what their expectations were.

Q. Is it your opinion that anyone purchasing during the period January 4 to January 27 should have been aware that the prices were artificially inflated?

A. No, it's not my testimony.

Q. Is it your opinion that anyone purchasing during the period January 23 to January 27 should have been aware that the prices were artificially inflated?

A. No. I don't express any opinion on what investors should have been aware of or should have done. My only opinion is that during the time when a significant percentage of class members had to purchase in order to sell at a loss, there was extensive commentary and publicly available information from multiple sources about the existence of artificial prices as confirmed by the testimony of several of the class representatives and

D. R. Fischel

therefore individualized inquiry is necessary in order to determine which class members relied on the integrity of the market price and which class members did not.

Q. And why is it important in this case that investors have relied on the integrity of the market price when they purchased their shares?

MR. ORSINI: Objection to the extent it's calling for a legal conclusion.

THE WITNESS: I was going to say the same thing. If it's important, the reason why it's important is because a significant percentage of class members purchased at a time when there was extensive publicity from multiple sources about the existence of artificial prices and the temporary nature of those artificial prices and therefore, for those class members who fit that description, the possibility exists that those class members not

D. R. Fischel

only purchased at a time of artificial prices but purchased because of the existence of artificial prices, demonstrating that for those class members, they did not rely on the integrity of the market price as was confirmed by the testimony that I quote in my rebuttal report of several of the class representatives. And as I said, there's another class member whose testimony that I received after the time of my rebuttal report which where the testimony was basically the same thing.

Q. Now, would you agree that a large number of the shares purchased in the preclass period were purchased by high frequency traders?

A. I would neither agree nor disagree with that statement. I don't know.

Q. So do you know what high frequency trading is?

A. Yes, I do.

D. R. Fischel

Q. Do you know what program trading is?

A. Yes, I do.

Q. What's program trading?

A. It's algorithmic trading based on the triggers derived from a program.

Q. Isn't it true that a large number of the world's largest financial institutions engage in program trading in stocks in the United States?

A. You know, that's too broad of a statement. I wouldn't want to express an opinion on that one way or the other without studying the issue.

Q. So you have no idea what portion of the shares traded in the preclass period for these nine affects stocks were traded by high frequency traders?

A. Correct, I don't have any opinion on that one way or the other.

Q. Now, would high frequency traders be barred from relying on the integrity of the market for some reason, in your opinion?

D. R. Fischel

MR. ORSINI: Objection. Vague. To the extent it calls for a legal conclusion.

THE WITNESS: I don't know what that means. I'm not offering any legal opinions on who is barred, to use your phrase, from --

Q. Relying on the integrity of the market price.

You have an opinion on the integrity of the market price in this case; right?

A. The opinion that I have is what I repeated several times and it's stated in my reports.

Q. So that opinion does not impact -- does not speak to whether or not high frequency traders relied on the integrity of the market price; correct?

A. I don't know what you mean does not speak to, but there's no separate opinion I have about high frequency traders.

Q. So if somebody was engaged in

D. R. Fischel

high frequency trading, would they have relied on the integrity of the market price or not?

A. I don't think you know without investigating the relevant facts and circumstances.

Q. So basically everybody in the class you'd have to ask them if they relied on the integrity of the market price in order for them to get a presumption of reliance; is that your opinion?

MR. ORSINI: Objection.

THE WITNESS: That also sounds like a legal question.

Q. Well, you say everyone needs individual inquiries; is that right?

A. I said --

Q. Yes or no, do we need individual inquiry or not for this issue?

MR. ORSINI: What issue?

MR. ROSEN: Integrity of the market price.

THE WITNESS: I think the issue

D. R. Fischel

of -- under the facts and circumstances of this case, the issue of reliance on the integrity of the market price cannot be determined on a class-wide basis in light of the economic evidence that I've reviewed and I've described at length in my two reports as well as the testimony of the class representatives that I quote in my report.

Q. What about momentum traders? If someone's a momentum trader and buying at momentum AMC, GEM on January 26 of 2021, are they relying on the integrity of the market price or not?

A. It would just depend on the relevant facts and circumstances.

Q. The relevant fact is a momentum trader saw the stock price going up and they said, oh, look, it's going up. I'm going to buy it because I'm a momentum trader.

Are they relying on the integrity of the market price or not?

D. R. Fischel

A. I think it depends on the relevant facts and circumstances. Are they aware of all of the articles about artificial prices and they're aware of the -- they interpret the momentum in light of that information, you know, just as one question that occurs to me. I think it would depend on the relevant facts and circumstances.

Q. So is it your opinion that anybody who read the media news articles that you cite as showing, quote, artificial prices during the preclass period did not rely on the integrity of the market?

A. That's not my opinion.

Q. So someone could read these media news articles that you cite as indicating artificial prices and still have relied on the integrity of the market?

A. You mean is that possible? Yes, I think that's possible.

Q. Under what circumstances would

D. R. Fischel

it be possible?

A. Whether a purchase was based on the integrity of the market price as opposed to trying to profit by the lack of integrity of the market price, as was testified to by the class representatives.

Q. So if somebody was hoping the price would go up because there was a short squeeze, they were not relying on the integrity of the market?

A. I would say if somebody -- as one of their class representatives testified -- was aware that prices were inflated because of a short squeeze and hoped to profit by prices increasing further because of the perceived short squeeze or any other reason, I would say they are not relying on the integrity of the market price.

Q. But if an investor was aware of the short squeeze but didn't hope to profit by it, they just wanted to buy the stock because it was a momentum trade, they would have relied on the integrity of

D. R. Fischel

the market price?

A. You'd have to examine the relevant facts and circumstances. If somebody's aware but it has no influence on their investment decision, that's a different situation than the class representative whose testimony I quoted. And I keep paraphrasing the testimony, but it's in footnotes fourteen and fifteen of my rebuttal report where in footnote fourteen the testimony is: "I was banking on there being a short squeeze. Do you mean like" -- question: "Do you mean like in your own investing you're assuming or hoping that there was going to be a short squeeze.

Answer: "Yes.

Question: "And you were going to make a profit from that.

Answer: "I was hoping to, yes".

That to me -- that testimony is inconsistent with a reliance on the integrity of the market price.

Q. Do you have any academic

D. R. Fischel

literature that supports that?

A. Yes, the fact that --

Q. What's that?

A. -- short squeezes cause a distortion in prices that are temporary in nature and therefore anybody who's purchasing because of an attempt to profit by the existence of artificial inflation hoping that the artificial -- the existence of artificial inflation not only continues but increases in order to be able to sell at a profit, that's inconsistent with relying on the integrity of the market price. That's relying on a distortion in the market price and hoping that the distortion continues and, in fact, increases.

Q. Was there an illegal manipulation of any of the nine affected stocks in the preclass period?

MR. ORSINI: Calls for a legal conclusion.

THE WITNESS: That's a legal opinion, and I don't have any legal

D. R. Fischel

opinions on that or any other subject.

Q. Do you have any evidence of any manipulation of the prices of the nine affected stocks in the preclass period?

A. My preclass period, I have evidence of a perception that the cause of the artificial inflation was a perceived short squeeze coupled with excessive social media speculation about the abilities created for retail investors by the perceived short squeeze. That's what my opinions are.

Q. And is the perceived short squeeze and the excessive social media speculation, are either of those manipulation?

MR. ORSINI: I object to form.

THE WITNESS: That's also a legal opinion.

Q. So you're not making the opinion that the perceived short squeeze or the excessive social media speculation are manipulation; is that correct?

MR. ORSINI: I object to form.

D. R. Fischel

THE WITNESS: In terms of a legal conclusion, that's correct.

Q. How about as an economic conclusion?

A. Well, the existence of manipulation is a legal concept. So if you're defining manipulation in terms of whether prices were distorted, artificially inflated --

Q. No, the term "manipulation", I'm not talking about distortion, I'm talking about manipulation. That was the term.

So are you offering any opinion, whether it be economic, legal, or any other form, are you offering any opinion in this litigation as to whether the perceived short squeeze or the excessive social media speculation was a manipulation?

MR. ORSINI: Objection. Vague.

THE WITNESS: Well, first of all, the perception is not a manipulation, a perception could be based on and was attributed to a

D. R. Fischel

perceived short squeeze. Whether you want to define a short squeeze or not as a manipulation, particularly since the concept of manipulation --

Q. Well, that's the question.

Do you want to define it as a manipulation?

A. Excuse me, you have to let me finish my answer.

A manipulation involves not just an effect on prices but a certain intent by the actors, you know, things that I don't press an opinion about one way or another, particularly since it's a legal opinion.

Q. So you're not offering any opinion as to whether or not there was any manipulation in the preclass period in respect to the perceived short squeeze or the excessive social media enthusiasm?

MR. ORSINI: Same objections.

THE WITNESS: Correct, to the extent you're asking me for a legal opinion.

D. R. Fischel

Q. And what if I'm not asking you for a legal opinion, then what?

A. Then I would say that there was a distortion in prices, a creation of artificial -- extreme price movements and volatility during the preclass period as I define the preclass period was the product of a perceived short squeeze and excessive social media speculation that was by definition and widely understood to be artificial price movements that were inherently temporary in nature.

Q. You've written on stock market manipulation; isn't that correct?

A. I have.

Q. And you've defined it, correct, in your articles?

A. I think you'd have to show me what you're referring to, but I think it would be more accurate to say I've discussed the difficulty of defining it.

Q. Are you able to define it?

A. Again, it's a legal concept, and I'm not offering any legal opinions.

D. R. Fischel

Q. Have you ever heard the term "assumption of reliance on an efficient market free of manipulation"?

A. Have I ever heard that term?

Q. Yes.

A. That's not a term, it's a phrase. I don't know if I've ever come across that phrase.

Q. Do you know what it means?

A. Well, just based on the ordinary usage of the English language, I think I know what it means.

Q. And does it mean the same thing as reliance on the integrity of the market price in an efficient market?

A. Not necessarily, no.

Q. Do you offer any opinion in this case as to whether Plaintiffs or the class were entitled to an assumption of reliance on an efficient market free of manipulation?

A. That sounds like a legal opinion. I'm not offering any legal opinions one way or the other.

D. R. Fischel

Q. So do you know what the class definition in this case is?

A. My understanding of the class definition is in my report.

Q. And what would your understanding be?

A. I believe it's investors in the nine stocks who held a position on January 27 and sold at a loss during the class period. That's my understanding.

Q. Do you offer any opinion as to whether -- as to what investors relied on in selling their shares during the class period?

A. No. The only opinion that I offer is the timing and prices of those sales relative to the timing and prices of purchases.

Q. Do you offer any opinion as to whether the restrictions imposed by Robinhood in the purchase of the affected securities induced or did not induce class members to sell their shares during the class period?

D. R. Fischel

A. I don't have any opinion on that one way or the other.

Q. So this being a seller's class, why is the reason for the class members' purchase relevant to this litigation?

MR. ORSINI: Objection to the extent it's calling for a legal conclusion.

THE WITNESS: The reasons why I think it's relevant is what I've been describing in my answers to your questions and explained at greater length in my reports relevant for my opinion, again not offering any legal opinions as to what the court ultimately determines is relevant or not relevant.

Q. Have you ever testified in a stock market manipulation case before?

MR. ORSINI: At deposition, trial, either?

Q. In any form; submitted a report, testified live.

A. I've certainly testified in

D. R. Fischel

manipulation cases involving futures markets, and I've been a witness and I'm currently a witness in cases involving alleged manipulation in equity markets, I mean apart from this case.

Q. What's the current -- sorry, go ahead.

A. I'd have to check, actually, look at my CV to the extent I could remember every alleged cause of action. The cases I'm confident without recalling anything specific that some of the equity market cases involved allegations of manipulation.

Q. What's the current case you're working on that involves manipulation?

A. I'm not going to disclose it.

Q. Have you ever analyzed market efficiency using the Cammer factors before?

A. Yes, I'm sure I have.

Q. And is it your opinion that the Cammer factors are a sound basis for determining market efficiency?

D. R. Fischel

A. Again, without offering a legal opinion, I think the extent to which they're a sound factor in economic terms can vary depending on the relevant facts and circumstances.

Q. So it depends on the case; is that what your position is?

A. On the facts and circumstances of the case.

Q. Did you analyze market efficiency for these nine affected stocks in this case?

A. Yes, I did.

Q. Did you use each of the five Cammer factors for the nine stocks?

A. Again, what I did is laid out in my report, but I focused on the factor that is -- I think I referred to all the factors, but I focused on the factor that's generally considered to be the most important of the Cammer factors, the relationship between information and price movements.

MR. ROSEN: I'll ask you to take

D. R. Fischel

a look at a document here.

(Whereupon, a document entitled In re Initial Public Offering Securities Litigation was marked Exhibit 116 for identification.)

Q. So take a look at Exhibit 116.

A. What do you want me to take a look at?

Q. Well, see if you recognize that document.

A. Well, I certainly recognize the case, because I was an expert in the case. I'm not sure I recognize this particular document.

Q. This is a decision by Judge Scheindlin in the In Re IPO Securities Litigation. It's dated January 10, 2009. It's published in the reporter 260 FRD 81, Southern District of New York 2009.

So you were an expert witness in that case?

A. I was.

Q. And that was a litigation involving markets for three hundred nine

D. R. Fischel

different IPOs; is that right?

A. That's right. I thought it was three hundred six, but whatever the number is, it was approximately three hundred nine.

Q. And in that case, did you testify on behalf of the plaintiff class?

A. I did, plaintiff classes.

Q. And what issues did you testify for them on?

A. It's more than fifteen years ago, so if you show me my testimony, I can be able to remember more carefully. But as I sit here, it had something to do with the pricing of initial public offerings and what happened on the first day and what happened over time in light of the particular allegations in the case. But beyond that, I just don't recall.

Q. If you go to page twenty-four of the PDF document.

MR. ORSINI: What's the page? Is it the page on the lower left-hand corner?

D. R. Fischel

MR. ROSEN: Yes.

Q. So that's where your name first comes up in the document on page twenty-four. It's actually I think ninety-seven of the reported decision but twenty-four of the document.

And it says that "Plaintiffs proffered Professor Daniel Fischel to opine with respect to the efficiency of the markets for six focus cases as applicable to the three hundred three nonfocus cases".

I guess question one is: Is it true that you provided an opinion on market efficiency for six of these three hundred nine cases; is that right?

A. It sounds right and the court is saying that that's what I did, so I have no reason to disagree. As I said, I don't have a career recollection of exactly what my opinions were.

Q. Have you ever had a case before in which there were three hundred nine different issuers' stocks being evaluated

D. R. Fischel

for market efficiency?

A. It's safe to say this was the only case I've ever been involved in where there were three hundred nine consolidated cases.

Q. Now, according to this opinion -- not opinion, this decision -- well, it's a judicial opinion, I suppose, it says that you evaluated the market efficiency of these stocks using the Cammer factors; is that right?

A. At least what I'm looking at, I don't see where it says that.

Q. Well, if you scroll down from twenty-four to twenty-five to twenty-six to twenty-six to twenty-seven, she discusses your analysis of the Cammer factors?

A. That's possible. I just don't have that on the screen.

MR. ORSINI: Where are you referring to, page twenty-five?

MR. ROSEN: Twenty-five to twenty-nine, I guess. I guess

D. R. Fischel

twenty-five to thirty.

THE WITNESS: Where the court's addressing the criticisms by Defendants' experts of my analysis; is that what you're referring to?

Q. She just goes through the Cammer factors and your analysis of the Cammer factors. She cites your report.

A. (Reviewing).

Okay. I've read it.

Q. So it's true that you used the Cammer factors to analyze market efficiency for these six focus stocks in the IPO litigation?

A. Yes. I said I've done that more than just this particular instance, but that's what I did here as well.

Q. Now, page thirty, they discuss -- the judge in this decision discusses incorporation of information into share price, which is the fifth Cammer factor.

You're familiar with that; right?

A. I am.

D. R. Fischel

Q. Go to page thirty.

A. I'm really bad at this, I apologize. It disappeared from the screen.

MR. ORSINI: That's impressive. I think you closed out of it. Good thing you're better at finance and economics theory.

Q. Now, this fifth factor, this is -- it says, "using event study methodology, Fischel determined that the focus case shares tended to react significantly to unexpected corporate events". And then it says, "for each focus case, Fischel listed examples where unexpected information was released to the public and the share price moved in a statistically significant manner".

So you did an event study for these focus cases; right?

A. Yes, I'm sure I did.

Q. And do you recall what process you used to -- how you selected the events and exactly how you went about it?

D. R. Fischel

A. No, I don't.

Q. Then you go to the next page, top of the next page, thirty-one. It says that "Defendants' expert submitted a number of challenges to Fischel's findings".

A. I see that.

Q. Those challenges were unsuccessful; weren't they?

A. I believe so.

Q. And it says, "first they argued that because Fischel analyzed share price movements on a daily basis" -- let's keep going.

So let's go to the one that's at the bottom of page thirty-one where it says, "second, Gompers, after examining the twenty-eight days identified by Fischel as having a statistically significant price change for Sycamore, concluded that the price moved without the release of relevant new information twenty-two of those days".

Now, Gompers is -- is it Paul

D. R. Fischel

Gompers, Professor Paul Gompers?

A. That's what it is.

Q. He's at Harvard; right?

A. He's at Harvard, yes.

Q. So he was trying to point out flaws in your analysis; is that right?

A. Again, I really have no recollection of this. I'm just reading what the court stated.

Q. And it says that Gompers examined the twenty-eight days identified by you as having a statistically significant price change for Sycamore and concluded that the price moved without the release of relevant new information on twenty-two of those twenty-eight days; right? Do you see that?

A. Yes, I see that.

Q. And it says, "Fischel responded that a conclusion of inefficiency does not follow merely because significant share price changes are not always explained by known announcements". And it says, "he argued that most of the daily variation in

D. R. Fischel

stock prices generally is unexplained by market factors, industry factors, or firm-specific news", and it cites footnote one hundred eighty-three to an article by Richard Roll called R Squared.

Do you see that?

A. Yes, I see that.

Q. Are you familiar with that Roll article?

A. Well, I haven't looked at it in a long time, but it's a well-known article, so I'm generally familiar with it.

Q. And is it -- so twenty-two divided by twenty-eight, let's see what we get, that equals 78.6. So only 11.4 percent of the news days were explained by firm-specific news for Sycamore; is that correct?

A. I don't know if it's correct.

Q. Well, twenty-two divided by twenty-eight --

A. No, I'm not quarreling about the arithmetic. In other words, I can read

D. R. Fischel

what the court says. Exactly what my analysis was and why I said it, it looks like I was commenting on the low power of R Squared typically and regression analyses, meaning that the independent variables generally have low explanatory power in understanding stock price movements. That's what I infer from what the court referred to as the authority that I cited based on that Roll article. Again, I don't have my testimony in front of me. I'm just looking at what you're saying the court said.

MR. ROSEN: I'm going to show you the Roll article.

(Whereupon, a Journal of Finance article was marked Exhibit 117 for identification.)

Q. This is an article by Richard Roll titled -- in the Journal of Finance, volume forty-three, issue three.

This is the article that you cite or that the court asserts you cited in your report in the IPO litigation; is

D. R. Fischel

that right?

A. Yes, this is the article that I apparently cited based on the description by the court.

Q. Are you aware of any subsequent academic literature that would render the Roll article no longer reliable?

MR. ORSINI: I object to form.

THE WITNESS: Well, I haven't investigated that. I mean, Professor Roll is regarded as a distinguished authority in finance and I myself, after having conducted countless event studies, have observed the same patterns of R Squared's frequently fairly low in their explanatory power of the independent variables in the regression.

But other than that, as I said, I haven't done any study of the findings, subsequent study of the findings in this article.

Q. If you go down to the bottom of page thirty-two, other factors, so there's

D. R. Fischel

a section on other factors and it looks like you also evaluated for the market efficiency study in the IPO litigation what are called Krogman factors; is that right?

A. Maybe I'm looking at the wrong page, but at least on the page that I'm looking at I don't see that.

Q. So you just looked at the additional factors were market capitalization and bid/ask spread; is that right?

A. Again, that's what's discussed here in addition to the court's conclusion that the prices -- that I showed that the price of the focus stocks were generally responsive to the release of information throughout the class period.

Q. Let's go to the loss causation section, page thirty-seven.

So tell me when you get to the section on loss causation.

A. I have the first page of it.

Q. Do you recall what the alleged

D. R. Fischel

manipulation was in the IPO litigation?

A. Only in the most general terms. It dealt with the pricing of initial public offerings and whether the allegation was manipulation or something else, I don't recall.

Q. So if you go to the top of page thirty-eight, there's a description of a methodology that you used to demonstrate loss causation. That might refresh your recollection a bit.

A. All right. I see where the court describes my methodology.

Q. So it says here, "Fischel's second analysis seeks to demonstrate a causal link between the tie-in agreements and continued inflation in stock prices".

So does that refresh your recollection as to the nature of the manipulation alleged in this case?

A. You know, in the most general terms. Again, manipulation is a legal concept which it might be that's what the allegation was. I'm analyzing the

D. R. Fischel

economic evidence. I'm not focused on the legal causes of action.

Q. And it says that you proposed two theories, the comparable index approach and the event study procedure; correct?

A. That's what it says.

Q. And what's the comparable index approach; do you recall?

A. Well, I have no recollection, actually, other than what the court says here, which appears to be quoting me that it approximates what the returns on the security would have been had the fraud not occurred.

Q. Have you ever used a comparable index approach methodology in determining loss causation damages in the last ten years?

A. I've used what could be called a comparable index approach many times for different reasons over the past ten years, I would say.

Q. Could you explain conceptually

D. R. Fischel

how that works, that methodology?

A. Again speaking at a high level of generality because I'm not thinking of application of any particular set of relevant facts and circumstances, is if you're trying to estimate what a price would be independent of the act factor that's affecting prices during the particular period, one way of doing that is to estimate what the price would have been had it performed the same way as a comparable industry index.

Q. So you assumed that, during the class period, it would have performed like the index and been subject to market forces and industry forces and you excluded the company-specific events?

A. I'm not sure I'd accept that paraphrase. You know what the price is but you know what the price is in the actual world because of a particular factor or events and you're trying to estimate what the price would be or would have been in the absence of that factor or

D. R. Fischel

event. One way of doing that is to, again, depending upon the relevant facts and circumstances, is to calculate what the price would have been in a but-for world if the price had behaved the same way that a comparable index behaved over whatever period you're trying to measure.

Q. The other methodology was the event study methodology that's mentioned there, event study procedure.

How would the event study procedure be used to calculate loss causation?

A. Well, it looks like under the facts and circumstances of the IPO litigation -- which again I'm speaking based on what the court says as opposed to a distinct memory myself of what I did -- but the idea would be that, when you know actual returns on days that are alleged to be influenced by the alleged fraud, substituting the predicted return on those days based on a regression analysis for the actual return and then just

D. R. Fischel

calculating a true value line on that basis.

MR. ROSEN: This will be Exhibit 118. It's a report -- it looks like a report that you authored for this IPO litigation. It's dated January 20, 2004 on the front. That may or may not be the date it's signed, I don't know, but that's the date on the report.

(Whereupon, a document entitled In re: Initial Public Offering Sec. was marked Exhibit 118 for identification.)

Q. Just take a look at it and tell me if that's a report that you authored in or about that time frame.

A. It looks like it.

Q. What was the purpose of this report?

A. I'd have to read it to know.

Q. Paragraph seven says, "I have been asked by counsel" --

A. I see it.

D. R. Fischel

Q. It says that you were asked by counsel for Plaintiffs to address various issues concerns loss causation in the six focus cases.

A. For the limited purpose of class certification analysis.

Q. You should read the fine print.

A. It's just a continuation of the sentence. It's hardly fine print.

Q. So you authored this report?

A. I did.

Q. So paragraph twelve, take a look at paragraph twelve.

A. (Reviewing).

Okay.

Q. So it mentions that investors who receive information that the value of the security exceeds its current market price will want to buy the security.

That's not controversial; right?

A. Well, it's a very contested case. Under the facts and circumstances of the case, that was part of my opinion.

Q. The next sentence,

D. R. Fischel

"consequently, if market participants observe strong demand for a stock by investors as alleged in the instant cases, market participants would likely infer that purchasers have positive information about the stock. This would cause market participants to revise their expectations about the value of the stock upwards, causing the price to be higher than it would otherwise be".

So is there any academic literature that supports that proposition?

A. At least on its face, that's simply a statement that if market participants believe that the value of a stock is higher than its market price, they're going to be, as a general statement, inclined to purchase and the context of the case, which is coming back to me now as I'm looking at what you're showing me is the allegation was that there was an agreement between certain underwriters to create false demand for these particular stocks through tie-in

D. R. Fischel

agreements where sophisticated investors would agree to purchase the stocks at particular prices and increase volume and demand to create the impression for uninformed investors that the informed people in the market believe the stocks were undervalued and that would communicate information to other market participants. As I think I said in the earlier discussion, I just assumed that alleged to be true based on the allegations in the case and assuming it to be true, tried to calculate the effect of those agreements for purposes of loss causation.

Q. So you're just assuming -- you're saying that paragraph twelve, that statement, "consequently, if market participants observe strong demand for a stock by investors as alleged in the instant cases, market participants would likely infer that purchasers have positive information about the stock", so that an assumption rather than an opinion?

D. R. Fischel

A. No, that's an opinion based on the allegations, assuming the allegation was true.

Q. So let's go to paragraph fifteen.

A. Okay.

Q. So that paragraph says that the stock prices of issuers' shares would continue to be inflated as long as the false and misleading information generated by Defendants' alleged misconduct continued to influence issuers' share prices; is that correct?

A. That's what it says.

Q. And it says, the last sentence of that paragraph, "indeed, as I explain more fully in part four below, the economic evidence supports plaintiff's claim that the artificial inflation persisted through December 6, 2000 and thereafter"; is that right?

A. You're reading it correctly.

Q. So just to short-circuit this, if you go to paragraphs twenty-one and

D. R. Fischel

twenty-two, the IPO of this -- like say for example FirePond stock was in February of 2000. And it was your opinion that the price for this stock was inflated, artificially inflated for, I don't know, ten months until December 6, 2000; is that right?

A. Well, I'm just reading the paragraph, and it talks about how the declines in FirePond's stock price are consistent with the dissipation of some of the inflation in the absence of any corrective disclosure, although the existence of the inflated prices dissipated over time. That's what the paragraph says.

Q. So then if you go to paragraph twenty-seven, the heading in that section is empirical evidence supports Plaintiff's allegations of continued price inflation in the six focus case stocks after December 6, 2000.

So it looks like on December 6, 2000 there was a corrective disclosure in

D. R. Fischel

the Wall Street Journal and you opine that that corrective disclosure did not dissipate all of the inflation, that there continued to be inflation in the stock for a longer period of time; is that correct?

A. You know, again I don't remember. I'm just interpreting the court's language here, which obviously speaks for itself. But it looks like I concluded that on the assumption that prices were inflated by the IPO pricing with the combined alleged tie-in sales to prop up the IPO price that the price movements of the stocks discussed in these paragraphs were consistent with the existence of that artificial inflation and notwithstanding the fact that there was a Wall Street article -- Wall Street Journal article on December 6, there were subsequent investigations of Defendants' alleged misconduct after December 6 by the U.S. Attorney, by NASDAQ, and therefore it's not correct to treat what occurred on December 6 as a complete disclosure based

D. R. Fischel

on the liability assumptions that I was assuming, complete corrective disclosure.

Q. You're familiar with the efficient market hypothesis, I assume?

A. I am.

Q. Do you believe that the stock market is efficient?

A. I think that depends entirely on the relevant facts and circumstances of which stock over which time period, but I think generally speaking, stocks traded on organized exchanges such as the New York Stock Exchange, it's reasonable to start with an assumption that, absent contrary evidence and obviously subject before analysis, that those stocks are more likely to trade in an efficient market.

Q. Is it possible to manipulate the stock of an issuer whose stock is traded in an efficient market?

A. Again putting aside whether you're asking me for a legal opinion, but if you're asking me is it possible for prices for stocks that are otherwise

D. R. Fischel

traded in an efficient market, for those prices to be distorted by conduct, yes, that's absolutely possible.

Q. What about stocks that are traded in an inefficient market? Can those stocks be manipulated?

A. The same answer about not offering any legal opinions, but prices that trade in an inefficient market, those prices can be distorted, also. It just depends on the relevant facts and circumstances.

Q. What does it mean for prices to be distorted?

A. If, for example, there are false representations about the value of the security being traded, whether the security is traded in an efficient market or an inefficient market, that would be an obvious example.

Q. So the social media enthusiasm that you referred to in your report, is all of it related to a short squeeze or is some of the enthusiasm unrelated to a

D. R. Fischel

short squeeze?

A. You'd have to look. As I said, I didn't do a comprehensive analysis of all the discussion on social media, but a lot of it that I'm familiar with was about the situation that institutional investors were in because of the short squeeze positions that they took and the opportunities that that created for retail investors.

Q. What is the difference between a stock's market price and its value?

A. You have to have a definition of what "value" means.

Q. Do you have a definition of "value" for a stock?

A. Well, there's a general definition of what a fair market value is, a price between a willing buyer and a willing seller where both have reasonably complete information and neither is under a compulsion to buy or sell. That's a generally accepted definition of fair market value. So under that definition,

D. R. Fischel

as long as those criteria are met, price and value are the same. There could also be private information which suggests a departure from price and value, at least in the opinions of certain traders.

There's an economic literature on the reasons why prices are efficient is because of the consent attempt by market participants, particularly sophisticated market participants, to identify mispriced securities so arbitrage opportunities are eliminated in that process, creating the existence of an efficient market. But as has been discussed in the economic literature, it's something of a paradox, meaning that, in order for markets to be efficient, they can't be perfectly efficient because if it's perfectly efficient, then there's no incentive to search and there has to be an incentive to search, which is in other words a reward for finding mispriced securities which is what eliminates the existence of mispriced securities because of the arbitrage

D. R. Fischel

opportunities that result.

MR. ROSEN: Why don't we take a break.

(Whereupon a break was taken)

Q. What are noise traders; do you know?

MR. ORSINI: Sorry, did you say "noise"?

MR. ROSEN: "Noise", yes.

THE WITNESS: That's just -- I don't know if there's a fixed definition. It's a term that's usually used for uninformed traders.

Q. Were the social media investors in these nine stocks noise traders?

A. As I said, I'm not sure there is a fixed definition of what a noise trader is. And what the particular circumstance for any trader is would depend on the relevant facts and circumstances for that trader.

Q. Do you know what the term "investor sentiment" means?

A. I think that's similar, meaning

D. R. Fischel

-- it means the sentiment of investors. Other than that, I'm not sure how else it could be defined.

Q. In the academic literature, the term "noise traders" is often used.

Are you familiar with that?

A. Yes.

Q. Now, in the academic literature, is it understood that noise traders make judgment errors in their investment?

A. You know, you'd have to show me what academic literature you're referring to, whether you're talking about individual traders or traders as a class. And again, I'm not sure what academic literature you're referring to. If you were doing any study of a particular situation, it would depend on the relevant facts and circumstances.

Q. Why didn't you address the first four Cammer factors in your opening report?

A. Because I didn't think they were particularly relevant for the issues that

D. R. Fischel

I was analyzing. They weren't necessary to my opinion.

Q. Let's look at your event study.

It begins at paragraph thirty-three of your opening report; is that right?

A. Was that a question, I'm sorry?

Q. I was just saying that it looks like your event study's described in your report beginning at paragraph thirty-three.

A. That's the section of my report that deals with whether the stocks during the -- what I refer to as the preclass period traded in an efficient market.

Q. So we'll focus on the events in the preclass period.

So did you do an event study on just the preclass period or both the preclass period and the class period?

A. I did an event study in the preclass period in my opening report and, in light of what Dr. Werner stated, I also did an event study of the class period in

D. R. Fischel

my rebuttal report.

Q. And why did you do an event study of the class period in your rebuttal report?

A. Because Dr. Werner expressed an opinion that the stocks during the class period traded in an inefficient market because of the alleged manipulation, and I didn't think that was an accurate characterization as I described in my rebuttal report.

Q. Why -- so you think that the -- well, what was inaccurate about it?

A. I don't believe that the reasons that the stocks traded in an inefficient market was because of alleged wrongdoing by the defendants, which was the basis of Dr. Werner's opinion, as I discuss in my rebuttal report.

Q. So you believe that the stocks traded in an inefficient market during the class period, but not because of the restrictions on the purchase of the affected stocks?

D. R. Fischel

A. I believe the stocks traded in an inefficient market during the class period because they also fail factor five of the Cammer factors, which is generally regarded as the most important of all the Cammer factors.

Q. But if a stock is being manipulated, wouldn't the normal test for efficiency be affected by that manipulation under certain circumstances?

A. I mean, are you asking the abstract or under the facts and circumstances of this case?

Q. Let's start with the abstract.

A. I wouldn't say you could draw that implication necessarily. I think it would depend on the facts and circumstances again suggesting that I'm giving a legal opinion on the meaning of "manipulation".

Q. Well, now that you mention it, let's go to paragraph thirty-eight of your opening report.

A. Okay.

D. R. Fischel

Q. And the second sentence says -- well, the first sentence says, "as described above, the prices of the affected stocks increased dramatically and artificially during the preclass period. These artificial price increases were widely recognized by market participants as temporary market manipulations and/or coordinated purchasing by retail traders due to heightened commentary on social media".

So was it your opinion that there were temporary market manipulations in the nine affected stocks during the preclass period?

A. That is my opinion as to the reasons that were given and widely recognized for the causes of the artificial price movements during what I refer to as the preclass period.

Q. So what are the market manipulations you're referring to there?

A. Specifically the perceived existence of short squeezes in multiple

D. R. Fischel

stocks.

Q. Anything else?

A. With respect to the use of the term "temporary market manipulations", it says, "and/or coordinated purchasing by retail traders due to heightened commentary on social media".

Q. Is it your opinion that coordinated purchasing by retail traders was market manipulation in this case?

A. Again, that's asking for a legal conclusion. It's my view that that contributed or was perceived to have contributed to the extreme price increases and extreme increase in volatility during what I refer to as the preclass period.

Q. But it's not your opinion that coordinated purchasing is market manipulation?

A. Again, that's a legal conclusion. I'm not offering any legal opinions one way or another, and I'm certainly not suggesting that any particular individual in the preclass

D. R. Fischel

period satisfied all the legal requirements for manipulation. I'm not expressing any legal opinions on any subject.

Q. The next sentence says, "absent Robinhood's and other brokers' action, there is no way to know in the but-for word whether prices would have kept rising, how long they would have remained artificially high, and how quickly they would have fallen to nonmanipulated levels".

So is it your opinion that the prices were at manipulated levels?

A. It's my opinion that prices were at artificial levels because of a perception of the existence of short squeezes, which is generally understood as a type of manipulation, as well as the effect of coordinated purchasing by retail investors due to heightened commentary on social media.

Q. Let's go back to your event study.

D. R. Fischel

So to do your event study on the preclass period for your opening report, could you please list -- give me a step-by-step process that you undertook to do the event study?

A. The step-by-step process which is described in appendix C.

Q. And which sentence is it that you're referring to in appendix C?

A. The entire first paragraph at table one. That's a step-by-step description of --

Q. So --

A. A step-by-step description of the event study that was used in this case, the regression analysis that produced the event study.

Q. The third sentence of paragraph one says, "this is typically done by one, estimating historical relationship", et cetera.

So when it says this is typically done, are you saying this is what was actually done?

D. R. Fischel

A. Yes. If you keep reading in the paragraph, that's exactly what it says.

Q. So is it fair to say the first thing you did in your event study is you estimated the relationship between the affected stocks' returns, the broad market return, and the returns of various industry indices?

A. You establish a relationship between the returns on a particular security and the returns of the overall market and industry index during a particular period, you could call it a control period, in this case for the one hundred twenty trading days prior to January 1, 2021 and then use that relationship to generate predicted returns during the forecast period and then calculate the difference between the actual returns and the predicted returns and then analyze whether that difference is large enough or not to be deemed statistically significant so that it's possible to reject the null hypothesis.

D. R. Fischel

Q. So first you did this regression analysis and you determined which days during the preclass period were statistically significant -- had statistically stock price movements and which days didn't; is that correct?

A. I'm sorry, I'm not sure it is correct, the way you formulated the question.

Can you repeat it?

Q. So first you performed the regression analysis and determined which days during the preclass period were statistically significant and which days were not?

A. But when you say first, that's what's misleading about your question.

Q. What did you do first? If that wasn't the first thing, what was the first thing?

A. You establish a relationship between the movements of a particular security and the movements of the overall market and a particular industry index as

D. R. Fischel

a separate independent variable during a period, as I said, you could call it a control period on an estimation period and then use that to generate predicted returns during the period in question, in this case what I refer to as the preclass period.

Q. So I meant to subsume the creation of the market index and the industry index as part of the regression analysis.

So first you have create your market and industry index and estimated returns and then you plug that into the regression analysis; is that right?

A. No, that's not right.

Q. Well, tell me what's right.

A. I'm going to repeat what I just said. First you establish a relationship, which is not a manner of predicting returns, you establish a relationship between actual movements of the security in question in relation to movements in the overall market and movements in a

D. R. Fischel

particular industry index. And once you have that relationship established, you then use that relationship to generate predicted returns during the forecast period, which for purposes of my initial report, was the preclass period.

Q. And then what did you do?

A. Then you can compare the predicted returns with the actual returns. And once you know what that difference is, in light of the relationship that you've calculated, you're able to determine whether the difference between the actual return and the predicted return is large enough to be calculated -- is large enough to be determined to be statistically significant typically at the ninety-five percent confidence level, which enables you to reject the null hypothesis, meaning that you could observe a difference between the actual and predicted relationship -- the actual and predicted returns, excuse me, that large solely as a result of chance less than five percent of

the time.
Q. And did you do that?
A. Yes, that's exactly what we did.
Q. And then let's see if I've got this right.
And the results of that is on page twenty-three, Exhibit 3?
A. Yes.
Q. So once you got Exhibit 3 and you understood which days were statistically significant during the preclass period and which days weren't, then what did you do for your event study?
A. Report all the different results and calculate a total cumulative residual return.
Q. And then was that the completion of your event study, just determining what days were statistically significant and what days weren't, or was there more to it?
A. Well, it's the percentage return on every day for all the different stocks, which days are statistically significant

for all the different stocks, and what the cumulative -- the total cumulative residual return is for all the different stocks.
Q. But then do you do some analysis to determine whether the share prices for these stocks move in response to news, or you didn't do that?
A. You know, that's the analysis in appendix D.
Q. Was that part of an event study, your analysis in appendix D?
A. An event study is the relationship between events and prices. The event study itself just tells you what the stock price returns were in relation to the predicted returns under a particular model. It doesn't tell you anything about events. What the purpose of an event study is to study the relationship between events and prices and that's what was done in Exhibit D with respect to information about particular companies that was publicly disclosed

during the preclass period.
Q. You said Exhibit D or was it appendix D?
A. Appendix D, I'm sorry.
Q. Now, is the work in appendix D here, is that what was commonly referred to as the fifth Cammer factor analysis whether stock prices are moving in response to news?
A. I would say Exhibit D in relation to Exhibit 3 is something that can be used to analyze factor five of the Cammer factors.
Q. Is that what you did?
A. In part.
Q. Which part?
A. What's included on appendix D.
Q. So is appendix D the analysis of the fifth Cammer factor then, whether or not it's responding to news?
A. In part. There's also a discussion in my report about all of the disclosures by companies, price targets, demonstrating that there was a lot of

economic evidence demonstrating that price movements were not attributable to new value-relevant information about companies but were only explained by factors unrelated to fundamentals about the companies, especially the perception of short squeezes and the excessive discussion in social media about the effect of the short squeeze position of large institutional investors. I would say all of that information on appendix D as well as the other information discussed in my report that I just described is all relevant to the application of factor five of the Cammer factors.
Q. Now, is it true that before you looked at any of the news, you first determined which days during the preclass period were statistically significant, had statistically significant stock price movements?
A. No, that's not true.
Q. So how did you determine which days -- which news days to include in your

event study?
A. Every day was included in the event study in a particular period. There was no choice of days.
Q. Is that how event studies are normally done, you just look at every day during a particular period?
A. Again, every case depends on the facts and circumstances of that case, but typically I would say yes.
Q. Isn't it highly biased to do the event study the way you did it?
A. It's not at all biased. It's completely routine and standard.
Q. Really?
So isn't it true you identified statistically significant days and then went to see if there was news on those days? Isn't that what you did?
A. No, I wouldn't say that's exactly what we did.
Q. Tell me what you did then. Tell me what you did.
A. The model is a model to

determine the existence of statistically significant days. You don't know the existence of statistically significant days by an I-know-it-when-I-see-it test. You have to perform the statistical analysis to know which days are statistically significant. That analysis is done in a particular context, and the particular context in this case depending on whether you're looking at the preclass period or the class period depends on what you're trying to analyze.
Q. So when you -- for example, on January 4 it says there's no company-specific news.
Did you make that determination before or after you had determined which days were statistically significant during the preclass period?
A. I'm trying to figure out the best way to make it clear what we did.
Q. Just tell the truth.
A. Which is to pick a period of days to analyze whether stock price

movements over some period of days is -- which days were statistically significant and which days were not. And what appendix D does is look at every day during that period, whether the days were statistically significant or not statistically significant, and analyze what potentially relevant firm-specific information was disclosed on those days based on the search criteria that we used that are described in my report.
Q. I'm going to give you a chance to give me a yes or no answer here.
At the time you determined whether news was value-relevant material news for each of these days during the preclass period, had you already determined which days were statistically significant?
A. It's just not an accurate description of --
Q. You don't want to say yes or no? You don't want to tell the truth?
MR. ORSINI: Okay. Objection.

Argumentative.
Q. I'm asking did you know when you determined which days had value-relevant news, did you or did you not know whether the stock price had had a statistically significant move that day.
A. The analysis with respect to publicly available news had nothing to do whether stocks were -- whether movement of stocks was statistically significant on any particular day. It was an analysis of every day during a particular period. You don't know whether stock prices are statistically significant until you perform the statistical model, but you can analyze whether information was publicly disclosed on every day whether or not stock price movements were statistically significant, and that's exactly what we did.
Q. Do you deny having knowledge of whether a day was statistically significant or not at the time you made the determination whether or not there was

value-relevant news that day?

A. Yes, I deny that. One thing has nothing to do with the other. The existence of statistically significant price movements did not determine or affect what days we looked for publicly available news.

Q. You're not answering the question. You just avoided the question.

I didn't ask the question whether it determined, I asked whether you had knowledge of whether a day's stock price movement was statistically significant or not at the time you made the determination that there was or there was not value-relevant news, and you said you're not answering the question. And it's quite obvious from your report that you had knowledge of whether the stock price move what is statistically significant or not at the time you determined whether there was value-relevant news. So you can either own up to it or obfuscate.

So what would you prefer to do?

MR. ORSINI: That's not a real question.

Ask a question and he'll answer it.

Q. So who went through and determined whether there was value-relevant company-specific news in appendix D? Who did that? Whose job was that?

MR. ORSINI: We covered that this morning.

THE WITNESS: I think one or more research assistants attempted to find every single firm-specific announcement or SEC announcement -- information contained in an SEC filing that was publicly disclosed for every stock on every day.

Q. Did I ask find? I didn't use the word "find". I said who determined whether it was value-relevant.

A. I just told you one or more research assistants.

Q. So you didn't determine whether news was value-relevant?

A. There was no determination whether the news was, in a fact, value-relevant. It was every disclosure that identified a particular firm, that's what's listed in appendix D.

Q. So you're telling me appendix D lists every news article about every firm?

A. Every news article putting aside repetitions of the same article other than articles which attribute price movements not to firm-specific announcements about the firms but rather -- the lack of firm-specific announcements but rather the existence of artificial prices caused by a perceived short squeeze or excessive social media discussion about the effect of the short position of institutional investors in terms of opportunities for retail investors.

Q. Isn't it true that to do a proper event study, one should select the event or events to be studied before

determining whether or not there was a statistically significant stock price movement on the date of the events?

A. It's true that you have to select a period of time that you want to analyze, so that's true. In other words, the event study doesn't analyze a random time. There's a period of time that's connected to the facts and circumstances of what you want to analyze and you try and conduct a regression analysis based on a statistical model that's responsive to the period that you want to analyze.

Q. So if I wanted to do an event study over a period of a year, I would look at every trading -- I was first statistically do an analysis and determine which days were statistically significant and then I would look at the news for each day and determine whether there's value-relevant news?

A. That's completely wrong.

Q. But isn't that what you did here?

D. R. Fischel

A. No.

Q. Didn't you do a regression analysis and determine which days were statistically significant for each day during this time frame for the preclass period?

A. Yes, but that's a product of the statistical analysis which is very different from the description of it that you had in your previous question.

Q. So once you knew which days were statistically significant, you then looked to see if there was news that could be considered value-relevant; is that correct?

MR. ORSINI: Asked and answered.

THE WITNESS: No, that's not correct. We looked for news on every day, whether or not the result was statistically significant.

Q. So when you went to look for news on every day to see if there was any value-relevant news, you had already determined which days were statistically

D. R. Fischel

significant; correct?

A. No, the two analyses that I'm trying to describe to you are completely separate.

Q. Well, which happens first chronologically?

A. I think they happened simultaneously, as they typically do.

Q. Simultaneously?

A. Yes, I think a statistical model does not tell you anything about events. So if you want to analyze events during a particular period, that's a completely different search than the process of calculating a statistical analysis of stock price movements.

Q. Now, who is the person who determined whether there was value-relevant news on each day during the preclass period?

A. You know, as I've stated, the analysis isn't attempting to filter which days are value-relevant, it's attempting to report all news articles that satisfy

D. R. Fischel

certain criteria for a certain search based on particular sources and information.

Q. Let's start, page D1, your report.

A. Page D1 of my report. Let me just find it.

I have it.

Q. The first row, January 4, 2021, this shows whether there was the abnormal return and the T statistic, and then it shows company-specific news.

Who determined whether or not there was company-specific news on January 4, 2021?

MR. ORSINI: Asked and answered about twenty times.

THE WITNESS: As I've said multiple times, there is standard databases that we use and one or more research assistants.

Q. So a research assistant determined whether or not there was company-specific news on January 4, 2021?

D. R. Fischel

A. Whether they could identify a -- not whether it's value specific news, whether it's any news on that day that was publicly announced based on the sources that we looked at.

Q. So does appendix D list all of the company-specific news, every single piece of company-specific news during the preclass period?

A. That is about developments in the different stocks as opposed to announcements about the stocks that talk about the absence of any explanation for price movements. Those announcements are also discussed but are not listed in appendix D because appendix D is conducted for a different purpose, and you can see that there are some days with no announcements, there's some days with announcements, there are announcements are days that are statistically significant, as well as announcements on days that are not statistically significant. That's the purpose of appendix D.

D. R. Fischel

Q. And who determined whether or not the news set forth in -- the company-specific news was value-relevant or not?

A. As I said multiple times, the purpose was not to determine whether the information was, in fact, value-relevant. I think the term that's used in the text is potentially value-relevant, meaning that it's a company-specific news announcement which could or could not be value-relevant depending on the nature of the information and the stock price reaction to the announcement of the information.

Q. So you're not the person who determined whether or not the company-specific news that was obtained from Factiva was value-relevant or not during the preclass period; is that correct?

MR. ORSINI: That mischaracterizes probably an hour of testimony on the same question

D. R. Fischel

already.

If you have something to add, go ahead.

THE WITNESS: That's a mischaracterization of the analysis that was performed and the reasons why it was performed.

Q. So who is the person who determined whether or not the news on any specific day during the class period was value-relevant?

MR. ORSINI: Literally asked and answered at least a dozen times.

MR. ROSEN: He hasn't given me a name.

Q. Who's the name? Give me the name. Tell us the name of the person who did this.

MR. ORSINI: The "this", the notion that there was a "this" is mischaracterizing the testimony.

Q. Who is the person that did appendix D?

A. The statistical analysis is one

D. R. Fischel

part of appendix D. I've described the model, how the model was created. The results of the model --

Q. I'm just asking for a name. I'm just asking for a name.

Give me a name.

A. The statistical analysis was designed by me.

Q. The --

A. Excuse me, let me just finish.

As I stated earlier, the person who actually did the analysis of pushing the buttons on the computer to produce the work product on the model that was specified by me that's reported in appendix D, I don't know the name of that person.

Similarly, with respect to the right side of appendix D, the company-specific news, that was derived from data sources that were identified by one or more research assistants. That's the answer to your question.

Q. But you don't know their names?

D. R. Fischel

A. Not as I sit here, no.

Q. And what did you do to ensure that the company-specific news listed in Exhibit D was properly listed there?

A. I looked at all the disclosures, every single one, and I made a determination that they fit the criteria that was established for appendix D, and recognizing that the process of downloading articles from standard databases is a -- just a matter of plugging into the databases to generate the output on Exhibit D subject to my review of every single article that's referred to, that's the process that was used.

Q. So on page D1 of appendix D, there are a number of rows that are empty under company-specific news, particularly January 4, 5, and seventh through fifteenth shows no news.

Do you see that?

A. Correct.

Q. What did you do to ensure that

D. R. Fischel

appendix D accurately -- was accurate in not listing any company-specific news for those days?

A. I trusted our process so that relatively, as I said, purely mechanical process of downloading articles and having results checked and rechecked.

Q. So you had the research assistants ensure that all the company-specific news was listed in those rows where there is nothing listed in appendix D1?

A. I think it's fair to say that I relied on research assistants to download the standard data sources that I referred to, but there's also the relevant facts and circumstances of the case. If there was any discussion in any of the voluminous amounts of information that I reviewed in the complaint, the court's opinion, all the analyst reports of other firm-specific, company-specific information that I saw that wasn't listed on appendix D, that would have been a red

D. R. Fischel

flag at least to investigate further. I'm not aware that there are any omissions in appendix D for the -- under the criteria that I specified. If anybody points anything out that was left out, which is possible because human error is always possible, I would take that into account and add it to appendix D. But I don't think the qualitative conclusions from appendix D in light of the facts and circumstances described in my report would be affected even if there were some -- even if there was some news on the days that you mentioned, January 7 to January 15, where none of those days was statistically significant, whether or not there was any company-specific news that were disclosed on that -- that was disclosed on that day that our research assistants omitted if, in fact, they did omit anything, which I'm not aware that they did.

Q. Now, paragraph thirty-six says, "this review demonstrates that the vast

D. R. Fischel

majority of the price increases for all nine affected stocks cannot be explained by new value-relevant company-specific information".

Did you write that?

A. I'm sorry, I'm looking at --

Q. Paragraph thirty-six.

MR. ORSINI: It's the penultimate sentence in that paragraph.

THE WITNESS: And there's a footnote after that.

So I would say I did a lot of writing in connection with this report. I don't remember if I wrote this specific sentence as opposed to wanting to highlight the importance of this specific sentence as one of the important conclusions of my analysis.

Q. And paragraph thirty-seven says, "thus, I find the affected stocks did not trade in an efficient market during the class period".

Is that because the vast majority of the price increases for all

D. R. Fischel

nine affected stocks during the preclass period cannot be explained by new value-relevant company-specific information?

A. Yes, in light of the relevant facts and circumstances in this case. If you look at Exhibit 3 which is on the next page which is also part of paragraph thirty-six, not the part that you asked me to read but it's the introduction to the paragraph that you're referring to, if you look at January 27 and you look at the price increases on that day -- not price increases, I'm sorry, the increases in returns on that day for AMC, 298.35 percent going across ranging from I guess 480.08 percent is the largest number and 11.95 percent is the lowest number with no value-relevant information disclosed on that day, I would say that's an illustration of why this period of time cannot be described as trading in an efficient market combined with the other facts and circumstances that I describe in

my report.

Q. And what proportion of stock price increases, in your opinion, must be explained by the existence of value-relevant news for a stock to trade in an efficient market?

A. I don't know if there's a particular dividing line. I think it just depends on the relevant facts and circumstances.

Q. Is there a range, a guidepost, anything you can think of?

A. Well, I can certainly think of what I analyzed in this particular case under the facts and circumstances of this case, but it's function of the nature of the price increases, the commentary about the price increases, the lack of company-specific value information explaining those price increases, all the commentary by companies and other market participants about the lack of relationship between value-relevant information for particular companies and

the stock price -- increase in returns to holding particular securities during this period, the price targets, really all the different facts and circumstances and economic evidence that I discuss in my report.

Q. So in the IPO litigation, you testified that even though only eleven percent of the days with statistically significant stock price increases had value-relevant news, it was still efficient, but you don't think that same proportion would hold here, for some reason?

MR. ORSINI: Objection to form. Incomplete.

THE WITNESS: I'm not sure I would compare the circumstances in that case, to the extent I remember them, to the circumstances in this case. And again, I would -- even though I don't have a clear recollection of everything that I did and why I included it, I did notice in

what you referred me to that the court concluded that I demonstrated that there was a clear relationship between events, information disclosing events and stock price reactions to those events.

Q. Have you ever calculated damages for a Section 10b case under the Exchange Act?

A. I think I was a plaintiff's expert in a jury trial that resulted in the largest damage verdict in history in a securities fraud trial, the Household case, where the -- that verdict was largely affirmed but not completely affirmed on appeal and then the case settled for billions of dollars, as I recall. So I was a damage witness, a loss causation and damage witness in that case and had an opinion on damages, although my opinion was on inflation per share as opposed to aggregate damages, which was calculated later. And I've done that analysis many other times, but that was a

particular example that sticks out in my mind because it was contested litigation that resulted in a jury trial and an appeal and then a remand, and then ultimately a settlement.

I did something similar in the Pfizer securities fraud case where I was also a plaintiff's damages expert, I did something similar in the IPO allocation cases that you've pointed me to, as well as a number of other cases that just didn't result in testimony. So the answer to your question is yes, many times. And it's probably the case that there were allegations under Section 10b -- that was your specific question -- but I'd have to check to make sure that that was the case.

Q. And did you use the out-of-pocket method of damages?

A. Again, that's a legal concept. In all those cases, I calculated inflation per share.

I've also conducted many analyses -- under various assumptions

about what any given assumption about inflation per share translates into aggregate damages, which depends on, you know, factors such as how many members of the class are going to claim, whether there are offsets of gains against losses, and how to handle ins and outs, different factors that can have an influence on trying to translate inflation per share to aggregate damages.

Q. So you said that rather than using the out-of-pocket measure of damages, you simply calculated inflation per share to arrive at damages in these 10b-5 cases you worked on; is that right?

A. No, that's wrong, I did not say that.

Q. Well, what's the relationship between inflation per share and the out-of-pocket measure of damages?

A. Again, that's a legal question, and I'm not expressing any opinion on any legal issue.

Q. So how would one go about

calculating inflation per share or deflation per share in our case here, Robinhood?

A. You would calculation inflation per share if you felt there was inflation per share with respect to allegations by class members. I don't think that issue can be determined at this stage for any particular class member. One would need to know more facts and circumstances, including whether there's any inflation for any class member. But in any event, that determination for me at least at this stage is premature.

Q. Did you make any effort to determine -- did you make any effort to identify a method for determining the deflation per share during the class period?

A. Again, if you mean deflation per share meaning transaction prices away from true value, that's the way I was using the term "inflation" or "deflation" per share, from my analysis so far I think it's the

reverse. I think during the class period, because of all the factors that I mentioned earlier, prices got closer to the true value, not moved further away from true value, that the artificial prices -- the magnitude of the existence of artificial prices dissipated during the class period at least in part. So at least based on my analysis, so far I don't think there was any artificial deflation during the class period. I think exactly the reverse, that prices during the class period moved closer to their true value as demonstrated by the level of prices immediately after the class period as I've discussed earlier and also as I discussed in my reports.

Q. So you made no effort to determine deflation per share during the class period; is that correct?

A. As I said, that determination is really premature in terms of the analysis that I've conducted, but based on what my opinion is as of this time, I think price

movement during the class period as a result of all the different factors that I mentioned earlier dissipated the existence of artificial inflation that preceded the class period so that prices moved closer to their true value during the class period, which is the opposite of artificial deflation during the class period.

And I said, one way to know that, in addition to what happened in the preclass period, is to ask the question of what happened immediately after the alleged wrongdoing stopped. Did prices rebound or the affected stocks did they rebound to the January 27 level, and the answer is the opposite. For I think eight of the nine stocks, they were lower in the volume-adjusted price analysis that I did in my report than they were even during the class period, and that combined with all the other economic evidence and the relevant facts and circumstances that I describe in my report is inconsistent with

D. R. Fischel

deflation, it's removing artificial inflation, moving prices closer to their true value, to their correct level.

Q. And it's true that you made no effort to identify any methodology to determine deflation per share in this case; is that correct?

A. No, that's incorrect.

Q. What effort did you make to identify the methodology for determining deflation per share according to the plaintiffs' allegations in this case?

A. Well, recognizing that my analysis was for the purpose of analyzing whether individualized inquiry was necessary for all the reasons that I described as opposed to assuming that there was integrity on the market price on a class-wide basis or that there was an efficient market in either the preclass period or the class period, what my analysis demonstrates both in terms of stock price movements in the preclass period and the preclass period as well as

D. R. Fischel

all the other economic evidence and facts and circumstances that I describe in my report, that the prices during the class period moved closer to their true value because the temporary price inflation that I described at length began to dissipate during the class period, which is the opposite of deflation per share if what you mean by deflation per share is that the difference between prices of sales and true value increased during the class period and, in my opinion, it decreased during the class period as evidenced by the price declines, the fact that the price increase is caused by --

Q. You're not answering the question. You're going on and on and on and not answering the question.

MR. ORSINI: Yes, he is.

MR. ROSEN: We're going to have to stay the whole seven hours if he continues to do this. I'm just saying.

MR. ORSINI: If we're here seven

D. R. Fischel

hours it's because you've spent five hours asking the same question.

But continue, Professor.

THE WITNESS: I was just going to say the dissipation of the artificial price increases during the class period moved prices clear to their true value for all the reasons that I've just said, as well as all the reasons discussed in my two reports.

Q. Now, if Plaintiffs win on liability here and your theory that you just expounded is not accepted by the jury or the judge and it's determined that Plaintiffs are entitled to damages for the difference between the value of the stock on January 27 and the sale prices, how would you go about determining damages?

A. I don't know. If I make those assumptions which, as you know, are completely contrary to my own opinion and if I were asked to try and apply a finding by a jury or a court, I would have to know

D. R. Fischel

what the finding was and what it was based on and what the evidence was and perform the analysis at that time.

Q. So isn't it true that your opinion that damages are not capable of class-wide determination a function of having to prevail on your theory of whether there was artificial price inflation prior to the class period?

A. No, I don't think that's true. First of all, I'm not the ultimate fact finder, or the court, so I'm not going to comment on what courts or jurors might determine in the future. That is something that I'm not offering any opinion on one way or the other. I'm offering opinions on what I believe based on the analysis that's conducted in my reports. And I talk about multiple reasons why, in my opinion, it's not possible to calculate damages on a class-wide basis using a common methodology, not just the one that you mentioned.

D. R. Fischel

Q. Let's go to paragraph forty of your opening report.

It says, "Plaintiffs have no way of disentangling the effects of confounding events".

A. That's right.

Q. Did you make any effort to disentangle the effects of confounding events?

A. No, I didn't, other than to highlight there are a lot of confounding events occurring at the same time.

Q. But you made no effort to identify potential methods to disentangle the effects of confounding events?

A. Other than to say I don't believe there's anyway to do it that's been demonstrated so far or that I can think of.

Q. What efforts did you make to think of methods to disentangle the effect of confounding events?

A. I discussed this already. There are actions by multiple economic actors at

D. R. Fischel

the time. There is going to be reversion because the price increases were, by definition, temporary, so that reversion was going to occur sometime in any event, typically in a very short period of time subsequent to the end of the perceived short squeeze. All those different factors were all occurring basically at the same time, and I don't know -- I can't think of anyway that it's possible to isolate the incremental effect of each one of those factors on the stock price declines during the class period.

Q. And is it your opinion that because you can't think of any way to disentangle the effects, no one else can?

A. No, that's not my opinion. My opinion is that Dr. Werner has not suggested any method for doing so and, based on what I know now, I think it would be extremely difficult if not impossible to have a common method that could be used to calculate damages on a class-wide basis.

D. R. Fischel

Q. Are you offering any opinion as to whether or not a presumption of reliance is available under affiliated use in this case?

A. I think that's a question asking for a legal conclusion and I'm not offering any legal conclusions.

Q. Are you offering any opinion as to any other presumption of reliance should be made available to the class members in this case?

A. That's another legal opinion that I'm not offering any opinion about one way or the other.

MR. ROSEN: Let's take a break.

(Whereupon a break was taken)

Q. Are you aware that the Securities and Exchange Commission issued a report about the -- I think they called it the meme stock event?

A. I am.

Q. Did you read it?

A. You know, I read parts of it. I'm not sure I read the entire report.

D. R. Fischel

Q. Now, in your rebuttal report at table three, you just look at the price -- prices of the various affected stocks as of February 5 and you determined that there are no damages based on the fact that the prices on February 5 were lower than the average prices during the class period; is that right?

A. No, that's wrong.

Q. Explain it to me.

A. I don't have any opinion about damages that I express in this particular report.

Q. So how would you characterize the inference drawn from table three then? It says that, "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".

A. And there's a footnote thirty-eight.

Q. So this goes to loss causation

then, not damages; is that correct?
A. In the context of this report, it goes to whether there's a common method that can be used to calculate damages.
Q. So the fact that it didn't -- the stock prices didn't bounce back, how does that relate to a common method to calculate damages?
A. Because what Dr. Werner stated was the common method was to compare sale prices during the class period to the prices on January 27 because, in his opinion, the proper method was to compare trading prices at a loss with what the price was on January 27, assuming that that's the true value of the stocks.
Now, there's all kinds of things wrong with that as I discuss in this particular section, but one of the things wrong with it is the assumption that January 27 is the true value that damages should be measured against by comparing sale prices -- sale price declines adjusted I think he says for market and

industry movements to January 27 and for the reasons that I state, at least one of the reasons, there's no basis to assume that the true value is on January -- for these stocks is on January 27 and a lot of reasons to believe the opposite.
Q. So you chose to only look at prices on February 5, 2021 in table three; is that correct? You didn't go out any further past February 5 to February 6 or later; is that right?
A. On this particular table, that's right.
Q. Now, why didn't you look further than just one day?
A. I could have, but the main reason was the more days you look at, the more other factors that can begin to influence prices and the day when the restrictions stop that are alleged to be depressing prices, one test of that is to look at whether the price after restrictions stop bounces back to the alleged true value price, which in Dr.

Werner's analysis is January 27. And since what you find, as demonstrated by table three but not just table three, it's really the opposite that the price when the restrictions stop is even lower than -- speaking at a high level of generality with respect to the nine stocks -- than what the prices were during the class period and that is, in my opinion, an important piece of economic data that's inconsistent with Dr. Werner's proposed method of calculating damages using a common method.
Q. So for many of these stocks, they ended up going back up subsequent to February 5.
Did you know that?
A. As I said, I didn't investigate what happened after February 5 for the reason that I stated.
Q. In the IPO litigation, I believe your opinion was that the stock price -- prices for those IPO stocks, the three hundred nine stocks, the inflation caused

by the manipulation continued for ten months after the misconduct at issue ceased.
Why couldn't the deflation here by the manipulative conduct continue for some longer time period once the restrictions were lifted?
A. Well, first of all, for reasons I've already stated, I don't accept the premise. Based on what I've seen so far that there was deflation -- I actually said in my previous answers that it's quite possible that the dissipation of artificial inflation that existed in the preclass period could have continue beyond February 5, so that's certainly a possibility. And the fact that prices fluctuated after February 5 and prices for some or most of the stocks went up, the question is whether they went up to the January 27 level or anything close to it as a result of the cessation of the restrictions and I don't believe that's the case because there would be

disclosures to that effect if it was the case.

Q. So in paragraph thirty-nine of your opening report, if you please turn to that paragraph, there's an analysis of the trades from some of the named plaintiffs.

Did you draft paragraph thirty-nine of the report?

A. With respect to this particular paragraph, I certainly didn't draft the calculations that are reflected in this particular paragraph. I think the first sentence and the last sentence about what the data show, those were certainly conclusions of mine.

Q. Now, in paragraph thirty-nine, it describes the named plaintiff Joseph Gurney having purchased some AMC shares, and it lists his average purchase price and then the average sale price. And it says that -- well, I'll read it. It says, "for example, named plaintiff Joseph Gurney purchased 21.27 AMC shares at an average price of $5.64 on January 26-27,

2021 and sold the shares at an average price of $8.01 for a gain of $50.39, a forty-two percent return, on January 28, 2021".

So is that -- is your testimony that Mr. Gurney suffered no damages in the case because he sold at a gain of $50.39 per share? I'm sorry, an average -- because he made a gain of $50.39? Is that your opinion?

A. As I said, I'm not offering any opinion on damages. My opinion in this particular paragraph is that given -- as the first sentence says, "given the volatile and nonuniform movements of each of the affected stocks during the class period, even small changes in the timing of trades could alter whether an individual incurred a loss as a result of a sale and therefore qualifies to be a potential class member". And if you look at the last sentence in the paragraph it says, "individualized inquiry would be required to determine whether and how a

potential class member would have changed their trading behavior and therefore whether or not they would have sustained a net gain or loss in the affected stocks in the but-for world".

Those are two related by different points in support of my general opinion that Dr. Werner has not provided a common methodology that could be used to calculate damages during the class period without in any way conceding on my part that there were any damages.

Q. So it's fair to say you're not saying that Mr. Gurney or anyone else didn't suffer damages based on these calculations; is that correct?

A. I'm not offering that specific opinion, no.

Q. Now, is it your opinion that the plaintiffs have to prove what they would have done, what transactions they would have -- what sales they would have made had there been no manipulation?

A. Again, I'm not offering any

legal opinions. My only point is on that particular issue is that there's no way of knowing what would have occurred in the but-for world. A calculation -- a common method of calculating damages has to have some comparison of what happened in the real world versus what would have happened in the absence of the alleged wrongdoing. And the particular point that's made in this particular section is there's no way of knowing what would have occurred in the but-for world in terms of whether class members would have had bigger losses, whether they would have gained, when they would have sold, if they would have sold, and that's all completely indeterminate. So that's a point that I think is important in this particular section.

Q. And how does this case differ from any other securities class action where people might have acted differently had there been no fraud?

A. Well, I think it's different in a lot of ways from the typical case where

D. R. Fischel

you know what -- based on a common methodology what the artificial inflation was on any particular day and you know what the true value was after a corrective disclosure or multiple corrective disclosures of the alleged misimpression created by the alleged false disclosure or material nondisclosure.

Q. Well, I just want to focus on that sentence in paragraph thirty-nine, your sentence "counterfactually speculating as to the timing of trades, whether and when investors would have traded in the but-for scenario in which Robinhood did not put restrictions in place requires individualized inquiries".

Why is it necessary to prove what they would have done in this case had there been no restrictions? What requirement is there?

MR. ORSINI: Well, I object to the extent that that calls for a legal conclusion.

MR. ROSEN: Well, he's made that

D. R. Fischel

conclusion.

Q. Tell me why it's necessary to prove this.

MR. ROSEN: He says that this is -- this required individual inquiry. I just want to know why it requires individual inquiry. Is it a legal requirement, is it an economic requirement? Where does it stand for and why.

THE WITNESS: I think I've answered that question. I'm not offering any legal conclusions. I think it's relevant on the question of whether there's a common method that can be used to calculate damages during the class period, particularly whether the opinion that Dr. Werner has advanced on that issue is credible, and in my opinion it's not for multiple reasons, including this one.

Q. But you haven't answered my question.

D. R. Fischel

Why do they have to prove what they would have done? They sold. We know what they did. Why do they have to prove whether they would have sold or not sold had there been no fraud? They sold. We know what they did. Why should they prove something that they didn't do? Can you explain?

MR. ORSINI: Asked and answered.

THE WITNESS: That's a mischaracterization of what's in my report and what I've said. You know what happens in the real world. You don't know what would have happened in the but-for world in order to compare the real world relative to the but-for world.

Q. Let's go back to the IPO litigation where you testified for the plaintiffs and you testified that there was these tie-in agreements that caused inflation and these plaintiffs purchased stock at inflated prices because of this manipulation.

D. R. Fischel

In that case, did the plaintiffs have to prove what they would have done whether they would have purchased or not purchased?

A. Yes, the calculation would require a determination of the difference between the purchase price that actually occurred and what the purchase price would have been based on an assumption of what would have occurred had the alleged wrongdoing not occurred.

Q. But you don't mention sale price here. You say speculating as to the timing of trades, whether and when investors would have traded, not purchase price, the timing.

Now, why did you have to show in the IPO litigation exactly when they would have would have purchased those shares at the exact time that they did had there been no fraud?

A. Again, I don't want to comment on the IPO litigation specifically in any detail because it's somewhere between

fifteen and twenty years ago depending upon which report you focus on.

But as a general matter, inflation is usually calculated between the difference between the actual transaction price and what the transaction price would have been in the absence of any wrongdoing.

Q. Isn't it true that you can't think of a single case in the history of all the work you've done, forty-plus years where a plaintiff in a class action had to prove whether and when they would have traded in the but-for world?

A. I think at least under the facts and circumstances of this case, I'm saying there's no way of knowing whether they would have traded that all or if they traded in the absence of the alleged wrongdoing, whether they would have made money or lost money, and I think that's a relevant fact or a relevant criticism of the opinion of Dr. Werner or more generally whether there's particularly

combined with all the other reasons that are discussed in this particular section of my report, whether there's a -- it's possible to have a common method to calculate damages on a class-wide basis.

Q. Please identify one case, one case in the history of all the work you've done in which a plaintiff in a class action had to prove whether and when they would have traded in the but-for world.

A. I didn't say a plaintiff would have to prove it. I just said there's no way of knowing under the facts and circumstances of this case given the usual methodology of comparing an actual transaction date with what the transaction price would have been in the absence of the alleged wrongdoing. In this particular case, that is an additional factor, particularly in combination with the other facts and circumstances that I describe in this particular section that there's no evidence that investors would have sold -- for example, all investors

would have sold on January 27 at the high price so they would have realized that value, no evidence that that's a true value. All the evidence is to the contrary.

Q. So you're unable to identify a single case, and you acknowledge that the plaintiff class in this case have no obligation to prove that they would have traded in the but-for world, the date they would have traded, and whether or not they would have traded had there been no fraud; is that correct?

MR. ORSINI: Completely mischaracterizes his testimony.

THE WITNESS: When you ask whether I have an opinion as to what Plaintiffs would have to prove, what they would have an obligation to prove, I'm not offering an opinion on that one way or another.

Q. So if they don't have to prove whether or not they would have traded on a specific day had there been no fraud, why

is it relevant?

MR. ORSINI: Asked and answered.

Q. If it has nothing to do with any element of proof when they would have traded, why do they have to prove it? If they don't have to prove it, why is it even relevant?

MR. ORSINI: That's an impossibly vague question.

THE WITNESS: And also a mischaracterization of what I've said.

Relevance is going to be determined by a court, presumably, not by me. It's relevant to my opinion on whether or not there is a common method that could be used to calculate damages on a class-wide basis, particularly when what you were just asking me about is considered in combination with the other factors that are discussed in this particular section. Whether a judge ultimately determines that's legally relevant or not relevant is not something I'm

D. R. Fischel

expressing an opinion about one way or the other.

Q. So much of this paragraph thirty-nine is not even relevant to the case; right? Is that what you're acknowledging?

A. No, that's not what I'm acknowledging.

Q. So the last sentence of paragraph thirty-nine is, "individualized inquiry would be required to determine whether and how a potential class member would have changed their trading behavior and therefore whether they would have sustained a net gain or loss in the affected stocks in the but-for world".

What's the basis for that statement?

A. Everything that precedes it in the paragraph combined with the rest of the discussion in this particular section.

Q. So where does this requirement stem from? Is it a legal requirement, an economic requirement? What is it?

D. R. Fischel

A. It's part of my criticism of whether or not there's a common method to calculate damages on a class-wide basis.

Q. I understand it's a criticism.

But is there any basis in the case law where there is a requirement for individualized inquiry as to whether and how a potential class member would have changed their trading behavior?

MR. ORSINI: I'm pretty sure that calls for a legal conclusion.

MR. ROSEN: Well, he's making one here and I'm trying to understand what the basis for it is.

MR. ORSINI: He's not making a legal conclusion. He's already testified multiple times.

Q. So other than it's your criticism, do you have any basis for why it's a requirement here?

A. I don't understand the question.

Q. Well, you say it's a criticism, but where does this requirement stem from? Just articulate the basis for this

D. R. Fischel

requirement. Thin air? What is it?

A. The reason why it's a criticism is described in my report and I've tried to explain to you in my answers which part of my opinion about why it's impossible to calculate damages using a common methodology during this class period at least in comparison with the opinion that Dr. Werner has expressed.

Q. Can you think of a single other case that supports -- that you've worked on that supports this claim that you make, this so-called requirement in paragraph thirty-nine?

A. I don't know how to answer that except by repeating --

Q. Just tell me the case. Tell me the case, whatever it is.

A. The opinion isn't based on case research, it's based on my analysis --

Q. Well, some history, is there another securities class action that you can point to that had the same requirement?

D. R. Fischel

A. You know, I don't know of another case where the maximum artificial price is assumed to be the true value under some assumption that everybody would have sold on that price so therefore the difference between that price and the prices where prices are moving away from the artificial price is the assumed common method for calculating damages without any showing of how behavior would have been different in a but-for world.

Q. So I'll give you thirty seconds to identify a single case that supports this requirement that you're identifying in paragraph thirty-nine. I'll give you thirty seconds and tell me what you have.

MR. ORSINI: He's answered the question multiple times. If you want to waste thirty seconds, that's your prerogative.

MR. ROSEN: Thank you for your time, Mr. Fischel.

THE WITNESS: Thank you.

(CONTINUED ON NEXT PAGE)

D. R. Fischel
MR. ORSINI: I have no questions.
(TIME NOTED: 5:51 p.m.)

IN RE JANUARY 2021 SHORT SQUEEZE TRADING LITIGATION
4/12/2023 - DANIEL R. FISCHEL
ACKNOWLEDGEMENT OF DEPONENT

I, DANIEL R. FISCHEL, do hereby declare that I have read the foregoing transcript, I have made any corrections, additions, or changes I deemed necessary as noted on the Errata to be appended hereto, and that the same is a true, correct and complete transcript of the testimony given by me.

_____ _____
DANIEL R. FISCHEL Date
*If notary is required

SUBSCRIBED AND SWORN TO BEFORE ME THIS
_____ DAY OF _____, 20___.

_____
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* * *

I N D E X

WITNESS	EXAMINED BY	PAGE
D. R. Fischel	Mr. Rosen	3

E X H I B I T S

FOR I.D.	DESCRIPTION	PAGE
Exhibit 113	Document entitled Report of Daniel R. Fischel	7
Exhibit 114	Document entitled Rebuttal Report of Daniel R. Fischel	53
Exhibit 115	Seeking Alpha article dated February 1, 2021	88
Exhibit 116	Document entitled In re Initial Public Offering Securities Litigation	122
Exhibit 117	Journal of Finance article	131

I N D E X (continued)
E X H I B I T S (continued)

FOR I.D.	DESCRIPTION	PAGE
Exhibit 118	Document entitled In re: Initial Public Offering Sec.	138

* * *

CERTIFICATION BY REPORTER

I, Wayne Hock, a Notary Public of the State of New York, do hereby certify:

That the testimony in the within proceeding was held before me at the aforesaid time and place;

That said witness was duly sworn before the commencement of the testimony, and that the testimony was taken stenographically by me, then transcribed under my supervision, and that the within transcript is a true record of the testimony of said witness.

I further certify that I am not related to any of the parties to this action by blood or marriage, that I am not interested directly or indirectly in the matter in controversy, nor am I in the employ of any of the counsel.

IN WITNESS WHEREOF, I have hereunto set my hand this 13th day of April, 2023.

Wayne Hock

IN RE JANUARY 2021 SHORT SQUEEZE TRADING LITIGATION

4/12/2023 - DANIEL R. FISCHEL

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PAGE_____ LINE_____ CHANGE_____

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REASON_____

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DANIEL R. FISCHEL Date

&

& 1:16 2:8

1

1 53:24 88:6 158:17 224:17
1.50 54:23
10 122:18
10016 2:5
10019 2:9
10:11 1:10
10b 6:5,24 188:9 189:16 190:16
11.4 130:17
11.95 185:19
113 7:9,13,18 224:10
114 53:18,21 88:21 224:13
115 88:7 96:9 224:16
116 122:6,7 224:18
117 131:18 224:22
118 138:5,14 225:5
12 1:10 100:3
122 224:21
131 224:23
138 225:7
13th 226:23
15 183:16
16 7:20
1934 5:19
1980 5:9
1:56 100:4

2

2 54:22
20 138:8 223:17
2000 142:21 143:4,7,23,25
2004 138:8
2009 122:18,20
2021 1:5 16:7,7 20:9,10 22:2 23:6,20 24:24 34:3,23 39:16 50:23 51:9,19 52:2 55:19 60:4 66:18 88:6 108:14 158:17 176:10 176:16,25 203:9 207:2,5 223:1 224:17 227:1
2023 1:10 7:20 100:3 226:23
21-2989 1:8
21.27 206:24
23 102:12
26 108:14
26-27 206:25
260 122:19
27 15:3 16:7 20:10 22:2 23:6,20 24:24 25:8 28:2 34:3 34:23 50:22 51:9,19,23 52:2,11,21 57:22 58:3,7 58:12,19,23 59:15 61:8,22 62:6,22 64:2 66:18 70:10,25 71:8,10,21 74:19 91:9,10 92:18,19 94:7 94:8 95:6,12 95:19,24 96:8 100:15,18,19 102:8,13 118:10 185:13 193:17 196:19 202:13,16,22 203:2,6 204:2 205:22 216:2
275 2:4
28 39:16 60:4 60:10,25 61:3 61:23 62:15 67:8 69:15,25 70:11 71:8 72:14 73:13,21 74:13 92:5 207:4
29 92:5
298.35 185:16

3

3 162:8,10 164:12 185:8 224:6
332 3:10
3922 226:24

4

4 15:3 16:6 20:9 21:25 23:6,20 24:24 25:8 27:25 34:2,22 51:8 67:9 91:9 92:18 94:7 100:18,25 102:7 167:15 176:10,16,25 181:21
4/12/2023 223:2 227:2
480.08 185:18

5

5 55:18 57:21 57:25 58:4,8 58:10 96:6 181:21 190:16 201:5,7 203:9 203:11 204:17 204:20 205:17 205:19
5.64 206:25
50.39 207:3,8 207:10

53 224:15
5:51 222:3

6

6 142:21 143:7 143:23,24 144:20,22,25 203:11
60604 3:11

7

7 183:15 224:12
78.6. 130:17

8

8.01 207:3
81 122:19
825 1:17 2:9
88 224:17

a

a.m. 1:10
abilities 113:11
ability 4:23 48:25 72:3
able 78:4 79:20 87:17 97:8 112:13 116:23 123:14 161:13
abnormal 176:11
above 154:4
absence 62:17 136:25 143:13 177:14 209:9 214:8,20 215:18
absent 56:18 145:15 156:6
absolutely 146:4
abstract 43:6 78:7 153:13,15
academic 5:13 50:15 64:10,15 64:19 65:2,9 74:24 75:19 76:6,10,19 91:15 96:23 97:2 111:25 132:7 140:12 150:5,9,13,16
accept 136:19 205:10
accepted 147:24 196:15
account 63:14 183:8
accounts 37:25
accuracy 39:7 39:9
accurate 11:21 66:8 70:3 98:21 116:21 152:10 168:21 182:2
accurately 182:2
acknowledge 216:8
acknowledge... 223:3
acknowledging 218:7,9
act 5:19 6:6 136:8 188:10
acted 209:22
action 6:4 120:11 135:3 156:7 209:21 214:13 215:10 220:23 226:18
actions 56:21 61:13 62:18,25 63:18 69:19,23 70:4,19 71:6 71:14 73:5 92:10 93:13 94:2 198:25
active 79:24 97:12
activities 4:18 56:25 57:6
actors 63:2 70:5 73:5,7 74:3 92:10 93:14 94:3 115:13 198:25
actual 97:24 136:22 137:21 137:25 158:21 160:23 161:10 161:14,22,23 214:6 215:16
actually 5:20 10:16 17:7,8 36:12 49:19 52:7 90:16 96:14,24 97:5 99:9 120:9 124:5 135:12 157:25 180:13 205:12 213:8
add 34:4 94:25 179:3 183:9
addition 19:20 61:12 62:24 133:15 193:12
additional 83:17 96:3,20 133:11 215:20
additions 223:6
address 3:9 139:3 150:21
addressed 38:8
addressing 126:4
adel 36:25
adjusted 61:25 193:20 202:25
admitted 5:5
adopting 47:9
advanced 211:20
advantage 49:2
advocating 80:2
affect 45:2 170:7
affected 12:10 14:23 15:6,19 15:22 16:8

18:11 19:4 20:12 21:23 23:3,4,19 24:22 27:23 33:7,25 34:20 38:21 39:17,22 40:13 41:19 43:3,21 44:19 46:24 48:8 50:21 65:16 67:6 68:13 69:16,24 71:23 72:17 73:13,20 74:13 75:15 77:7 79:11 80:21 89:15,25 95:5 97:14 100:13 112:20 113:5 118:22 121:12 152:25 153:10 154:5 154:15 158:7 183:13 184:3 184:21 185:2 193:16 201:4 201:19 207:17 208:5 218:17
affecting 136:9
affects 105:18
affiliated 3:19 200:4
affirmed 188:16,17
aforesaid 226:8
aggregate 188:23 190:4 190:11
ago 56:8 123:13 214:2
agree 21:20 22:3 29:22 104:16,20 141:3
agreement 140:23
agreements 134:17 141:2 141:15 212:22
ahead 31:24 120:8 179:4
air 220:2
akston 96:10 96:13,15 97:5
alex 9:7,9
algorithmic 105:6
allegation 134:6,25 140:22 142:3
allegations 7:3 38:3,6,7,10 120:14 123:19 141:13 142:3 143:21 189:16 191:7 194:13
alleged 56:9,9 56:18,19,24 57:6 58:24 69:7 80:7 95:21 120:5,11 133:25 134:21 137:21,22 140:4 141:12 141:21 142:12 144:13,22 152:9,17 193:15 203:21 203:25 209:9 210:7,8 213:11 214:20 215:19
allocation 189:10
alpha 88:5 96:10,25 224:16
alter 207:19
altonaga 1:8
ambiguous 22:5
amc 12:20 60:9 60:24 61:3 108:14 185:16 206:19,24
amount 87:7
amounts 75:7 182:20
analyses 131:6 175:3 189:25
analysis 10:7,9 10:18 11:6,25 40:25 45:16 52:9,19 57:3 60:12 80:15 97:19 125:18 126:5,8 129:7 131:3 134:16 137:24 139:7 145:17 147:4 157:17 159:3 159:13 160:12 160:16 163:6 163:10,13 164:8,19 167:7 167:8 169:8,12 173:12,18 174:4,9 175:16 175:23 179:6 179:25 180:8 180:13 184:19 188:25 191:25 192:10,23 193:20 194:15 194:23 197:4 197:19 204:2 206:6 220:21
analyst 50:3 182:22
analyze 52:5 61:18 121:11 126:13 158:22 164:13 167:13 167:25 168:8 169:17 173:7,8 173:11,14 175:13
analyzed 47:23 52:16,20 120:19 128:13 186:15

analyzing 134:25 151:2 194:15
announced 177:5
announcement 171:17,17 178:12,15
announcements 129:24 172:14 172:16 177:13 177:15,20,21 177:21,23
answer 5:17 6:9 10:11 26:14 31:18,21 32:15 33:2 35:2,4,13,20,25 43:16 69:4 72:4,5,18,20 98:20,21 111:18,21 115:10 146:8 168:14 171:5 180:24 189:13 193:18 220:16
answered 31:11,23 34:8 34:24 35:12 43:15 72:2 90:5 92:7 93:7 94:23 95:17 174:17 176:17 179:14 211:13 211:24 212:10 217:3 221:18
answering 43:12,14 170:9 170:18 195:17 195:19
answers 64:14 82:13,14,24,25 86:13 119:12 205:13 220:5
anti 7:3
anybody 87:10 109:12 112:7 183:5
anyway 67:8 198:18 199:11
apart 120:6
apologize 127:4
apparently 132:4
appeal 188:17 189:5
appears 135:13
appended 223:8
appendix 17:18 17:19,21 18:7 18:14,21,22 19:5,9,19,21 20:15,23,25 21:4 22:20 23:14 25:10 26:3,8,24 28:14 30:12 32:23 33:12,15 35:17 157:8,10 163:11,13 164:4,5,6,18,19 165:12 168:5 171:10 172:8,9 177:7,17,17,25 179:24 180:2 180:17,20 181:9,18 182:2 182:13,25 183:4,9,11
applicable 124:12
application 136:5 165:15
apply 196:24
appreciate 74:6
approach 135:6,10,18,22
appropriate 92:2
approximately 90:22 123:5
approximates 135:14
approximation 96:5,7
april 1:10 100:3 226:23
arbitrage 148:12,25
area 6:2
areas 6:18
argued 128:12 129:25
argument 35:8
argumentative 169:2
arithmetic 130:25
arrive 190:15
article 14:5,12 14:17 16:20,23 19:23 20:2 25:3,5,18 26:25 27:12 29:18 30:4 33:19,23 34:18 35:16,22 52:14 65:14,21 88:6 88:9,20 89:2 89:13 94:14,16 96:13,19,22 130:5,10,13 131:11,16,18 131:20,23 132:3,8,23 144:19,20 172:10,11,12 181:15 224:16 224:23
articles 12:7 13:5,10,11,14 13:17,19,22,25 14:9,22,25 15:17 16:6,19 16:21 17:2,3,6 17:13,16,18,20 17:22 18:2,7,9 18:15,20,25,25

19:2,3,4,10,14 19:17,23 20:4 20:9,23,25 21:2,5,7,15,22 21:25 22:9,17 22:19,20,25 23:8,9,18,22 24:5,7,11,20,21 25:2,14,15,21 25:23 26:3,7,9 26:11,15,21,24 27:6,15,18,20 28:4,5,8,11,14 28:19,20,22 29:3,8,12,19 30:9,12,13,23 31:2,6,8,9 32:2 32:3,5,10,11,16 32:17,22 33:2 33:5,6,11,13,16 35:18,22 36:3 49:17,23 65:11 109:4,12,19 116:18 172:13 175:25 181:11 182:7

articulate 219:25

artificial 19:17 21:12 26:18 27:8,22 30:19 41:4 42:6,11 42:16 43:9 44:6,11,14,22 44:23 45:5,20 45:23 46:2,7 46:13,17,23 48:2,15 50:14 50:18 51:5,21 58:7 61:11 64:7,12,22 66:23 68:9 69:3 73:3 74:16,17 76:17 76:22 79:18 81:3,4,7,12 87:6,15,18,19 88:15 90:7 91:7 92:13 94:6 96:2 100:20 101:21 102:23 103:21 103:22 104:2,4 109:5,14,20 112:9,10,11 113:8 116:6,12 142:20 144:17 154:7,20 156:17 172:17 192:6,8,11 193:5,9 194:2 196:7 197:9 205:15 210:3 221:3,9

artificially 79:21 95:6 100:14 101:4 102:9,14 114:10 143:6 154:6 156:11

aside 145:22 172:11

asked 22:24 31:10 34:24 35:9 56:7 82:9 82:11,21 91:25 93:7 94:22 95:14 138:24 139:2 170:12 174:17 176:17 179:13 185:10 196:24 212:10 217:3

asking 6:11 13:20 16:15 24:18 38:15 56:4 63:11 66:21 68:2 75:2 78:6 79:13 115:24 116:2 145:23 145:24 153:12 155:12 169:3 180:5,6 196:3 200:6 217:20

aspects 5:25 9:24 10:2,5

assert 40:13

assertion 64:16

asserts 131:24

assist 8:16

assistance 10:19

assistant 13:18 176:23

assistants 9:12 31:6 171:15,25 176:22 180:23 182:10,15 183:21

assume 4:19 16:12 25:3 31:5 54:24 60:20 145:5 203:4

assumed 136:14 141:11 221:4,9

assuming 78:6 78:7 85:17 111:15 141:13 141:17 142:3 145:3 194:18 202:16

assumption 117:3,20 141:25 144:11 145:15 190:2 202:21 213:10 221:5

assumptions 68:20 145:2 189:25 196:22

attempt 11:10 26:25 27:11 49:7 81:17 112:8 148:9

attempted 24:6 35:15 99:2 171:15

attempting 98:6 175:23,24
attorney 144:23
attorneys 2:4,8
attributable 165:3
attribute 172:13
attributed 47:6 114:25
attribution 47:9,10
author 7:21
authored 138:6 138:17 139:11
authority 131:10 132:13
authors 65:15
available 47:24 97:22 102:22 169:9 170:8 200:4,11
avenue 1:17 2:4 2:9 3:10
average 54:9 54:12,14 55:4 55:8,9,20 90:20 201:8 206:20,21,25 207:2,9
averaged 55:16
avoided 170:10
avoiding 34:10
aware 32:8 33:15 36:3,13 36:15 83:18 101:3 102:8,13 102:16 109:4,5 110:14,21 111:5 132:6 183:3,22 200:18
awareness 81:12

b

b 224:8 225:3
back 56:5 58:12,15 66:5 140:20 156:24 201:20 202:7 203:24 204:16 212:19
background 39:11,13 61:14 63:3 69:18
bad 127:3
banking 111:12
barred 105:23 106:7
bars 5:5,6
based 32:15 39:13 40:25 43:6 46:9 47:8 52:8 55:16 56:17 57:2 74:22 77:8 78:17 81:11,15 82:14 83:13,13 86:19 87:13,14 105:6 110:3 114:25 117:11 131:11 132:4 137:18,24 141:12 142:2 144:25 168:11 173:12 176:3 177:5 192:10 192:24 197:2 197:18 199:21 201:6 205:11 208:16 210:2 213:10 220:20 220:21
basic 14:14
basically 39:11 68:20 100:16 104:14 107:8 199:9
basis 37:3 88:21 101:7 108:6 120:24 128:14 138:3 152:18 194:20 197:23 199:25 203:4 215:6 217:18 218:18 219:4,6,15,20 219:25
bath 12:20
bed 12:20
began 73:6 195:7
beginning 5:12 70:8 151:11
begins 151:5
behalf 123:8
behaved 137:6 137:7
behaving 30:21
behavior 208:3 218:14 219:10 221:11
belief 81:16
believe 21:16 37:13 56:2 58:14 84:3,12 84:18 85:7 86:14,15 118:8 128:11 140:16 141:7 145:7 152:15,21 153:2 197:18 198:18 203:7 204:22 205:24
best 32:24 41:3 72:2 167:22
bets 97:13
better 38:8 58:5,9 127:8
beyond 12:21 68:19 123:20 205:16
biased 166:12 166:14
bid 133:12
big 72:22

bigger 209:14
billions 188:18
bit 20:6 22:5 59:18 134:12
blackberry 12:21
blood 226:18
bloomberg 13:16,23 15:2 17:14 18:16 22:13 54:19,25 55:2
board 72:23 74:20
bottom 128:17 132:24
bounce 201:20 202:7
bounces 203:24
bound 64:2,17
break 41:8 59:8 59:10 63:11 69:5 99:10,11 149:4,5 200:16 200:17
brena 4:5
briefs 50:3
broad 45:6 105:12 158:7
brokerage 38:18
brokers 156:7
bubble 66:14 66:19,20
bubbles 50:18 65:16 66:11 68:17 76:23
business 4:6 50:22 82:10
busy 4:12
buttons 180:14
buy 108:22 110:23 139:20 147:23
buyer 147:20
buying 80:20 97:13 108:13

c

c 2:2 3:2 100:5 157:8,10
calculate 70:17 70:18 137:4,13 141:14 158:20 162:16 197:22 199:24 202:5,9 208:11 211:17 215:6 217:17 219:4 220:7
calculated 161:13,16 188:8,24 189:22 190:14 214:5
calculates 54:25
calculating 138:2 175:16 191:2 204:13 209:6 221:10
calculation 72:6 95:18 191:5 209:5 213:6
calculations 71:5 206:12 208:17
call 23:7 41:10 66:20,21,22 158:14 160:3
called 13:16 58:19 59:4 130:6 133:5 135:21 200:20 220:14
calling 103:12 119:8
calls 106:3 112:22 210:23 219:12
cammer 120:20 120:24 121:16 121:22 125:12 125:18 126:7,8 126:13,22 150:22 153:5,7 164:8,14,20 165:16
capability 89:10
capable 197:6
capitalization 133:12
career 5:13 124:21
carefully 123:14
case 1:8 7:6 8:9 8:15,21 10:4,5 12:18 36:14 38:4,13 45:9 45:11 46:10 51:3 56:11,13 56:19 57:15 59:3 64:22 86:11 89:15 92:14 103:8 106:13 108:3 117:19 118:3 119:20 120:6 120:16 121:7 121:10,13 122:13,13,22 123:7,19 124:23 125:4 127:13,16 134:21 139:23 139:24 140:20 141:13 143:22 153:14 155:11 157:17 158:15 160:7 166:9,10 167:10 182:18 185:7 186:15 186:17 187:20 187:22 188:9 188:15,17,20 189:8,15,18 191:3 194:8,13 200:5,12

205:25 206:3 207:8 209:20 209:25 210:19 213:2 214:11 214:17 215:7,8 215:15,20 216:8,9 218:6 219:7 220:12 220:18,19,20 221:3,14
cases 6:24 7:2 120:2,4,12,14 124:11,13,17 125:6 127:21 139:5 140:4 141:22 189:11 189:12,22 190:16
category 88:2
causal 134:17
causation 133:20,23 134:11 135:19 137:14 139:4 141:16 188:20 201:25
cause 12:9 42:11,16 43:3 43:20 46:23 47:7,21 69:14 70:12 71:2 73:12,19 74:11 86:9 91:18 92:4 93:5 112:5 113:7 120:11 140:7
caused 40:19 47:15 61:2 62:4 88:15 89:16 90:2,7 92:22 94:19 172:17 195:16 204:25 212:22
causes 19:16,16 21:11 26:18 27:8,22 30:18 42:5 61:6,19 62:13,14 135:3 154:19
causing 98:7,13 140:10
caveats 52:18
cease 56:25
ceased 205:4
certain 5:24 9:24 10:23 14:14 22:12,13 45:11 101:9 115:12 140:23 148:6 153:11 176:2,2
certainly 37:4 40:21 51:4 89:19 119:25 122:12 155:24 186:14 205:17 206:11,15
certification 139:7 226:2
certify 226:5,16
cessation 205:23
cetera 157:22
chairman 3:25
challenges 128:6,9
chance 161:25 168:13
change 67:17 68:20 75:23 128:21 129:14 227:4,7,10,13 227:16,19
changed 208:2 218:14 219:10
changes 44:17 129:23 207:18 223:7
characterizati... 66:9 98:19 152:11
characterize 201:15
characterized 66:12
charlotte 2:11
chart 39:24
check 11:4,10 11:14,19 39:6 39:9 120:9 189:18
checked 11:18 182:8
chicago 3:11,22 4:4,7
choice 166:5
choices 29:23
choose 37:24
chose 203:8
chronologica... 175:7
circles 95:14
circuit 142:24
circumstance 149:19
circumstances 45:9,10,19 46:10 107:7 108:3,18 109:3 109:10,25 111:4 121:6,9 136:6 137:4,16 139:23 145:10 146:13 149:21 150:20 153:11 153:14,19 166:10 173:10 182:18 183:12 185:7,25 186:11,16 187:5,19,21 191:11 193:24 195:3 214:17 215:15,22
cite 75:11,16 94:17 109:13 109:19 131:24

cited 50:14 89:2 131:11,24 132:4
cites 126:9 130:4
claim 58:16 142:20 190:6 220:13
claims 38:13 51:3
clarified 32:23
class 6:4 14:7 48:3 51:13 52:6,22,23 54:4,6 55:7,10 55:11,15,17,24 56:22 58:21 69:9 75:15 79:4 80:6,7,8 80:10,11,13 81:2,6,11,13,21 82:12,13,22 83:17 86:4,9 86:13,20 87:22 87:23,24 89:21 90:2 92:6,23 93:6,12,20 94:20 95:20 97:19,20,25 98:5,25 101:8 101:9,14,18,25 102:19,25 103:4,5,18,23 103:25 104:5 104:10,11 107:9 108:6,10 110:7,13 111:7 117:19 118:2,4 118:11,14,23 118:25 119:4,5 123:8 133:19 136:15 139:6 150:15 151:21 151:25 152:4,7 152:23 153:3 167:12 179:11 184:23 190:6 191:8,10,13,19 192:2,9,12,13 192:16,21 193:2,6,7,9,22 194:20,22 195:4,8,12,14 196:8 197:7,10 197:23 199:14 199:24 200:11 201:8 202:12 204:9 207:17 207:22 208:2 208:11 209:13 209:21 211:18 214:13 215:6,9 216:9 217:18 218:13 219:4,9 220:8,23
classes 5:18 123:9
clear 32:16 101:12 167:22 187:23 188:4 196:8
clepic 2:11
clerking 5:12
close 50:22 51:18 63:8 205:22
closed 127:7
closer 58:5 192:4,14 193:6 194:3 195:5
closing 61:22 61:23
cognition 4:23
collected 20:10 22:7 25:16 26:12 28:15,24 29:14 33:13 35:18
collecting 29:8
collection 16:18
column 55:7 60:3,5
combination 40:24 92:9 215:21 217:21
combined 42:20 45:15 76:10 94:4 144:13 185:24 193:22 215:2 218:21
come 24:9 38:24 63:8 86:19 117:8
comes 32:12 55:2 85:4 124:4
coming 140:20
commencem... 226:10
comment 79:16 197:14 213:23
commentary 41:22 45:16 48:21 49:10 78:25 97:18 101:20 102:21 154:11 155:8 156:22 186:18 186:22
commentator 88:18
commented 67:19 69:2 94:11
commenting 78:25 131:4
commission 200:19
common 61:17 197:23 199:23 202:4,8,11 204:14 208:10 209:5 210:2 211:16 215:5 217:16 219:3 220:7 221:9
commonly 164:7

communicate 92:2 141:9
companies 14:7 15:3,19 19:11 19:12 26:16 27:13 30:14,16 30:20,21 44:20 70:14 163:25 164:24 165:4,7 186:22,25
company 14:23 15:24 21:6,9 25:5 27:3,4,5 27:19 88:17 136:18 167:16 171:9 176:13 176:15,25 177:8,9 178:4 178:11,19 180:21 181:4 181:20 182:3 182:11,23 183:18 184:4 185:4 186:20
comparable 135:5,9,17,22 136:13 137:7
compare 161:9 187:19 202:11 202:14 212:16
compared 57:20
comparing 57:14 202:23 215:16
comparison 54:3 209:7 220:9
compass 3:21 3:23 4:14,17 16:5
compilation 16:20
compile 22:7
compiled 16:12 16:19 17:6 18:5,23 21:16 21:21 22:4 23:18 25:15
complaint 182:21
complete 69:4 144:25 145:3 147:22 223:9
completely 166:15 173:23 175:4,14 188:16 196:23 209:17 216:15
completion 162:18
comprehensive 147:4
compulsion 147:23
computer 10:10,14,17 180:14
conceding 208:12
concept 114:7 115:5 116:24 134:24 189:21
conceptually 135:25
concerns 139:4
concise 8:12
conclude 57:7 57:17
concluded 57:8 128:22 129:15 144:11 188:3
concluding 17:17
conclusion 57:19 72:9 103:13 106:4 112:23 114:3,5 119:9 129:21 133:15 155:13 155:22 200:7 210:24 211:2 219:12,17
conclusions 183:10 184:19 200:8 206:16 211:14
conditions 4:22
conduct 58:24 69:7 146:3 173:12 205:6
conducted 11:6 40:25 132:14 177:17 189:24 192:24 197:19
confidence 161:19
confident 72:8 85:2 120:12
confirm 41:25
confirmed 101:24 102:24 104:8
confounding 198:6,9,12,16 198:23
connected 173:10
connection 5:8 19:11 30:14 67:16 184:14
consent 148:9
consequently 140:2 141:19
consider 6:3
considered 121:21 174:15 217:20
consistent 143:12 144:16
consolidated 125:5
consulting 3:20
contain 8:10 18:15
contained 14:17 18:4,21 21:4,22 22:21 23:3 24:8,21 28:12 38:6,10

45:16 47:18 49:22 57:24 171:18
containing 18:10 50:4
contains 8:4
contemporan... 47:25 76:9
contemporan... 41:2 48:14
contemporary 74:23
contested 139:22 189:3
context 20:24 23:13 24:2 32:21 44:15 45:8,10 84:25 85:25 140:20 167:9,10 202:3
contingent 79:24
continuation 139:9
continue 86:17 87:16 99:6 142:10 196:4 205:6,16
continued 52:14 75:4 100:10 134:18 142:13 143:21 144:5 205:2 221:25 225:2,3
continues 112:12,17 195:23
contrary 145:15 196:23 216:6
contribute 50:17
contributed 155:14,15
control 158:15 160:4
controversial 139:21
controversy 226:20
convenient 41:12
coordinate 37:11
coordinated 9:15 154:10 155:6,10,19 156:21
copy 21:17 82:21
corner 123:25
corporate 127:14
correct 4:25 10:24,25 12:3 12:4,11 15:10 16:17 18:11,12 20:5,14,23 21:25 22:17 25:11,25 26:4 28:6,7 29:5,11 29:14,16 33:3 33:4 38:22,23 39:18 41:16 42:13 48:10 49:18,20 55:21 55:22,25 58:17 58:18 60:25 62:2,7 63:20 84:10,21 93:24 100:15,16 105:20 106:20 113:24 114:3 115:23 116:15 116:17 130:20 130:21 135:7 142:14 144:6 144:24 159:7,9 174:16,19 175:2 178:22 181:24 192:21 194:4,8 202:2 203:10 208:17 216:14 223:9
corrections 223:6
corrective 143:14,25 144:3 145:3 210:5,6
correctly 11:7 142:23
counsel 138:24 139:3 226:21
counterfactua... 210:12
countless 132:14
couple 4:10 56:7 67:15 95:23
coupled 97:24 113:9
course 5:21 6:20 8:21
courses 5:22
court 1:2 50:3 91:16,23 119:16 124:18 129:10 131:2 131:10,14,24 132:5 134:14 135:12 137:18 188:2 196:25 197:13 217:14
court's 126:3 133:15 144:9 182:21
courts 197:14
covered 5:24 171:12
covering 5:18
covers 13:6
cravath 1:16 2:8
cravath.com 2:10,11
create 89:10 140:24 141:5

160:13
created 16:5,12 49:3 113:11 147:10 180:3 210:8
creating 76:21 148:13
creation 116:5 160:10
credible 211:21
criteria 14:15 24:14,16,16,17 25:9 30:4,8 32:9 33:17 36:5 148:2 168:11 176:2 181:8 183:4
criticism 214:23 219:2,5 219:20,23 220:3
criticisms 61:15 126:4
cumulative 162:16 163:3,3
current 3:9 120:7,16 139:19
currently 3:19 4:5 120:4
cv 120:10

d

d 3:2 4:1 5:1 6:1 7:1 8:1 9:1 10:1 11:1 12:1 13:1 14:1 15:1 16:1 17:1,18 17:19,21 18:1 18:7,14,21,22 19:1,5,9,19,21 20:1,15,23,25 21:1,4 22:1,20 23:1,14,16 24:1 25:1,10 26:1,3,8,24 27:1 28:1,13 28:14 29:1 30:1,12 31:1 32:1,23 33:1 33:12,15 34:1 35:1,17 36:1 37:1 38:1 39:1 40:1 41:1 42:1 43:1 44:1 45:1 46:1 47:1 48:1 49:1 50:1 51:1 52:1 53:1 54:1 55:1 56:1 57:1 58:1 59:1 60:1 61:1 62:1 63:1 64:1 65:1 66:1 67:1 68:1 69:1 70:1 71:1 72:1 73:1 74:1 75:1 76:1 77:1 78:1 79:1 80:1 81:1 82:1 83:1 84:1 85:1 86:1 87:1 88:1 89:1 90:1 91:1 92:1 93:1 94:1 95:1 96:1 97:1 98:1 99:1 100:1,5 101:1 102:1 103:1 104:1 105:1 106:1 107:1 108:1 109:1 110:1 111:1 112:1 113:1 114:1 115:1 116:1 117:1 118:1 119:1 120:1 121:1 122:1 123:1 124:1 125:1 126:1 127:1 128:1 129:1 130:1 131:1 132:1 133:1 134:1 135:1 136:1 137:1 138:1 139:1 140:1 141:1 142:1 143:1 144:1 145:1 146:1 147:1 148:1 149:1 150:1 151:1 152:1 153:1 154:1 155:1 156:1 157:1 158:1 159:1 160:1 161:1 162:1 163:1,11 163:13,23 164:1,3,4,5,6 164:11,18,19 165:1,12 166:1 167:1 168:1,5 169:1 170:1 171:1,10 172:1 172:8,9 173:1 174:1 175:1 176:1 177:1,7 177:17,17,25 178:1 179:1,24 180:1,2,17,20 181:1,5,9,14,18 182:1,2,25 183:1,4,9,11 184:1 185:1 186:1 187:1 188:1 189:1 190:1 191:1 192:1 193:1 194:1 195:1 196:1 197:1 198:1 199:1 200:1 201:1 202:1 203:1 204:1 205:1 206:1 207:1 208:1 209:1 210:1 211:1 212:1 213:1 214:1 215:1 216:1 217:1 218:1 219:1 220:1 221:1 222:1 224:4,6

225:2
d1 176:5,7 181:18 182:13
daily 55:3,4 128:14 129:25
damage 59:4,5 61:16 188:13 188:19,20
damages 56:9 57:10,13,14,17 61:18 135:19 188:8,21,23 189:9,20 190:4 190:11,14,15 190:21 196:17 196:20 197:6 197:22 199:24 201:6,13 202:2 202:5,9,22 204:13 207:7 207:13 208:11 208:13,16 209:6 211:17 215:6 217:18 219:4 220:7 221:10
daniel 1:14 3:16 7:12 53:20 124:9 223:2,4,13 224:11,15 227:2,24
data 13:15 29:8 31:3,3,4 55:2 90:21 180:22 182:16 204:11 206:15
databases 176:21 181:12 181:13
date 52:13 138:9,11 173:4 215:17 216:11 223:13 227:24
dated 7:20 88:6 122:18 138:7 224:17
day 37:3,3 40:2 52:15 54:16,18 55:9,11,14,21 55:23 60:7 73:23 74:15 75:3,6 92:6,19 94:8 123:17 162:24 166:3,7 168:5 169:7,12 169:13,18,23 170:2 171:20 173:21 174:5 174:20,23 175:20 177:4 179:11 183:20 185:14,16,21 203:16,20 210:4 216:25 223:17 226:23
day's 170:13
days 15:7 55:15 70:22 72:11 75:7 90:22 91:2 95:23 96:3 128:19,24 129:12,17 130:18 137:21 137:24 158:16 159:3,7,14,15 162:11,13,20 162:21,25 165:19,25,25 166:5,18,20 167:3,5,7,19,25 168:2,3,4,6,10 168:17,19 169:4 170:7 173:19 174:4 174:12,25 175:24 177:19 177:20,22,23 182:4 183:14 183:16 187:10 203:18
dealing 5:22
deals 151:14
dealt 134:4
december 142:21 143:7 143:23,24 144:20,22,25
decision 111:6 122:16 124:6 125:8 126:20
decisions 80:18
declare 223:4
decline 60:6,8 60:13,22,23 61:2,6,10,20 62:4,15 63:6 64:18 67:2,20 68:6,10,12 73:12 74:21 90:14 91:19 92:5,23 93:5 93:13,21 94:20
declined 39:18 40:7 59:15 66:3 67:8
declines 63:9 69:15 72:22,25 73:20 74:12 75:14 76:4 89:25 90:24 143:11 195:15 199:14 202:24
declining 90:11
decrease 70:13 71:3
decreased 75:5 75:6 195:13
deemed 158:23 223:7
defendants 2:8 126:5 128:5 142:12 144:21 152:18
define 23:8,21 48:11 76:12 115:3,7 116:8 116:23
defined 24:19 26:8 80:22

116:17 150:4
defining 25:4 76:14 114:8 116:22
definition 25:24 29:10 45:4 51:20 66:13 75:24 78:2 90:9 91:11 94:9 116:11 118:3,5 147:14,16,19 147:24,25 149:13,18 199:4
definitive 35:25
definitively 35:20
deflation 191:3 191:19,21,24 192:11,20 193:9 194:2,7 194:12 195:9 195:10 205:5 205:12
demand 140:3 140:24 141:5 141:20
demonstrate 134:10,16
demonstrated 83:16 188:3 192:15 198:19 204:3
demonstrates 15:21 183:25 194:23
demonstrating 104:5 164:25 165:2
deny 169:22 170:3
departure 148:5
depend 108:17 109:9 149:20 150:19 153:18
depending 84:24 121:5 137:3 167:10 178:13 214:2
depends 109:2 121:7 145:9 146:12 166:9 167:12 186:10 190:4
deponent 223:3
deposition 1:14 119:21
depressing 203:22
derived 105:7 180:21
describe 59:5 61:13 63:24 69:23 73:7 92:11 102:3 175:4 185:25 193:25 195:3
215:23
described 9:19 11:23 24:8,14 26:11,13 43:7 46:4,5 47:18 51:6 63:2 64:3 94:3 98:2 108:8 151:10 152:11 154:4 157:8 165:14 168:12 180:2 183:12 185:23 194:18 195:7 220:4
describes 134:14 206:18
describing 69:5 119:12
description 10:3 14:9 24:7 70:3 103:24 132:4 134:9 157:13,15 168:22 174:10 224:9 225:4
design 10:17
designed 180:9
detail 213:25
determination 167:17 169:25 170:16 172:4 181:8 191:14 192:22 197:7 213:7
determine 12:8 15:4 17:5 27:16 47:14,21 81:21 103:3 161:13 163:7 165:24 167:2 170:6 172:2 173:18,21 174:4 178:7 191:17 192:20 194:7 197:15 207:25 218:12
determined 17:9 26:22 28:5 29:4 108:5 127:12 159:3,13 161:17 165:19 167:18 168:15 168:19 169:4 170:12,23 171:8,22 174:25 175:19 176:14,24 178:2,18 179:10 191:9 196:16 201:5 217:14
determines 119:17 217:24
determining 120:25 135:18 162:19 173:2 191:18 194:11 196:20

developments 177:11
devoted 4:18
diamond 76:25 77:2
differ 209:20
difference 56:8 56:14 57:10 147:12 158:20 158:22 161:11 161:14,21 195:11 196:18 213:7 214:6 221:7
different 9:25 16:24 18:6 26:6 33:14 35:19 55:13 61:18 62:25 68:22,24 73:6 74:3 75:9 92:10 94:3 111:7 123:2 124:25 135:23 162:15,24 163:2,4 174:10 175:15 177:12 177:18 187:5 190:8 193:3 199:8 208:8 209:24 221:12
differently 209:22
difficult 199:22
difficulty 74:6 116:22
direct 59:3
direction 8:19 9:20 10:20 11:16 15:15
directly 9:16 59:19 226:19
disagree 104:21 124:20
disappeared 127:4
disbelieve 84:6
disclose 120:18
disclosed 15:5 163:25 168:10 169:18 171:19 183:19,20 185:20
disclosing 188:5
disclosure 143:14,25 144:3,25 145:3 172:6 210:6,8
disclosures 27:3,14 164:24 181:6 206:2 210:7
discretion 4:10
discuss 40:20 48:20 64:5,6 64:10,20 70:4 76:20 126:19 152:19 187:6 202:19
discussed 19:18 20:13 21:3 27:6 36:18 42:18 50:15,19 65:2 70:7 89:18 116:22 133:14 144:15 148:15 165:13 177:16 192:17 192:17 196:11 198:24 215:3 217:22
discusses 64:11 76:20 125:18 126:20
discussion 39:15 64:21 76:16 77:10 141:11 147:5 164:23 165:9 172:19 182:19 218:22
discussions 76:10
disentangle 61:5 72:25 73:9 198:9,15 198:22 199:17
disentangling 198:5
dissipate 93:18 94:12 144:4 195:7
dissipated 96:3 143:16 192:8 193:4
dissipation 52:14 90:3 143:12 196:6 205:14
distinct 137:19
distinguish 81:10 87:22
distinguished 19:13,13 132:12
distort 85:19
distorted 84:12 84:19 85:8 89:9,11 101:4 114:9 146:3,11 146:15
distortion 112:6,16,17 114:12 116:5
district 1:2,2 122:20
diversification 78:9
divided 130:16 130:22
dividing 186:9
document 7:11 53:19 94:22 122:2,3,11,15 123:22 124:4,7 138:12 224:10 224:13,18

225:5
documents 49:14
doing 136:10 137:2 150:18 199:20
dollar 54:21
dollars 45:24 45:25 188:18
dow 14:24 17:13 18:16 22:11 25:7
download 182:15
downloaded 31:6
downloading 181:11 182:7
dozen 179:14
dr 51:11 56:10 56:21 57:7,12 58:17 59:6 61:15 151:24 152:6,19 199:19 202:10 203:25 204:12 208:9 211:19 214:24 220:10
draft 206:8,11
dramatic 62:21
dramatically 58:2 154:5
draw 153:16
drawn 201:16
driven 76:13 78:13,21
drivers 50:13
due 154:11 155:7 156:22
duly 3:3 100:6 226:9
dunbar 65:17
duplicates 14:13

e

e 2:2,2 3:2,2 100:2,2,5,5 224:4,8 225:2 225:3 227:3,3 227:3
earlier 46:5 76:15 89:19 95:24 100:12 141:11 180:12 192:4,17 193:4
easier 21:19
economic 63:2 73:5,7 74:3 93:14 94:3 108:7 114:4,15 121:4 135:2 142:19 148:7 148:15 165:2 187:6 193:23 195:2 198:25 204:11 211:9 218:25
economics 3:20 5:23 6:20,22 127:9
effect 19:15 27:6,20 30:17 48:24 64:21 70:19 71:10,12 71:22 72:16,25 74:2 87:8 115:12 141:14 156:21 165:10 172:19 198:22 199:12 206:2
effective 21:10
effects 198:5,9 198:16 199:17
efficiency 120:20,25 121:12 124:10 124:16 125:2 125:11 126:14 133:4 153:10
efficient 51:12 117:3,16,21 145:5,8,18,21 146:2,19 148:8 148:14,18,19 148:20 151:16 184:22 185:24 186:7 187:13 194:21
effort 47:14 97:4 191:16,17 192:19 194:6 194:10 198:8 198:14
efforts 47:20 198:21
eight 59:24 88:13,22,23 89:6 90:19 91:5 94:15,17 128:19 129:12 129:17 130:16 130:23 134:9 153:23 193:18 201:19,24
eighth 1:17 2:9 72:22 91:20
eighty 130:5
either 20:11 21:23 23:4 27:3 29:19 31:14 33:17 47:2 113:16 119:22 170:24 194:21
element 217:5
elements 38:13
eleven 187:9
eliminated 148:13
eliminates 148:24
emeritus 4:6
empirical 143:20
employ 226:21
employed 3:18
empty 181:19

enables 161:19
ended 95:22 204:16
engage 105:10
engaged 106:25
engagement 36:12
english 117:12
ensure 11:5 181:3,25 182:10
entertainment 12:20
enthusiasm 76:13 77:6,8 78:13,21 79:10 115:21 146:22 146:25
entire 4:17 15:14 157:11 200:25
entirely 145:9
entitled 7:11 53:19 101:9 117:20 122:3 138:12 196:17 224:10,13,18 225:5
equals 130:17
equity 37:14 120:5,13
errata 223:8
error 183:7
errors 150:11
especially 165:7
esq 2:5,10,11
establish 158:10 159:22 160:20,22
established 161:3 181:9
estimate 52:10 52:17 58:9 136:7,11,24
estimated 158:6 160:14
estimating 157:21
estimation 160:4
et 157:21
etfs 37:20
evaluated 124:25 125:10 133:3
evaluating 86:4
event 11:9,11 12:2,2,5 13:3,6 16:24 17:2 127:11,20 132:14 135:6 137:2,10,11,12 151:4,10,19,22 151:25 152:3 156:24 157:2,6 157:16,18 158:5 162:14 162:19 163:12 163:14,16,21 166:2,4,6,13 172:24,25 173:8,15 191:13 199:5 200:21
events 127:15 127:24 136:18 136:23 151:17 163:15,20,22 172:25 173:4 175:12,13 188:5,5,7 198:6,10,13,16 198:23
eventually 90:23
everybody 107:8 221:5
evidence 73:18 74:10 75:12,16 76:3 82:17 94:18 108:7 113:3,7 135:2 142:19 143:20 145:16 165:2 187:6 193:23 195:2 197:3 215:24 216:4,5
evidenced 195:14
exact 9:22 15:11 20:2 59:2 213:21
exactly 23:15 50:11 54:24 57:7 60:2 62:9 72:24 76:7 90:11 91:21 124:21 127:25 131:2 158:3 162:4 166:22 169:20 192:12 213:19
examination 3:7 100:10
examine 111:3
examined 3:5 100:8 129:12 224:5
examining 128:18
example 28:18 48:18,20 84:15 84:21 85:4 143:3 146:16 146:21 167:14 189:2 206:23 215:25
examples 84:23 85:12,16,21 127:16
exceeds 139:19
except 220:17
excessive 42:20 44:9 46:14,19 46:22 48:7,11 101:22 113:9 113:15,23

114:18 115:21 116:9 165:8 172:18
exchange 5:19 6:6 145:14 188:9 200:19
exchanges 145:13
excluded 63:13 136:18
excuse 28:13 42:8 115:9 161:24 180:11
exhausts 90:23
exhibit 7:9,13 7:17,18 23:16 26:23 28:13 39:23 52:7,23 52:25 53:18,21 53:24 57:18,22 59:20 88:4,7 88:21 96:9 122:6,7 131:18 138:5,14 162:8 162:10 163:23 164:3,11,12 181:5,14 185:8 224:10,13,16 224:18,22 225:5
exhibits 57:23 59:18
exist 68:4
existed 57:5 92:18 205:15
existence 41:22 44:8,16 50:11 50:17 57:14 81:12,18 90:6 97:20 101:20 102:23 103:20 104:4 112:9,11 114:6 143:15 144:17 148:14 148:24 154:25 156:18 167:2,4 170:5 172:17 186:5 192:7 193:4
exists 103:25
expect 79:19
expectation 78:3 83:24
expectations 102:4 140:8
expected 85:18 86:17
experienced 40:14 51:5
expert 6:4,15 7:9,10,14 13:3 37:7 122:13,21 128:5 188:12 189:9
expertise 6:17 6:19
experts 126:5
explain 18:24 26:5 53:23 54:13 66:10 92:16 135:25 142:17 201:11 212:9 220:5
explained 15:23 63:6 119:13 129:23 130:18 165:5 184:3 185:3 186:5
explaining 63:8 186:21
explanation 30:20 41:3 45:13 177:14
explanations 43:8 44:5 47:25 48:5,13
explanatory 131:7 132:17
expounded 196:15
express 102:15 105:13 201:13
expressed 152:6 220:10
expressing 156:4 190:23 218:2
extended 80:15
extensive 101:20 102:21 103:19
extensively 42:19
extent 51:20 63:5 103:12 106:3 115:24 119:8 120:10 121:3 187:20 210:23
extreme 41:4 43:9 44:5,16 46:10 47:7 48:2,15 64:7 66:22 67:13 73:2 74:16,18 75:20 76:12,17 78:12 90:7 92:16 116:6 155:15,16
extremely 199:22

f

f 3:2 100:2,5
face 140:14
fact 21:16 41:18,25 48:4 64:6 69:7 81:13 93:14 94:4 108:19 112:3,18 144:18 172:5 178:8 183:21 195:15 197:12 201:6 202:6 205:18 214:23
factiva 13:16 13:23 178:20

factor 73:24 74:8 93:25 121:4,18,20 126:22 127:10 136:8,23,25 153:4 164:8,13 164:20 165:15 215:21
factors 60:18 60:19 63:14 73:25 74:7 75:9 93:11,20 120:20,24 121:16,20,22 125:12,19 126:8,9,13 130:3,3 132:25 133:2,5,11 150:22 153:5,7 164:14 165:5 165:16 190:5,9 192:3 193:3 199:9,13 203:19 217:21
facts 45:8,10,18 46:9 107:6 108:2,18 109:3 109:9 111:4 121:5,9 136:6 137:3,16 139:23 145:10 146:12 149:21 150:20 153:13 153:18 166:10 173:10 182:17 183:11 185:7 185:25 186:10 186:16 187:5 191:11 193:24 195:2 214:16 215:14,22
fad 66:14
fads 50:17 66:11 68:17 76:23
fail 153:4
fair 6:25 10:3 17:10,12 85:3 85:11 147:19 147:24 158:4 182:14 208:14
fairly 36:11 132:17
fall 87:25
fallen 156:12
false 140:24 142:11 146:16 210:8
familiar 5:14 40:3 77:10 126:23 130:9 130:13 145:4 147:6 150:7
far 86:16 93:23 191:25 192:10 198:19 205:11
fast 53:4
february 7:20 55:18 57:21,25 58:4,8,10 62:15 67:9 88:6 96:6 143:3 201:5,7 203:9,11,11 204:17,20 205:17,19 224:17
federal 5:15
felt 191:6
ferrillo 65:14 65:17
fifteen 53:9,25 59:13 70:25 111:10 123:12 142:6 214:2
fifteenth 181:22
fifth 126:22 127:10 164:8 164:20
fifty 60:9,13,17 60:23 63:9 90:24
figure 167:21
filing 171:18
filings 15:18 17:15 18:17 27:5,14
filter 175:23
filtered 29:12 29:20
finance 127:8 131:17,21 132:13 224:22
financial 5:24 6:21,22 105:9
find 47:24 53:2 59:23 83:3 99:7 171:16,21 171:22 176:8 184:21 204:3
finder 197:13
finding 148:23 196:24 197:2
findings 11:10 128:7 132:22 132:23
fine 41:11 139:8,10
finish 26:13 85:15 115:10 180:11
firepond 143:3
firepond's 143:11
firm 2:3 3:20 4:2 60:23 67:5 97:6 130:4,19 168:9 171:16 172:7,10,14,16 182:23
firms 38:19,25 69:23 172:15
first 3:3 16:2 17:8 27:15 37:5 40:16 43:24 54:13 60:3,4 61:7 91:22 96:4

114:22 123:17
124:3 128:12
133:24 150:21
154:3 157:11
158:4 159:2,12
159:17,19,20
159:20 160:13
160:20 165:18
173:17 175:6
176:10 197:12
205:9 206:13
207:15
fischel 1:14
3:12,16 4:1 5:1
6:1 7:1,12 8:1
9:1 10:1 11:1
12:1 13:1 14:1
15:1 16:1 17:1
18:1 19:1 20:1
21:1 22:1 23:1
24:1,12 25:1
26:1 27:1 28:1
29:1 30:1 31:1
31:24 32:1
33:1 34:1,12
35:1,11 36:1
37:1 38:1 39:1
40:1 41:1 42:1
43:1 44:1 45:1
46:1 47:1 48:1
49:1 50:1 51:1
52:1,15 53:1
53:20 54:1
55:1 56:1 57:1
58:1 59:1 60:1
61:1 62:1 63:1
64:1 65:1 66:1
67:1 68:1 69:1
70:1 71:1 72:1
73:1 74:1 75:1
76:1 77:1 78:1
79:1 80:1 81:1
82:1 83:1 84:1
85:1 86:1 87:1
88:1 89:1 90:1
91:1 92:1 93:1
94:1 95:1 96:1
97:1 98:1 99:1
100:1 101:1
102:1 103:1
104:1 105:1
106:1 107:1
108:1 109:1
110:1 111:1
112:1 113:1
114:1 115:1
116:1 117:1
118:1 119:1
120:1 121:1
122:1 123:1
124:1,9 125:1
126:1 127:1,12
127:16 128:1
128:13,20
129:1,20 130:1
131:1 132:1
133:1 134:1
135:1 136:1
137:1 138:1
139:1 140:1
141:1 142:1
143:1 144:1
145:1 146:1
147:1 148:1
149:1 150:1
151:1 152:1
153:1 154:1
155:1 156:1
157:1 158:1
159:1 160:1
161:1 162:1
163:1 164:1
165:1 166:1
167:1 168:1
169:1 170:1
171:1 172:1
173:1 174:1
175:1 176:1
177:1 178:1
179:1 180:1
181:1 182:1
183:1 184:1
185:1 186:1
187:1 188:1
189:1 190:1
191:1 192:1
193:1 194:1
195:1 196:1
197:1 198:1
199:1 200:1
201:1 202:1
203:1 204:1
205:1 206:1
207:1 208:1
209:1 210:1
211:1 212:1
213:1 214:1
215:1 216:1
217:1 218:1
219:1 220:1
221:1,23 222:1
223:2,4,13
224:6,12,15
227:2,24
fischel's 128:6
134:15
fit 14:9 24:7
30:4 31:22
103:24 181:8
five 121:15
125:16,23,24
126:2 153:4
161:18,25
164:13 165:15
196:2
fixed 149:12,18
flag 183:2
flaws 129:7
flipping 53:4
florida 1:2
fluctuated
205:19
focus 21:13
74:8 80:6
124:11 126:14
127:13,16,21
133:17 139:5
143:22 151:17
210:10 214:3

focused 50:24 50:25 78:16,17 78:22 95:9 121:18,20 135:2
focuses 97:19
focusing 51:10 51:16
follow 129:22
follows 3:6 100:9
footnote 65:5,6 65:8,12,19 70:23 88:10,19 89:7 111:11 130:4 184:12 201:23
footnotes 111:10
forces 136:17 136:17
forecast 158:19 161:5
foregoing 223:5
forever 68:19
form 6:7 42:3 62:8 71:24 76:22 77:21 89:8 98:16 113:18,25 114:16 119:23 132:9 187:16
formed 42:10
forming 8:17 42:5
formulated 159:9
forth 178:3
forty 131:22 198:2 207:4 214:12
found 47:10 51:11
foundation 12:17
four 9:3 35:3 60:9,13,17,23 63:9 88:10 89:7 90:25 123:21 124:5,7 125:16 142:18 150:22
fourteen 111:10,12
frame 138:18 174:6
fraud 7:3 84:12 84:19 85:8 86:7 135:15 137:22 188:14 189:8 209:23 212:6 213:22 216:13,25
frd 122:19
free 117:4,21
frequency 104:19,24 105:19,22 106:19,23 107:2
frequently 132:16
front 96:19 97:8 131:12 138:8
fully 142:18
function 10:24 186:17 197:7
fundamental 44:19 45:3 67:17 75:24 86:18
fundamentals 165:6
funds 37:19 38:2
further 62:12 110:17 183:2 192:5 203:11 203:15 226:16
future 197:15
futures 120:2

g

gain 207:3,8,10 208:5 218:16
gained 209:15
gains 67:14 190:7
gamestop 12:20
gem 108:14
general 64:21 74:23 134:3,22 140:18 147:18 208:8 214:4
generality 136:4 204:7
generalize 56:16
generally 61:16 87:5 121:21 130:2,13 131:7 133:17 145:12 147:24 153:5 156:19 214:25
generate 158:18 160:5 161:4 181:13
generated 142:11
give 29:4,13 35:13,25 48:18 82:13 157:4 168:13,14 179:17 180:7 221:13,16
given 43:9 44:5 48:14 92:16 154:18 179:15 190:2 207:14 207:15 215:15 223:10
giving 153:20
gme 70:24
go 14:19 19:6 31:24 41:9,12 61:21 62:12 66:5 77:15

89:17 98:13,14 110:9 120:7 123:21 127:2 128:3,16 132:24 133:20 134:8 142:5,25 143:18 153:23 156:24 179:3 190:25 196:20 198:2 203:10 212:19
goes 126:7 201:25 202:4
going 41:6 50:12 53:11,17 56:5 61:9 62:17,18 66:3 66:5,25 67:20 71:7 72:10 73:16 74:4,21 75:25 78:4 79:20 80:25 87:16 88:3 93:9,18 95:13 103:14 108:20 108:21,22 111:16,19 120:18 128:15 131:15 140:18 160:19 168:13 185:17 190:6 195:18,21 196:5 197:13 199:2,5 204:16 217:13
gompers 128:18,25 129:2,2,11
good 3:12,13 52:17 59:7 96:6 127:7
gotten 4:12
great 98:14
greater 19:2 22:24 23:7,9 23:17,22 24:5 24:11,19,25 25:14 26:7,21 28:4,10 29:3 29:19 31:9 32:17 119:13
greatly 65:22
grenadier 36:6 37:6,8
grenadier's 53:8
guess 8:10 16:2 29:10 37:21 48:4 68:16 82:8,10 84:7 95:3 124:14 125:25,25 185:17
guidepost 186:12
gurney 206:19 206:24 207:7 208:15
guy 96:10

h

h 3:2 100:5 224:8 225:3 227:3
half 54:21,22
halt 71:10
halted 70:24
halts 70:9,12 71:21 72:7,12 72:13,15
hand 123:24 226:23
handle 190:8
hands 76:25 77:2
happen 44:3
happened 67:12,22,23 68:3,21,22,24 123:17,18 175:8 193:12 193:14 204:20 209:7,8 212:15
happening 70:21
happens 175:6 212:14
happy 41:12
hard 61:5 73:8
harvard 129:4 129:5
he'll 171:5
heading 143:19
headline 14:24 16:9 20:12 21:24 23:5 24:23 25:6 33:7,25 34:21
headlines 22:10
hear 76:24
heard 117:2,5
heightened 154:11 155:7 156:22
held 1:16 118:9 226:7
hereto 223:8
hereunto 226:22
high 19:8 56:16 104:18,23 105:19,22 106:18,23 107:2 136:3 156:11 204:7 216:2
higher 77:25 78:5 79:21 87:19 140:10 140:17 201:20
highest 57:11
highlight 91:7 184:17 198:12
highly 79:5 166:12
hinges 83:7
historical 157:21
history 188:13 214:11 215:8

220:22
hit 10:13,17
hock 1:18 226:4,25
hold 79:10 80:3 187:14
holding 187:3
hope 40:5 98:12,13 110:22
hoped 110:16
hoping 110:8 111:16,21 112:10,16
horizon 78:2
hour 41:7 178:24
hours 195:22 196:2,3
household 188:14
huge 61:7
hugh 96:10,14 97:5
human 183:7
hundred 122:25 123:4,5 124:12,17,24 125:5 130:5 158:16 204:25
hypothesis 145:5 158:25 161:20
hypothetical 43:23

i

i.d. 224:9 225:4
idea 14:14 105:16 137:20
identification 7:13 53:22 88:8 122:6 131:19 138:15
identified 12:7 13:4,12 18:9 23:2 29:9,14 31:7 32:9,11 33:24 34:19,19 36:5 37:6 39:5 42:9 128:19 129:12 166:17 172:7 180:22
identify 26:25 27:12 38:24 69:21 148:11 177:2 191:18 194:6,11 198:15 215:7 216:7 221:14
identifying 221:15
illegal 112:19
illinois 3:11
illiquidity 85:9 86:8
illustration 185:22
illustrative 28:19,21 69:10
immediately 54:6 192:16 193:14 201:17
impact 26:17 106:17
impacted 15:6
implemented 38:19
implication 153:17
implications 77:12
importance 184:17
important 72:7 91:6 103:7,15 103:16 121:22 153:6 184:19 204:11 209:19
imposed 67:4 73:6 118:21
impossible 67:11 68:5 73:8 199:22 220:6
impossibly 217:9
impression 141:5
impressive 127:6
inaccurate 152:14
incentive 148:20,21
inclined 140:19
include 14:13 19:24 91:3 165:25
included 19:19 164:18 166:3 187:25
including 37:9 72:11 191:12 211:22
inclusive 14:16
incoherent 59:6
incomplete 43:22 187:17
inconsistent 111:23 112:14 193:25 204:12
incorporation 126:21
incorrect 194:9
increase 43:4 43:21 47:4,16 61:7,12 62:6 62:21 68:8 70:6,13 71:2 74:19 75:4 86:18 141:4 155:16 187:2 195:16
increased 65:22 86:14,16 154:5 195:12
increases 15:22 40:14,19 47:22

64:22 67:14,18 69:2,11 73:3,4 74:17 90:11 93:15 94:5,6 112:12,18 154:7 155:15 184:2,25 185:14,15,15 186:4,18,19,21 187:11 196:7 199:3
increasing 110:16
incremental 199:12
incurred 207:20
independent 41:20 42:4 97:9 131:6 132:18 136:8 160:2
indeterminate 209:17
index 60:20 135:5,9,18,22 136:13,16 137:7 158:13 159:25 160:10 160:11,14 161:2
indicated 30:25 97:17
indicates 98:5
indicating 98:25 109:20
indication 56:5 95:22,25
indices 158:9
indirectly 37:21,23 226:19
individual 36:24 37:16 82:2,4 107:18 107:20 150:15 155:25 207:20 211:6,8
individualized 81:9 87:21 103:2 194:16 207:24 210:17 218:11 219:8
induce 118:23
induced 118:23
industry 60:19 60:20 61:25 63:7,14 96:23 97:2 130:3 136:13,17 158:9,13 159:25 160:11 160:14 161:2 203:2
inefficiency 129:21
inefficient 146:6,10,20 152:8,16,22 153:3
inevitable 68:12
inevitably 67:20 93:17 94:12
infer 131:9 140:5 141:23
inference 56:3 91:17 201:16
inferences 91:24
inflated 51:21 57:11 58:7 66:4 79:21 87:9,12 95:6 100:14 101:4 102:9,14 110:15 114:10 142:10 143:5,6 143:15 144:12 212:24
inflation 52:15 56:13 65:11 66:6,23 96:2 112:9,11 113:8 134:18 142:20 143:13,21 144:4,5,17 188:22 189:22 190:3,10,14,20 191:2,5,6,12,24 193:5 194:3 195:6 197:10 204:25 205:15 210:3 212:23 214:5
influence 111:5 142:13 190:9 203:20
influenced 137:22
information 15:25 19:12 27:4 30:15 44:18 47:24 50:8 75:23 91:4 97:23 102:22 109:7 121:23 126:21 127:17 128:23 129:16 133:18 139:18 140:6 141:9,24 142:11 147:22 148:4 163:24 165:4,12,13 168:10 169:17 171:18 176:4 178:8,14,16 182:20,24 184:5 185:5,20 186:20,25 188:5
informed 141:6
inherent 92:12
inherently 68:18 116:13
initial 96:6 122:4 123:16

134:4 138:13 161:6 224:19 225:6
inquiries 107:18 210:17
inquiry 81:9 82:2,4 87:21 103:2 107:21 194:16 207:24 211:6,8 218:12 219:8
ins 190:8
inspect 65:15
instance 126:17
instances 14:11 19:22 22:14
instant 140:4 141:22
institutional 49:3 147:7 165:11 172:20
institutions 105:10
integrity 81:16 81:18,22 82:18 83:8,9,21,25 84:17 85:10,22 86:5,10,25 87:3,13 101:11 103:4,9 104:7 105:24 106:9 106:12,19 107:3,10,23 108:4,15,25 109:15,21 110:4,6,11,19 110:25 111:24 112:14 117:15 194:19
intended 79:10
intensive 40:23
intent 115:12
interest 98:15
interested 226:19
interfere 4:22
interpret 109:6
interpreting 144:8
interval 94:14
introduce 7:8 88:4
introduced 88:20
introduction 39:10 185:11
invest 37:19
investigate 183:2 204:19
investigated 132:11
investigating 107:6
investigation 97:10
investigations 144:21
investing 111:15
investment 77:13,17,18 78:3,8 79:12 80:17 111:6 150:11
investments 96:15 97:5
investor 110:21 149:24
investors 48:25 49:3 77:14 78:14,18,20 79:3 81:15 85:17,21 97:11 98:12 101:16 102:16 103:8 113:11 118:8 118:13 139:17 140:4 141:2,6 141:21 147:7 147:11 149:15 150:2 156:22 165:11 172:21 172:22 210:14 213:16 215:24 215:25
involved 37:4 120:14 125:4
involves 12:18 115:11 120:17
involving 120:2 120:4 122:25
ipo 122:17 126:15 131:25 133:4 134:2 137:16 138:7 143:2 144:12 144:14 187:8 189:10 204:22 204:24 212:19 213:19,24
ipos 123:2
isolate 73:24 74:2 199:12
isolating 74:7
issue 83:7 105:15 107:21 107:22,25 108:3 131:22 190:24 191:8 205:3 209:3 211:20
issued 200:19
issuer 145:20
issuers 124:25 142:9,13
issues 123:10 139:4 150:25

j

j 2:10
january 1:5 15:3,3 16:6,7 20:9,10 21:25 22:2 23:6,6,20 23:20 24:24,24 25:8,8 27:25 28:2 34:2,3,22 34:23 39:16 50:22 51:8,9 51:19,23 52:2

52:11,21 57:22
58:3,7,12,19,23
59:15 60:4,10
60:25 61:3,8
61:22,23 62:6
62:22 64:2
66:18 67:8
69:15,25 70:10
70:11,25 71:8
71:10,21 72:14
73:13,21 74:13
74:19 91:9,9
91:10 92:5,18
92:18,19 94:7
94:7,8 95:6,12
95:19,24 96:8
100:15,18,18
100:19,25
102:7,8,12,13
108:14 118:10
122:18 138:8
158:17 167:15
176:10,16,25
181:21 183:15
183:16 185:13
193:17 196:19
202:13,16,22
203:2,5,6
204:2 205:22
206:25 207:4
216:2 223:1
227:1
jessica 9:6,17
job 171:10
jonathan 9:7
jones 14:25
17:14 18:16
22:11 25:7
joseph 206:18
206:23
journal 14:25
17:14 18:16
22:12 25:8
96:23,23 97:2
131:17,21
144:2,19
224:22
judge 122:16
126:20 196:16
217:23
judgment
150:11
judicial 125:9
jurors 197:14
jury 188:12
189:4 196:15
196:25

k

keep 111:9
128:14 158:2
kept 156:9
kevin 2:10
keys 10:13,17
kind 6:12
kinds 68:17
80:4 202:18
knew 174:12
know 7:16 9:5
12:13,22 13:13
13:19 23:22
31:12 33:18
36:6 38:12
39:23 41:17,21
45:6 61:4
67:11 68:16,23
75:8 78:25
79:23 80:12
82:6 83:10
84:24 87:11
95:16 96:16,17
96:24 97:12
98:18 104:22
104:23 105:2
105:12 106:5
106:21 107:5
109:7 115:13
117:8,10,13
118:2 130:21
134:22 136:20
136:21 137:20
138:10,22
143:6 144:7
149:7,12,23
150:12 156:8
161:11 163:10
167:3,5,7
169:3,5,14
175:22 180:17
180:25 186:8
190:5 191:11
193:11 196:21
196:22,25
199:10,21
200:24 204:18
210:2,4 211:7
212:3,7,13,15
220:16 221:2,2
knowing 35:22
72:21 81:3,6
209:4,12
214:18 215:14
knowingly
79:18
knowledge
86:22,23 87:4
87:6 169:22
170:13,20
known 129:24
130:12
korsini 2:10
koss 12:25
krogman 133:5

l

l 3:2,2 100:5,5
lack 21:7 46:6
81:18 110:5
172:15 186:19
186:23
laid 121:17
language
117:12 144:9
large 40:14
70:6 79:24
104:17 105:8
158:23 161:15
161:16,24
165:11
largely 188:16

larger 19:6 20:4,22 21:15 24:20
largest 105:9 185:18 188:13
lasted 90:21
laura 9:6
laurence 2:5
law 2:3 4:6,7 5:8 219:7
laws 5:15 7:4
lawsuit 80:14
lawyer 5:2,3,4
lay 12:17
lead 14:24 16:9 20:13 21:24 22:10 23:5 24:22 25:6 33:8,25 34:21
lee 4:5
left 63:17 123:24 183:6
legal 6:12 38:15,16 103:12 106:3,7 107:16 112:22 112:24,25 113:20 114:3,7 114:15 115:15 115:24 116:3 116:24,25 117:23,24 119:8,15 121:2 134:23 135:3 145:23 146:9 153:20 155:12 155:21,22 156:2,4 189:21 190:22,24 200:7,8,13 209:2 210:23 211:8,14 218:24 219:12 219:17
legally 217:24
length 40:20 89:19 108:8 119:14 195:7
lepic 2:11
level 9:12 19:8 56:16 58:13 69:6,9 136:3 161:19 192:15 193:17 194:4 201:21 204:7 205:22
levels 156:13 156:15,17
lexecon 3:21,24 4:14,14,17 16:5
liability 145:2 196:14 201:21
lifted 58:11 201:18 205:8
light 62:20 108:6 109:6 123:18 151:24 161:12 183:11 185:6
likely 140:5 141:23 145:18
limited 139:6
line 138:2 186:9 227:4,7 227:10,13,16 227:19
link 134:17
linked 44:17
liquid 85:2
list 93:25 157:4 177:7
listed 18:17 127:16 172:8 177:16 181:4,5 182:11,12,24
listing 19:10 182:3
lists 172:10 206:20
literally 179:13
literature 64:11,16,19,24 65:2,9 74:24 74:24 75:19 76:6,11,19 91:15 112:2 132:7 140:13 148:7,16 150:5 150:9,13,17
litigation 1:6 6:5 85:25 114:17 119:6 122:5,18,24 126:15 131:25 133:4 134:2 137:17 138:7 187:8 189:3 204:22 212:20 213:19,24 223:1 224:21 227:1
little 20:6 22:4 59:18
live 83:6,13 119:24
llp 1:17 2:8
long 41:12 77:16,17 79:11 80:2 85:6 87:15 90:20 130:12 142:10 148:2 156:10
longer 23:13 41:9 57:2 58:24 132:8 144:6 205:7
look 14:2 17:15 17:21 22:16 29:5 33:19 35:15 52:5 54:8 57:3 97:3 101:15 108:21 120:10 122:2,7 122:9 138:16 139:13 147:3 151:4 166:7 168:5 173:17 173:20 174:22 185:8,13,13

201:3 203:8,15 203:18,23 207:22
looked 11:17 17:19 22:18 33:10 35:21,24 50:2,24 130:11 133:10 165:18 170:7 174:13 174:19 177:6 181:6
looking 36:2 53:7 59:12 96:12 125:13 131:13 133:7,9 140:21 167:11 184:7
looks 70:8 131:3 133:2 137:15 138:6 138:19 143:24 144:10 151:9
lose 77:19
loss 97:21 101:17 102:20 118:10 133:20 133:23 134:11 135:19 137:13 139:4 141:15 188:19 201:25 202:15 207:20 208:5 218:16
losses 190:7 209:14
lost 214:22
lot 6:23 7:2 8:9 18:19 50:2 71:6 93:14 147:6 164:25 184:13 198:12 203:6 209:25
low 131:4,7 132:17
lower 9:12 57:16 58:2 66:5 123:24 193:19 201:7 204:6
lowest 185:19
lrosen 2:6
lunch 99:12,14

m

made 27:11 46:17 169:24 170:15 181:7 192:19 194:5 198:14 200:11 207:10 208:23 209:10 210:25 214:21 223:6
madison 2:4
magnitude 192:7
main 92:15 203:17
majority 15:21 184:2,25
make 11:9,14 11:20 21:19 23:11 28:23 35:5 47:14,20 49:7,7,9 62:11 82:5 84:14 89:5 91:16,23 97:4,9 111:20 150:10 167:17 167:22 189:18 191:16,17 194:10 196:21 198:8,21 220:13
makes 44:13 46:2,7
making 24:3 78:22 97:18 101:13 113:21 219:13,16
management 97:6
mandel 9:6
mandel's 9:17
manipulate 97:15 145:19
manipulated 58:20 146:7 153:9 156:15
manipulating 80:22
manipulation 85:9 86:7 98:6 98:8,9,15,23 99:2,3 112:20 113:4,17,24 114:7,8,11,13 114:20,24 115:4,5,8,11,19 116:15 117:4 117:22 119:20 120:2,5,15,17 134:2,6,21,23 152:9 153:11 153:21 155:11 155:20 156:3 156:20 205:2 208:24 212:25
manipulations 84:13,20 154:9 154:14,23 155:5
manipulative 205:6
manner 127:19 160:21
mark 53:14,17
marked 7:12 53:21 88:7 122:5 131:18 138:14
market 52:3,6 60:18 61:25 63:6,14 80:23 81:16,19,22 82:19 83:9,21 83:22 84:2,4 84:17 85:3,10 85:19,22 86:6 86:10,25 87:3 87:13 89:9,11 92:10 101:11

103:5,9 104:7 105:24 106:10 106:12,20 107:3,10,24 108:5,16,25 109:16,22 110:4,6,11,20 111:2,24 112:15,16 116:14 117:4 117:15,16,21 119:20 120:14 120:19,25 121:11 124:16 125:2,10 126:13 130:3 133:3,11 136:16 139:19 140:2,5,7,15,17 141:7,9,19,22 145:5,8,18,21 146:2,6,10,19 146:20 147:13 147:19,25 148:9,11,14 151:16 152:8 152:17,22 153:3 154:8,9 154:14,22 155:5,11,19 158:7,13 159:25 160:10 160:14,25 184:22 185:24 186:7,22

194:19,21 202:25

markets 5:24 6:21,22 120:3 120:5 122:25 124:11 148:17

marriage 226:18

massive 87:7

matched 60:5

material 39:11 73:12 74:11 168:16 210:9

materials 43:7

matter 9:14,20 37:5 45:12 75:22 181:12 214:4 226:20

maximum 58:6 221:3

mdl 1:8

mean 6:10 12:13 16:12,14 23:23 29:6 37:16 45:22 62:19 63:17,21 63:24 64:3 65:10,23 66:4 73:2,11,19 74:8,11 75:12 76:4 80:8 83:20 87:2 98:17 106:21 109:23 111:14 111:14 117:14

120:6 132:11 146:14 153:12 191:21 195:10

meaning 66:4 131:6 148:17 149:25 153:20 161:20 178:10 191:22

means 29:17 51:21 66:14 83:22 87:9 106:6 117:10 117:13 147:15 149:24 150:2

meant 66:15 98:18 160:9

measure 57:10 57:13 58:6 137:8 190:13 190:21

measured 54:4 54:7 56:14,17 56:20 202:23

mechanical 182:6

media 40:24 42:21 44:10 46:15,19,22 47:11,12 48:7 48:12,17,19,21 50:9,13,16 76:6,13,21 77:6 78:13,16 78:21 79:2,10 79:25 80:5

97:12 101:23 109:12,19 113:10,15,23 114:19 115:21 116:10 146:22 147:5 149:15 154:12 155:8 156:23 165:9 172:19

medical 4:21

medication 4:20

meet 24:14

member 81:5 86:9 101:14 104:11 191:10 191:13 207:22 208:2 218:13 219:9

member's 86:5

members 9:2 80:6,7,11,13 81:2,11,13,21 82:14 83:17 86:21 87:22,25 97:20,25 98:5 98:25 101:8,9 101:18 102:19 103:4,5,18,23 103:25 104:6 118:24 119:5 190:5 191:8 200:12 209:14

meme 71:17 200:21

memorized 39:25
memory 4:23 137:19
mention 19:25 30:13 36:23 153:22 213:13
mentioned 9:14 15:13 18:20 19:5,10,21 20:11 22:15 25:6 27:2,12 27:19 32:18 33:6,14,24 34:19,20 36:20 36:22 38:18 46:8 64:24 69:18 74:9 77:9 88:10 137:10 183:15 192:4 193:4 197:25
mentions 14:22 20:2 139:17
merely 43:19 129:22
met 25:9 33:16 36:4 148:2
method 61:17 189:20 191:18 199:20,23 202:4,8,11,14 204:13,14 209:6 211:16 215:5 217:17 219:3 221:10
methodology 127:12 134:10 134:14 135:18 136:2 137:9,10 194:6,11 197:24 208:10 210:3 215:16 220:8
methods 198:15,22
michigan 3:10
mind 85:5 86:19 189:3
mine 206:16
minute 40:2 99:10
minutes 56:8 70:25 71:8 72:11
mischaracteri... 179:6 212:12 217:12
mischaracteri... 94:21 178:24 216:16
mischaracteri... 179:22
misconduct 38:4 142:12 144:22 205:3
misheard 12:16
misimpression 210:7
misleading 142:11 159:18
mispriced 148:11,23,24
misrepresent... 85:8
misrepresent... 84:13,19 86:7
missing 66:7
model 56:10 59:5 61:16 163:19 166:25 166:25 169:16 173:13 175:11 180:3,3,4,15
momentum 108:12,13,14 108:19,22 109:6 110:24
money 77:20 78:22 97:6 214:22,22
month 67:23
months 143:7 205:3
moore 1:17 2:8
morning 3:12 3:13 171:13
motivations 79:2
move 12:10 163:8 169:7 170:21
moved 44:25 127:18 128:22 129:15 192:5 192:14 193:6 195:5 196:8
movement 15:8 44:13 45:4,24 169:10 170:14 173:4 193:2
movements 21:12 26:18 27:9,23 30:19 39:25 41:4 42:6,12,16 43:10 44:6,12 44:16,20 45:15 45:20 46:11,17 46:24 47:7 48:2,16 50:14 50:18 51:6,22 51:23 62:2 63:7 64:7,12 71:16 75:20 76:18,22 91:8 92:13,17 100:18,20 116:6,12 121:24 128:14 131:9 144:15 154:20 159:6 159:23,24 160:23,24,25 165:3,22 168:2 169:19 170:6 172:13 175:17 177:15 194:24 203:2 207:16

moving 164:9 194:3 221:8
multiple 14:12 19:24,25 31:23 32:13,24 35:12 35:18 70:7 92:8 93:10,11 93:19 95:2 102:22 103:20 154:25 176:20 178:6 197:20 198:25 210:6 211:22 219:18 221:19
mutual 37:19 37:25

n

n 2:2 3:2 100:2 100:2,2,5 224:4 225:2
name 3:14,21 9:9 16:8 19:10 21:22 23:4 24:21 25:5 27:19 30:13 80:17 124:3 179:16,17,18 179:18 180:5,6 180:7,17
named 206:7 206:18,23
names 9:4 14:23 38:25 180:25
narrowed 18:24
nasdaq 144:23
nature 38:25 61:11 62:5 63:25 64:12 66:6 67:13 68:17 69:11 91:10 92:12 100:22 103:22 112:7 116:13 134:20 178:13 186:17
necessarily 117:17 153:17
necessary 82:3 82:5,6 87:21 103:3 151:2 194:17 210:18 211:3 223:7
need 10:22 107:20 191:10
needs 107:17
neither 104:20 147:22
net 208:5 218:16
never 5:20 49:19 67:12 80:3
new 1:17,18,19 2:5,5,9,9 3:5 15:23 88:4 100:8 122:20 128:23 129:16 145:13 165:3 184:4 185:3 226:5
news 12:6,8 13:5,9,11,14,17 13:22,25 14:5 14:22 15:2,5 15:17 16:6,18 16:20 18:10 20:3,9,22 21:6 21:9,15,21,25 22:17,25 23:7 23:9,17,22 24:5,11,20,20 24:25 25:15 26:7,9,21 27:2 28:4 31:9 32:13,17 45:2 46:6 47:11,12 49:17 76:6 88:17 109:12 109:19 130:4 130:18,19 163:8 164:10 164:21 165:18 165:25 166:19 167:16 168:16 168:17 169:5,9 170:2,8,17,24 171:9 172:3,5 172:10,11 173:20,22 174:14,19,23 174:24 175:20 175:25 176:13 176:15,25 177:3,4,8,9 178:3,4,11,19 179:10 180:21 181:4,20,22 182:3,11 183:14,18 186:6 187:12
nine 12:9,15,16 12:18,22 15:22 16:8 18:10 19:4 20:11 21:23 23:3,4 23:19 24:22 27:24 33:7,24 34:20 38:21 39:17,21 41:19 43:21 46:24 48:8 50:21,25 51:2,5 59:16 64:17,20 66:18 67:5 68:12 69:15 71:11,12 71:23 72:16,23 73:20 74:13 75:14 77:7 79:11 80:20 89:15,25 95:5 95:10 97:14 100:13 105:18 112:20 113:4 118:9 121:12 121:16 122:25 123:6 124:17 124:24 125:5

125:25 149:16 154:15 184:3 185:2 193:19 201:19 204:8 204:25 206:4,9 206:17 210:11 218:5,11 220:15 221:16
nineteen 7:25 8:4
ninety 124:6 161:18
noise 149:6,9 149:10,16,18 150:6,10
nonaffected 12:14
nondisclosure 210:9
nonfocus 124:13
nonmanipula... 156:12
nonuniform 207:16
normal 153:9
normally 166:7
notary 1:18 3:4 100:7 223:14 223:21 226:4
noted 222:3 223:7
notice 1:15 187:25
notion 179:21
notwithstandi... 144:18
null 158:25 161:20
number 6:18 7:17 12:6 13:5 18:8,25 28:22 104:17 105:9 123:4 128:6 181:19 185:18 185:19 189:12
nyse 70:24 71:9

o

o 100:2,2,2
obfuscate 35:5 170:25
object 6:7 62:8 71:24 77:21 98:16 113:18 113:25 132:9 210:22
objection 8:6 17:23 31:10 70:15 103:11 106:2 107:14 114:21 119:7 168:25 187:16
objections 115:22
obligation 216:10,20
observe 58:25 140:3 141:20 161:21
observed 132:15
obtained 13:9 13:11,14,23 14:6 22:14 178:19
obvious 146:21 170:19
obviously 38:7 144:9 145:16
occur 67:20 73:16 74:22 97:21 199:5
occurred 15:8 56:21 64:8 67:12 68:6,13 72:12 74:19 75:21 90:12 91:8,25 92:9 93:12,20 94:5 94:6 135:16 144:24 209:4 209:12 213:9 213:11,12
occurring 40:23 57:2 58:25 71:16 75:9 198:13 199:9
occurs 109:8
offer 7:5,22 88:14 117:18 118:12,17,20
offered 36:13
offering 38:16 81:24 106:6 114:14,16 115:17 116:25 117:24 119:15 121:2 122:4 138:13 146:9 155:22 197:16 197:18 200:2,8 200:9,14 207:12 208:18 208:25 211:14 216:21 224:20 225:7
offerings 123:16 134:5
office 16:3
offices 1:16
offsets 190:7
oh 36:23 108:21
okay 59:8 86:2 88:12 126:11 139:16 142:7 153:25 168:25
omissions 183:3
omit 183:22
omitted 183:21
once 68:19 161:2,11 162:10 174:12 205:7
ones 17:9,10 28:17 29:4,13

47:17 91:8
opening 7:10 88:11,24 150:22 151:6 151:23 153:24 157:3 198:3 206:5
opine 124:10 144:2
opinion 6:12,13 7:5 9:25 10:2,6 36:14 38:15 40:18 41:21 42:4,5,10,15,24 43:5,5,6,17 44:24 45:2 46:9 47:8,10 50:20 51:3,17 51:24 58:10 59:2 67:7 68:11,15 71:9 71:13,20 72:14 73:10 74:15 79:5 80:19,24 81:8,9,25 88:14,21 89:14 89:24 91:22,24 98:11 102:6,11 102:15,17 105:14,21,25 106:11,14,17 106:23 107:13 109:11,17 112:25 113:20 113:21 114:14 114:16 115:14 115:16,18,25 116:3 117:18 117:24 118:12 118:16,20 119:2,15 120:23 121:3 124:15 125:7,8 125:9 139:24 141:25 142:2 143:4 145:23 151:3 152:7,19 153:20 154:13 154:17 155:9 155:18 156:14 156:16 182:22 186:4 188:21 188:22 190:23 192:25 195:13 196:23 197:6 197:17,21 199:15,18,19 200:2,9,13,14 201:12 202:14 204:10,23 207:11,13,13 208:9,19,20 211:19,21 214:24 216:18 216:21 217:15 218:2 220:6,9 220:20
opinions 7:22 8:5,8,11,13,14 8:17,21 38:16 47:13 50:3 106:7 113:2,13 116:25 117:25 119:16 124:22 146:9 148:6 155:23 156:4 197:18 209:2
opportunities 77:13 147:10 148:12 149:2 172:21
opposed 19:25 78:9 98:7 110:5 137:18 177:12 184:16 188:23 194:18
opposite 57:7 59:2 193:8,18 195:9 203:7 204:5
options 38:20
order 9:6 77:19 77:23 79:17 101:17 102:20 103:3 107:11 112:12 148:17 212:16
ordinary 117:11
organizations 3:18
organized 145:13
original 65:4
orsini 2:10 6:7 8:6 16:11 17:23 31:10,21 34:7,14,24 35:7,11 41:6 43:22 53:14 59:9 62:8 70:15 71:24 77:21 92:24 93:7 94:21 95:13 98:16 99:11 103:11 106:2 107:14 107:22 112:22 113:18,25 114:21 115:22 119:7,21 123:23 125:22 127:6 132:9 149:8 168:25 171:3,12 174:17 176:17 178:23 179:13 179:20 184:9 187:16 195:20 195:25 210:22 212:10 216:15 217:3,9 219:11 219:16 221:18 222:2
output 181:14
outs 190:8
overall 158:12 159:24 160:25

overbroad 5:16
overreactions 65:17 66:12
overvalued 50:21 51:18,21 100:14,17
own 8:22 111:15 170:25 196:23

p

p 2:2,2
p.m. 99:15 100:4 222:3
package 10:23 11:2
page 7:24 53:9 53:24,25 59:12 59:24 123:21 123:23,24 124:4 125:23 126:19 127:2 128:3,4,17 132:25 133:8,8 133:21,24 134:8 162:8 176:5,7 181:18 185:9 221:25 224:5,9 225:4 227:4,7,10,13 227:16,19
pages 53:4
paid 56:15 77:25 78:5
paradox 148:16
paragraph 7:25 8:4 14:19 15:9,12 16:25 17:17,24 18:4 18:17 20:17 21:24 23:5 24:23 25:7 28:24 32:18 33:8 34:2,21 40:12,17 56:6 56:12 57:19 65:3,6 70:8 88:13,22,23 89:3,6 90:18 91:4 94:14,17 138:23 139:13 139:14 141:18 142:5,8,17 143:10,17,18 151:5,11 153:23 157:11 157:19 158:3 183:24 184:8 184:10,20 185:9,12 198:2 206:4,6,8,11,13 206:17 207:14 207:23 210:11 218:4,11,21 220:14 221:16
paragraphs 8:9 14:24 16:9 20:13 22:11 28:18 70:7 142:25 144:16
paraphrase 99:6 136:20
paraphrasing 56:12 111:9
part 10:6 11:24 11:25 12:5 13:2,3 16:22 29:18 31:4 35:16 36:24 63:6 78:20,22 79:9 80:14 90:3,8 139:24 142:18 160:11 163:12 164:16 164:17,22 180:2 185:9,10 192:9 208:12 219:2 220:5
participants 140:2,5,8,16 141:10,20,22 148:10,11 154:8 186:23
particular 9:5 17:17,25 18:23 26:19 27:10 28:20,21,23 31:2 44:15 45:8 54:5,7 57:19 70:19,21 89:13 92:14 122:14 123:19 126:17 136:5 136:10,22 140:25 141:4 149:19 150:18 155:25 158:11 158:14 159:23 159:25 161:2 163:19,24 166:4,8 167:9 167:10 169:12 169:13 172:7 175:14 176:3 186:9,15,25 187:3 189:2 191:10 201:13 202:20 203:13 206:10,13 207:14 209:3 209:10,11,19 210:4 215:3,20 215:23 217:22 218:22
particularly 44:20 51:22 62:20 91:10 92:19 94:8 95:9 100:19 115:4,15 148:10 150:25 181:20 211:18 214:25 215:21 217:19
parties 63:18 69:20 226:17
parts 33:11 200:24
party 70:5

pass 17:8 27:15
past 135:23 203:11
patterns 132:16
paul 128:25 129:2
pdf 123:22
penultimate 184:9
people 8:19,23 9:3,14,15 78:11 79:9,24 80:13,20 100:23 101:2 141:7 209:22
perceived 19:15 21:10 26:17 46:14,18 47:3 48:23 71:15 77:11 89:20 91:17 92:14 98:10 101:22 110:17 113:8,12,14,22 114:18 115:2 115:20 116:9 154:24 155:14 172:18 199:7
percent 45:12 60:10,13,17,24 63:10 67:15 75:22 90:25 130:18 161:19 161:25 185:17 185:18,19 187:10 207:4
percentage 101:18 102:19 103:17 162:23
perception 40:22 41:15 42:19 43:2,19 44:8 50:12 90:8,14 113:7 114:23,24 156:18 165:7
perfect 95:24
perfectly 148:18,19
perform 71:5 72:5 95:18 167:6 169:16 197:3
performance 88:17
performed 136:12,15 159:12 179:7,8
period 13:6 14:7 15:20 23:20 27:10,25 27:25 34:2,22 40:15 41:5 42:9,12,17 43:11 44:7 45:17 46:11 47:5,16 48:3,9 48:16 51:8,13 52:7,22,23 54:4,6 55:8,10 55:12,15,17,24 56:22 58:22 64:9 67:15 69:10 71:17,18 71:19 74:5 75:15 80:21 87:8 90:2 92:6 92:23 93:6,12 93:16,21 94:20 95:21 97:15 100:24 101:3 102:7,12 104:18 105:18 109:15 112:21 113:5,6 115:19 116:7,8 118:11 118:15,25 133:19 136:10 136:15 137:8 144:6 145:11 151:16,18,20 151:21,21,23 151:25 152:4,8 152:23 153:4 154:6,16,21 155:17 156:2 157:3 158:14 158:15,19 159:4,14 160:3 160:4,4,6,8 161:6,7 162:13 164:2 165:20 166:4,8 167:12 167:12,20,24 168:2,6,18 169:13 173:6,9 173:14,16 174:7 175:14 175:21 177:10 178:21 179:11 184:23 185:3 185:22 187:4 191:20 192:2,9 192:12,14,16 192:21 193:2,6 193:8,10,13,22 194:22,22,25 194:25 195:5,8 195:13,14 196:8 197:10 199:6,14 201:9 202:12 204:10 205:7,16 207:18 208:11 211:18 220:8
persist 76:2
persisted 142:21
person 29:7 175:18 178:17 179:9,18,23 180:12,18
person's 86:24
personally 11:13,19 13:21 24:4 25:13
pfizer 189:8
phrase 84:7 106:8 117:8,9

phrasing 18:13
pick 167:24
piece 75:11 177:9 204:11
pinpoint 68:5
place 210:17 226:8
placed 40:8
places 64:5 65:3
plaintiff 123:8 123:9 206:18 206:23 214:13 215:9,12 216:9
plaintiff's 142:19 143:20 188:11 189:9
plaintiffs 1:15 2:4 56:20 58:16,18 59:3 117:19 124:8 139:3 194:13 196:13,17 198:4 201:21 206:7 208:21 212:21,23 213:2 216:19
pleadings 50:2
please 26:14 34:12 35:14 99:8 157:4 206:5 215:7
plug 160:15
plugging 181:13
plus 93:14 214:12
pocket 189:20 190:13,21
point 24:2 25:22 28:23 32:12 54:12 57:18 61:10 62:19 64:18,23 67:2,21 68:10 73:17 74:22 129:6 209:2,10 209:18 220:24
pointed 189:11
points 28:20,21 183:5 208:8
polonsky 9:7
pontificating 34:15
portion 105:16
position 49:2 96:4 118:9 121:8 165:10 172:20
positions 147:9
positive 140:6 141:23
possibility 48:22 103:24 205:18
possible 27:22 29:23 30:18 48:24 61:6,17 70:18 73:23,25 77:12 79:8,14 79:17 109:23 109:24 110:2 125:20 145:19 145:24 146:4 158:25 183:7,8 197:22 199:11 205:14 215:5
possibly 51:4
post 96:10
postings 49:5 49:12,16,20,22
potential 19:16 21:11 27:7,8 27:21 30:17 61:19 62:14 69:14 198:15 207:22 208:2 218:13 219:9
potentially 21:5,8 26:15 30:15 168:9 178:10
power 131:4,8 132:17
practical 4:16
practice 5:8
practiced 5:10 5:11
practicing 5:3
preceded 193:5
precedes 218:20
precisely 44:22 75:8
preclass 40:15 41:5 42:8,12 42:17 43:11 44:7 45:17 47:5,16 48:9 51:8 64:9 71:19 80:21 87:8 93:16 97:15 100:24 101:2 104:18 105:17 109:14 112:21 113:5,6 115:19 116:7,8 151:15,18,20 151:21,23 154:6,16,21 155:17,25 157:3 159:4,14 160:7 161:7 162:13 164:2 165:19 167:11 167:20 168:18 174:6 175:21 177:10 178:21 185:2 193:13 194:21,24,25 205:16
predict 68:3
predicted 137:23 158:18 158:21 160:5 161:5,10,15,22 161:23 163:18
predicting 160:21

prefer 171:2
premature 191:15 192:23
premise 205:11
prepared 15:14
prerogative 221:21
present 28:5
presented 28:8 59:6
president 3:25
press 115:14
presumably 13:18 63:12 217:14
presumption 101:10 107:12 200:3,10
presupposes 82:6
pretty 219:11
prevail 197:8
previous 64:14 98:19 101:14 174:11 205:13
previously 100:6
price 15:6,8,22 21:12 26:18 27:22 30:19 39:25 40:7,14 40:19 41:4 42:6,11,16 43:3,10,20 44:6,12,13,16 44:20 45:4,14 45:19,23 46:11 46:17,24 47:7 47:21 48:2,16 50:14,18 51:5 51:22,23 52:3 54:5,9,12,14,15 54:17,23 55:3 55:4,9,19,20 56:18 57:5,11 57:12,15,16,21 57:25 58:2,4,7 58:8,18,23 60:11 61:11,19 61:23 62:4,6 62:14 64:7,12 64:22 65:11,21 66:3,6,17,23 67:14 69:2,11 69:14 70:13 71:3,16 73:3,3 73:12,20 74:12 74:16,17,18 75:14,20 76:3 76:18,22 77:25 78:5 79:19,22 81:23 82:19 83:9,21 84:4 84:17,25 85:10 86:6,10 87:14 87:19,19 89:25 90:10,24 91:7 91:18 92:13,17 93:15 94:5,6 95:19 100:17 100:20 101:11 103:5,9 104:7 106:10,12,20 107:4,11,24 108:5,16,20,25 110:4,6,9,20 111:2,24 112:15,16 116:6,12 117:16 121:23 126:22 127:18 128:13,21,22 129:14,15,23 131:8 133:17 136:7,11,20,21 136:24 137:5,6 139:20 140:10 140:17 143:5 143:11,21 144:14,14 147:13,20 148:2,5 154:7 154:20 155:15 159:6 163:17 164:24 165:2 165:21 167:25 169:6,19 170:6 170:14,21 172:13 173:3 175:17 177:15 178:14 184:2 184:25 185:14 185:14 186:4 186:18,19,21 187:2,4,11 188:6 192:25 193:20 194:19 194:24 195:6 195:15,16 196:7 197:9 199:3,13 201:3 202:16,24 203:23,25 204:5,23 206:20,21,25 207:3 213:8,9 213:13,17 214:7,8 215:18 216:3 221:4,6 221:7,9
prices 12:9 19:17 27:23 30:21 39:17,21 44:25 47:15 48:24 50:4 52:6,12,21,22 54:4 55:14 56:15,24 57:4 57:21 58:11 59:15 61:22 63:25 64:17 66:24 67:7 69:6,9,25 70:6 71:12,23 72:16 75:3,25 81:3,3 81:6,13,16,19 83:22 84:2,12 84:18 85:3,7 85:19,23 86:14 86:15 87:6,9

87:11,15,18
88:15 89:9,11
89:17 90:7,13
92:4,22 93:5
93:22 94:19
95:4,12 96:5
100:12 101:3
101:21 102:9
102:14,24
103:21,22
104:3,4 109:5
109:14,20
110:14,16
112:6 113:4
114:9 115:12
116:5 118:17
118:18 130:2
133:16 134:18
136:9 141:4
142:9,14
143:15 144:12
145:25 146:3,9
146:11,14
148:8 154:4
156:9,15,16
163:7,15,22
164:9 169:14
172:17 191:22
192:4,7,8,13,15
193:6,15 194:3
195:4,11 196:8
196:19 201:4,7
201:8,19 202:7
202:12,13,15
202:24 203:9
203:20,22
204:9,24
205:18,19
212:24 221:8,8
pricing 123:16
134:4 144:12
principal 8:8
8:14,25
print 139:8,10
prior 51:12
71:17 158:16
197:10
private 27:8
148:4
probably 14:13
178:24 189:15
procedure
135:6 137:11
137:13
proceeding
226:7
process 127:23
148:13 157:5,7
175:15 181:10
181:16 182:5,7
produce 180:14
produced
157:18
product 46:13
60:11 89:13
116:8 174:8
180:15
professional
4:18
professionals
9:13
professor 4:6
37:6 124:9
129:2 132:11
196:4
proffered
124:9
profit 77:19,24
79:17 81:17
87:17 89:22
98:6 99:2
110:5,16,23
111:20 112:8
112:13
program 105:2
105:5,7,10
proof 217:5
prop 144:14
proper 12:17
172:24 202:14
properly 11:15
181:5
proportion
186:3 187:14
proposed 135:4
204:12
proposition
75:12 89:5
140:13
prospects
88:17
prove 208:21
210:18 211:4
212:2,4,7
213:3 214:14
215:10,13
216:10,19,21
216:23 217:6,7
provide 50:8
provided
124:15 208:9
provisions 7:4
public 1:19 3:4
100:7 122:4
123:16 127:18
134:5 138:13
223:21 224:19
225:6 226:4
publicity 87:7
103:19
publicly 12:19
47:23 97:22
102:21 163:25
169:9,17 170:7
171:19 177:5
published 14:6
14:12 96:22
122:19
purchase 38:20
80:2 81:6,15
85:20 97:22
98:12 101:16
101:17 102:20
110:3 118:22
119:6 140:19
141:3 152:24
206:20 213:8,9
213:16

purchased 37:14 81:2,11 81:23 83:14,15 87:10,20 101:19 102:4 103:10,18 104:2,3,17,18 206:19,24 212:23 213:4,5 213:20
purchaser 85:6
purchasers 140:6 141:23
purchases 97:24 118:19
purchasing 78:8 79:7,18 79:25 87:12,14 100:24 101:2 102:7,12 112:8 154:10 155:6 155:10,19 156:21
purely 182:6
purpose 18:2,6 18:23 19:9 33:14 35:19 78:10 138:20 139:6 163:20 177:18,25 178:7 194:15
purposes 4:16 6:19 78:8 141:15 161:6
pursuant 1:15
pushing 180:13
put 85:24 210:16
putting 145:22 172:11

q

qualifies 207:21
qualitative 183:10
quarreling 130:24
question 5:17 6:11 10:12 12:13 16:2 18:13 21:13,14 25:4 26:19 27:10 31:20,22 34:8,15 35:8 35:10 36:25 38:8,14 43:12 43:14 52:5 56:7 68:2 77:23 82:16 92:7,20,25 93:2 95:15 98:22 101:14 107:16 109:8 111:14,19 115:6 124:14 151:8 159:10 159:18 160:6 160:24 170:10 170:10,11,18 171:4,5 174:11 178:25 180:24 189:14,17 190:22 193:13 195:18,19 196:3 200:6 205:21 211:13 211:15,25 217:10 219:22 221:19
questions 24:18 76:15 81:20,25 82:7,9,11,21 119:13 222:2
quickly 77:19 156:11
quite 170:19 205:14
quote 76:5 83:2 86:12 88:18 102:2 104:9 108:10 109:13
quoted 54:18 83:12 111:8
quoting 135:13

r

r 1:14 2:2 3:2 4:1 5:1 6:1 7:1 7:12 8:1 9:1 10:1 11:1 12:1 13:1 14:1 15:1 16:1 17:1 18:1 19:1 20:1 21:1 22:1 23:1 24:1 25:1 26:1 27:1 28:1 29:1 30:1 31:1 32:1 33:1 34:1 35:1 36:1 37:1 38:1 39:1 40:1 41:1 42:1 43:1 44:1 45:1 46:1 47:1 48:1 49:1 50:1 51:1 52:1 53:1,20 54:1 55:1 56:1 57:1 58:1 59:1 60:1 61:1 62:1 63:1 64:1 65:1 66:1 67:1 68:1 69:1 70:1 71:1 72:1 73:1 74:1 75:1 76:1 77:1 78:1 79:1 80:1 81:1 82:1 83:1 84:1 85:1 86:1 87:1 88:1 89:1 90:1 91:1 92:1 93:1 94:1 95:1 96:1 97:1 98:1 99:1 100:1,2,5 101:1 102:1 103:1 104:1 105:1 106:1 107:1 108:1 109:1 110:1 111:1 112:1 113:1 114:1 115:1 116:1 117:1 118:1 119:1 120:1

121:1 122:1
123:1 124:1
125:1 126:1
127:1 128:1
129:1 130:1,6
131:1,5 132:1
132:16 133:1
134:1 135:1
136:1 137:1
138:1 139:1
140:1 141:1
142:1 143:1
144:1 145:1
146:1 147:1
148:1 149:1
150:1 151:1
152:1 153:1
154:1 155:1
156:1 157:1
158:1 159:1
160:1 161:1
162:1 163:1
164:1 165:1
166:1 167:1
168:1 169:1
170:1 171:1
172:1 173:1
174:1 175:1
176:1 177:1
178:1 179:1
180:1 181:1
182:1 183:1
184:1 185:1
186:1 187:1
188:1 189:1
190:1 191:1
192:1 193:1
194:1 195:1
196:1 197:1
198:1 199:1
200:1 201:1
202:1 203:1
204:1 205:1
206:1 207:1
208:1 209:1
210:1 211:1
212:1 213:1
214:1 215:1
216:1 217:1
218:1 219:1
220:1 221:1
222:1 223:2,4
223:13 224:6
224:11,15
227:2,3,3,24
ran 10:7,9 11:14
random 173:8
range 186:12
ranging 185:17
rather 21:7,10 30:17 81:17 83:13 99:6 141:25 172:15 172:16 190:12
react 127:13
reaction 178:15
reactions 188:6
read 8:2 16:16 16:19 29:17,20 29:24,25 30:2 30:5,9,24 31:8 31:15,16,17 32:5,6,16,25 33:5,23 34:16 34:18 35:21 36:16 49:19,21 99:7 109:12,18 126:11 130:25 138:22 139:8 185:11 200:23 200:24,25 206:22 223:5
reader 56:4
reading 23:12 23:25 30:6 32:8 33:20,21 129:9 142:23 143:9 158:2
real 45:23 66:8 68:21 97:6 171:3 209:8 212:14,17
realized 216:3
really 4:17 6:8 18:12 34:4 38:8 56:6 57:18 68:4 70:2 72:18 94:24 95:10 127:3 129:8 166:16 187:4 192:23 204:5
reason 84:6,11 84:18 85:7 86:16 103:16 105:24 110:18 119:5 124:20 187:15 203:18 204:21 220:3 227:6,9,12,15 227:18,21
reasonable 145:14
reasonably 147:21
reasons 40:7 51:6 58:3 66:2 73:15 76:17 79:6 86:18 87:10 92:15 102:3 119:10 135:23 148:8 152:15 154:18 179:7 194:17 196:9,11 197:21 203:3,4 203:7 205:9 211:22 215:2
rebound 69:8 193:16,17
rebuttal 53:10 53:15,17,20,25 59:11,25 65:5 65:12 83:19 102:2 104:9,13 111:11 152:2,4 152:12,20 201:2 224:14

recall 37:10 49:15 50:6 123:20 127:23 133:25 134:7 135:10 188:19
recalling 120:12
receive 139:18
received 104:12
recently 36:11
recess 99:14
rechecked 182:8
recognize 122:10,12,14
recognized 154:8,19
recognizing 71:6 181:10 194:14
recollection 86:20 124:21 129:9 134:12 134:20 135:11 187:24
recommendat... 65:15
record 3:15 226:14
red 182:25
reddit 48:22 49:5,10,12,16 49:20 97:13
refer 31:18 41:5 43:10 44:7 71:18 83:11 151:15 154:21 155:17 160:7
referred 14:2,4 14:10 16:23 17:16 18:3 22:10,19 32:2 32:4,22 33:12 35:17 39:14 49:6,13,14,17 51:7 64:8 121:19 131:10 146:23 164:7 181:16 182:16 188:2
referring 7:19 23:14,16,17 39:10,19 40:11 45:7 49:25 64:13 65:13,18 78:12 99:4 116:20 125:23 126:6 150:13 150:17 154:23 157:10 185:12
refers 16:25 20:25 39:12
reflect 83:23 85:3
reflected 206:12
reflects 94:15
refresh 134:11 134:19
refutation 59:3
regarded 132:12 153:6
regression 10:7 10:9,18,22 11:3,6,9,15,24 60:12 131:5 132:19 137:24 157:17 159:2 159:13 160:11 160:16 173:12 174:3
regulation 5:21 5:25
reject 158:25 161:20
relate 83:5,6 202:8
related 76:4 146:24 208:7 226:17
relates 56:6
relation 160:24 163:17 164:12
relationship 52:20 57:4 121:23 157:21 158:6,10,18 159:22 160:20 160:22 161:3,4 161:12,23 163:15,22 186:24 188:4 190:19
relative 118:18 212:17
relatively 77:18 94:13 182:6
release 128:23 129:16 133:18
released 127:17
relevance 217:13
relevant 15:4 15:24 17:9,10 21:6,8,9 26:15 26:22 27:16,18 27:24 30:16 39:13 45:13 46:6 107:6 108:18,19 109:3,9 111:4 119:6,11,14,17 119:18 121:5 128:23 129:16 136:6 137:3 145:10 146:12 149:21 150:19 150:25 165:4 165:15 168:9 168:16 169:4 170:2,17,24 171:9,23 172:3 172:6 173:22 174:15,24 175:20,24 178:4,8,10,13

178:20 179:12 182:17 184:4 185:4,6,20 186:6,10,24 187:12 193:24 211:15 214:23 214:23 217:2,8 217:15,24,25 218:5
reliable 132:8
reliance 83:8 86:5,24 107:12 108:4 111:23 117:3,15,20 200:4,10
relied 50:7 81:22 101:10 103:4,8 106:19 107:3,10 109:21 110:25 118:13 182:15
rely 82:18 83:20,25 84:16 85:9,22 86:10 87:2 104:6 109:15
relying 105:23 106:9 108:15 108:24 110:10 110:19 112:14 112:15
remained 156:10
remaining 95:25
remand 189:5
remember 15:11 25:19 30:6 32:7 33:20 36:2 37:17 77:5 120:11 123:14 144:8 184:15 187:20
reminded 36:25
removing 194:2
render 86:24 132:7
repeat 12:12 28:16 35:2 93:2,10 159:11 160:19
repeated 19:23 106:15
repeatedly 93:8
repeating 32:12 220:17
repetition 19:22
repetitions 172:12
rephrase 84:9
report 7:10,10 7:12,14,20,21 7:23 8:5 13:3 14:2,5,10,20 15:14 18:3,20 19:18 20:18 21:3 22:21 24:8 26:12 28:12,16,17 29:10 32:3,4 36:16,18 37:7 37:9,12 38:6 38:11,17 39:5 39:15 40:4,13 40:21 42:19 43:8 47:19 50:19 52:8,12 53:2,8,10,18,20 54:2 59:11 61:4,14 63:3 63:23 64:4,6 64:24 65:4,5 65:13 69:17,22 71:14 73:8 76:20 80:25 81:19 83:2,19 88:11,14,24 92:11 94:4 98:2 102:3 104:9,13 108:11 111:11 118:5 119:23 121:18 126:9 131:25 138:5,6 138:11,17,21 139:11 146:23 150:23 151:6 151:11,13,23 152:2,5,12,20 153:24 157:3 161:7 162:15 164:23 165:14 168:12 170:19 175:25 176:6,7 183:12 184:15 186:2 187:7 193:21,25 195:4 198:3 200:20,25 201:2,14 202:3 206:5,9 212:13 214:3 215:4 220:4 224:11 224:14
reported 18:15 19:3 124:6 180:16
reporter 122:19 226:2
reports 45:17 46:5 50:3 57:24 80:16 106:16 108:9 119:14 182:22 192:18 196:12 197:20
representations 146:17
representative 111:8
representatives 79:5 80:9,10 82:12,22 86:13 87:23 89:21 101:25 102:25 104:10 108:10

110:7,13
require 213:7
required 81:10 207:25 211:6 218:12 223:14
requirement 210:21 211:9 211:10 218:23 218:24,25 219:7,21,24 220:2,14,25 221:15
requirements 156:3
requires 210:17 211:7
research 9:11 13:18 31:5 171:15,25 176:22,23 180:23 182:9 182:15 183:20 220:21
residual 60:8 60:14,22 62:21 63:9,12 162:16 163:4
respect 14:16 19:20 26:23 32:21 37:23 73:22 81:14 83:16 98:3 101:24 115:20 124:10 155:4 163:24 169:8
180:19 191:7 204:8 206:10
responded 129:20
responding 164:21
response 70:4,5 71:15 76:15 163:8 164:10
responsibilities 9:23,24
responsible 29:7 48:15 72:24 75:13
responsive 133:18 173:13
rest 218:21
restrictions 38:19 39:2,3 40:8 58:11 67:4 118:21 152:24 201:18 203:21,24 204:6 205:8,24 210:16,20
result 51:22 90:10 149:2 161:25 174:20 189:13 193:3 205:23 207:20
resulted 93:13 93:21 188:12 189:4
resulting 66:23
results 11:17 11:17,20 162:7 162:15 180:4 182:8
retail 48:25 77:14 78:13,18 78:19 79:3 97:11 113:11 147:10 154:10 155:7,10 156:21 172:22
retirement 37:25
return 58:23 60:15 62:21 137:23,25 158:8 161:15 161:15 162:17 162:23 163:4 176:12 207:4
returns 63:9,13 135:14 137:21 158:7,8,11,12 158:18,21,21 160:6,15,22 161:5,10,10,24 163:17,18 185:16 187:2
revealing 79:6 82:24
reverse 192:2 192:13
reversion 62:19 63:18,22,24 65:10 73:2,11
73:16,19 74:9 74:11 75:13 76:4 199:2,4
revert 64:2 65:23 66:3
review 13:21 15:20 17:7 24:4,6,10 25:13,23 26:9 33:16 36:4 49:4,8,9,11 181:15 183:25
reviewed 12:7 13:5 26:3 28:9 43:7 49:23 78:17 82:14,23 108:7 182:21
reviewing 25:19,20 64:25 126:10 139:15
revise 140:8
reward 148:22
richard 130:6 131:20
right 6:15,24 10:7,8,15 12:23 13:7,8 16:10,13 17:4 18:18,19 22:2 22:22 23:23 25:2,23 33:8 40:9,15 42:14 45:24 46:20,21 47:11 54:10 55:4,24 59:16

60:7,16 61:24 63:15,16,19 67:24 84:16 91:20,21 95:3 95:7 96:11 101:5,6 106:13 107:18 123:2,3 124:17,18 125:12 126:24 127:21 129:4,7 129:18 132:2 133:6,13 134:13 139:21 142:22 143:8 151:7 160:16 160:17,18 162:6 180:20 190:16 198:7 201:9 203:12 203:14 218:6
rinaudo 9:8,10
rise 91:18
rising 156:10
robert 3:16
robinhood 40:8 67:4 69:19,24 86:3 118:22 191:4 210:16
robinhood's 156:7
role 3:23 4:3 9:18 47:3 50:16 76:21
roll 12:22 130:6,9 131:11 131:16,21 132:8,12
rosen 2:3,5 3:8 7:8 16:13 34:9 35:9 53:16 88:3 100:11 107:23 121:25 124:2 125:24 131:15 138:4 149:3,10 179:15 195:21 200:16 210:25 211:5 219:13 221:22 224:6
rosenlegal.com 2:6
routine 166:15
row 60:4 176:10
rows 181:19 182:12
run 10:22 11:3
running 4:14 4:15

s

s 2:2 3:2 100:2 100:2,2,5 224:8 225:3 227:3
safe 125:3
sale 38:20 49:2 57:4,11,14,16 196:19 202:11 202:24,24 206:21 207:21 213:13
sales 118:18 144:13 195:11 208:23
satisfied 156:2
satisfy 175:25
saw 49:6,13,16 83:4 108:20 182:24
saying 66:17 68:7 90:13,17 124:19 131:14 141:18 151:9 157:24 195:24 208:15 214:17
says 14:21 15:16,20 55:7 60:14 70:23 90:18 96:14,20 124:8 125:10 125:14 127:11 127:15 128:4 128:12,18 129:11,20,24 131:2 134:15 135:4,8,12 137:18 138:23 139:2 142:8,15 142:16 143:17 154:2,3 155:6 156:6 157:20 157:23 158:3 167:15 183:24 184:20 198:4 201:17 202:25 206:22,22 207:15,24 211:5
scenario 210:15
scheindlin 122:17
school 4:7
screen 96:12,18 96:21 125:21 127:5
scroll 125:15
search 14:15 32:9 148:21,22 168:11 175:15 176:2
searched 13:4 14:22 22:9,25
searches 15:17
searching 15:18
sec 15:18 17:15 18:17 27:4,5 27:14,14 138:13 171:17 171:18 225:7
second 69:13 128:18 134:16 154:2
seconds 221:13 221:17,20
section 6:5 61:14 63:3 69:18 133:2,21 133:23 143:19

151:13 188:9 189:16 202:20 209:11,19 215:3,23 217:23 218:22
securities 5:15 5:19,21,25 6:4 7:4 26:19 27:9 27:24 37:15 56:11,13 67:6 83:24 118:23 122:5,17 148:12,23,25 187:3 188:14 189:8 200:19 209:21 220:23 224:20
security 84:5 135:15 139:19 139:20 146:18 146:19 158:12 159:24 160:23
see 8:3 21:2 57:25 69:20 82:12 97:4 122:10 125:14 128:8 129:18 129:19 130:7,8 130:16 133:9 134:13 138:25 162:5 166:19 167:5 174:14 174:23 177:18 181:23
seeking 88:5 96:9,25 224:16
seeks 134:16
seen 205:11
sees 31:22
select 172:24 173:6
selected 30:23 127:24
sell 77:24 78:4 79:20 80:3 102:20 112:13 118:24 147:23
seller 147:21
seller's 119:4
sellers 77:16
selling 87:18 118:14
sense 100:17
sent 21:17
sentence 16:16 20:17,19,20,24 23:13,25 32:19 32:21 40:16 139:10,25 142:16 154:2,3 156:6 157:9,19 184:10,16,18 206:14,14 207:15,23 210:11,12 218:10
sentiment 149:24 150:2
sentiments 28:17
separate 72:6 106:22 160:2 175:5
separately 19:18 70:17,18 71:4
series 62:25
services 31:4 32:13
set 14:15,15 16:6 19:2 20:8 20:22 21:15,21 23:7,9,17,22 24:5,11,19,20 24:25 25:14 26:7,10,21 28:4,10 29:3 29:19 30:12 31:9 32:17 33:13,15 36:3 90:21 136:5 178:3 226:23
sets 20:3
settled 188:18
settlement 189:6
seven 50:25 51:4,10,11,13 51:16,17 65:4 95:9 124:6 125:17 133:21 138:23 143:19 184:20 195:22
195:25
seventh 73:4 91:19 181:21
several 15:13 30:11,25 64:5 81:13 97:25 101:25 102:25 104:9 106:15
share 9:22 39:17 40:7 75:14 93:22 94:19 126:21 127:18 128:13 129:22 142:13 163:7 188:22 189:23 190:3 190:10,15,20 191:2,3,6,7,19 191:22,24 192:20 194:7 194:12 195:9 195:10 207:9
shares 54:21 80:20 103:10 104:17 105:17 118:14,24 127:13 142:9 206:19,24 207:2 213:20
short 1:5 19:15 21:10 26:17 27:7,21 30:17 40:22 41:15,18 41:23 42:2,20 42:22,25 43:2

43:18,19 44:3 44:9 46:11,14 46:18 47:4 48:23 49:2 68:18 74:25 77:11,11,16 78:23 86:15,23 86:24 87:4 88:15 89:16,20 89:22 90:4,8 90:15,16,19,20 90:23 91:17 92:4,14,21,22 93:4 94:13,19 98:10,15 101:22 110:10 110:15,17,22 111:13,16 112:5 113:9,12 113:14,22 114:18 115:2,3 115:20 116:9 142:24 146:24 147:2,8 154:25 156:18 165:8 165:10 172:18 172:20 199:6,8 223:1 227:1

shot 58:12,15

show 21:18 25:18 30:5 32:6 33:18 35:24 40:10 59:18 82:17 116:19 123:13 131:15 150:12 206:15 213:18

showed 133:16

showing 109:13 140:22 221:11

shows 56:3 59:14 60:3,6,8 62:23 176:11 176:13 181:22

side 180:20

signature 226:24

signed 138:10

significant 15:8 101:18 102:18 103:17 127:19 128:21 129:14 129:22 158:24 159:5,15 161:18 162:12 162:20,25 165:20,21 166:18 167:3,4 167:8,19 168:3 168:7,8,20 169:7,11,15,20 169:24 170:5 170:15,22 173:3,19 174:5 174:13,21 175:2 177:22 177:24 183:17 187:11

significantly 127:14

similar 149:25 189:7,10

similarly 180:19

simplest 83:10

simply 140:15 190:14

simultaneously 175:9,10

single 29:18 35:21 171:16 177:8 181:7,15 214:11 216:8 220:11 221:14

sit 16:4 123:15 181:2

sites 48:21

sitting 99:12

situation 111:7 147:7 150:19

situations 85:13,21

six 14:20 17:25 18:5,18 20:17 32:18 55:13 56:6,12 65:5,9 65:12,19 123:4 124:11,16 125:16,17 126:14 139:4 143:22 183:24 184:8 185:10

sixteen 70:23

sixty 88:10 89:7

small 18:8 207:18

smaller 19:6 20:4

social 40:23 42:21 44:10 46:15,22 48:7 48:12,17,19,21 50:9,13,16 76:13,21 77:6 78:12,15,20 79:2,9,25 80:5 97:12 101:23 113:10,15,23 114:19 115:21 116:10 146:22 147:5 149:15 154:11 155:8 156:23 165:9 172:19

software 10:23 11:2

sold 77:18 118:10 207:2,8 209:16,16 212:3,5,5,6 215:25 216:2 221:6

solely 161:24

somebody 10:13 29:2,6 77:15 106:25 110:8,12

somebody's 111:5

someone's 108:13
sophisticated 141:2 148:10
sorry 12:12,16 53:5,24 60:4 120:7 149:8 151:8 159:8 164:5 184:7 185:15 207:9
sort 4:9 5:16
sound 120:24 121:4
sounds 38:14 107:15 117:23 124:18
source 13:15 55:2
sources 13:12 13:17,19 14:10 14:16,17,18 22:15 24:9 29:9 31:3,3,7 39:4,7,9,14 49:18,23,24 50:7 102:23 103:20 176:3 177:5 180:22 182:16
south 3:10
southern 1:2 122:20
speak 106:18 106:22
speaking 136:3 137:17 145:12 204:7
speaks 144:10
specific 15:5,24 19:2 20:7 21:6 21:9 22:13 39:20 49:11 60:7,23 67:10 68:15 71:5 73:22 74:7,15 75:2 94:18 95:18 120:13 130:4,19 136:18 167:16 168:9 171:9,16 172:14,16 176:13,15,25 177:3,8,9 178:4,11,19 179:11 180:21 181:4,20 182:3 182:11,23,23 183:18 184:4 184:16,18 185:4 186:20 189:17 208:18 216:25
specifically 73:14 80:7 154:24 213:24
specified 180:16 183:5
speculating 210:13 213:14
speculation 40:24 42:21 44:10 46:15,19 46:23 48:7,12 48:18,19 65:22 87:15 101:23 113:10,16,23 114:19 116:10
spend 4:13
spent 196:2
spoke 36:9,11
spread 133:12
squared 130:6 131:5
squared's 132:16
squeeze 1:5 40:22 41:15,18 41:23 42:2,20 42:23,25 43:2 43:18,20 44:4 44:9 46:14,18 47:4 48:23 77:11,12,16 78:23 86:15,23 86:24 87:4 89:16,20,22 90:4,9,15,16,21 90:23 91:17 92:4,15,22 93:5 94:19 98:10 101:22 110:10,15,18 110:22 111:13 111:17 113:9 113:12,15,22 114:18 115:2,3 115:20 116:9 146:24 147:2,8 165:10 172:18 199:8 223:1 227:1
squeezes 19:15 21:11 26:17 27:7,21 30:18 88:15 89:8,10 90:19 112:5 154:25 156:19 165:8
staff 18:10 20:10 21:16,21 23:2,18 25:15 25:22 28:3 29:2 33:23 34:18 37:11,12
stage 191:9,15
stand 211:10
standard 11:8 166:15 176:20 181:11 182:16
start 42:22 63:21 145:14 153:15 176:5
starting 96:4
state 1:19 3:4 3:14,17 5:6 81:19 100:7 203:3 226:5
stated 7:24 47:13 58:4

71:13 75:17 80:24 106:15 129:10 151:24 175:22 180:12 202:10 204:21 205:10
statement 45:7 85:11 92:25 101:8,13 104:21 105:13 140:15,19 141:19 218:19
states 1:2 65:21 105:11
statistic 54:18 176:12
statistical 167:6 169:16 173:13 174:9 175:11,16 179:25 180:8
statistically 15:7 127:19 128:20 129:13 158:24 159:5,6 159:15 161:17 162:12,20,25 165:20,21 166:18 167:2,4 167:8,19 168:3 168:7,8,19 169:6,11,15,19 169:23 170:5 170:14,21 173:3,18,19 174:5,13,21,25 177:22,24 183:17 187:10
stay 195:22
stem 218:24 219:24
stenographic... 226:12
step 157:5,5,7,7 157:12,12,15 157:15
steps 41:24
steven 36:6
sticks 189:2
stock 12:9 30:21 39:21,25 44:25 45:14 60:6 61:3,19 63:25 65:11,21 66:2,17 69:14 69:25 70:13 71:3 73:12,20 74:12 89:25 90:24 92:4,22 93:5 98:12 108:20 110:24 116:14 119:20 130:2 131:8 134:18 140:3,7 140:9,17 141:21,24 142:9 143:3,5 143:11 144:5 145:7,11,14,20 145:20 147:17 153:8 159:6 163:17 164:9 165:21 167:25 169:6,14,19 170:13,20 171:20 173:3 175:17 178:14 186:3,6 187:2 187:11 188:6 194:24 196:18 199:13 200:21 202:7 204:23 212:24
stock's 147:13
stocks 12:10,14 12:19,22 14:23 15:7,19,23 16:8,24 18:11 19:4 20:12 21:23 23:3,4 23:19 24:22 33:7,25 34:21 37:17 38:20,22 39:18,22 40:14 41:19 43:4,21 45:3,11,14 46:25 47:5,15 48:8 50:21 51:11,17 52:2 58:20 59:16 62:15 64:17,20 65:16 66:18 67:16 68:13 69:16 71:11,12 71:17,23 72:17 72:23 73:13,21 74:13 75:15,21 77:7 79:11 80:21,23 89:15 90:2 95:5 97:14,16 100:13 105:11 105:18 112:21 113:5 118:9 121:12,16 124:25 125:11 126:14 133:17 140:25 141:3,7 143:22 144:15 145:12,17,25 146:5,7 149:16 151:14 152:7 152:16,21,25 153:2 154:5,15 155:2 158:7 162:24 163:2,5 163:8 169:10 169:11 177:12 177:13 184:3 184:21 185:2 193:16,19 201:4,20 202:17 203:6 204:8,15,24,25 205:20 207:17 208:5 218:17
stop 35:7 203:21,24 204:6

stopped 193:15
straight 35:13
street 14:25 17:14 18:16 22:12 25:7 97:13 144:2,19 144:19
strong 140:3 141:20
stronger 57:20
studied 172:25
studies 16:24 50:15 132:15 166:6
study 11:9,11 12:2,2,5 13:4,6 17:2 127:11,20 132:21,22 133:4 135:6 137:10,11,12 150:18 151:4 151:19,22,25 152:4 156:25 157:2,6,16,18 158:5 162:14 162:19 163:12 163:14,16,21 163:21 166:2,4 166:13 172:24 173:8,16
study's 151:10
studying 105:15
subject 52:17 113:2 136:16 145:16 156:5 181:14
submitted 119:23 128:5
submitting 37:7
subscribe 31:4
subscribed 223:16
subsequent 52:6,15 57:5 69:6 83:18 95:20 132:6,22 144:21 199:7 204:16
subset 18:8 19:6,7 22:25 26:6,8 28:22
substantial 12:6
substituting 137:23
subsume 160:9
suffer 208:16
suffered 97:20 207:7
sufficiently 85:2
suggest 201:22
suggested 101:15 199:20
suggesting 153:19 155:24
suggests 148:4
sum 17:3
summary 8:12 46:4
supervision 8:20 9:21 10:21 15:15 226:13
supplemented 15:17
support 89:4 208:8
supports 64:16 112:2 140:13 142:19 143:20 220:12,13 221:14
suppose 125:9
sure 5:17 6:10 10:11,16 11:14 11:20 23:12 24:13 25:17 33:18 39:8 53:16 54:25 59:9 62:11 68:9 72:8 77:22 84:14 120:22 122:14 127:22 136:19 149:17 150:3 150:16 159:8 187:18 189:18 200:25 219:11
sustained 208:4 218:16
swaine 1:16 2:8
sworn 3:3 82:15 100:6 223:16 226:9
sycamore 128:21 129:14 130:19
systematic 49:8 49:9

t

t 100:2 176:12 224:8 225:3 227:3,3
tabak 65:18
table 53:9,24 56:3 59:12,13 59:22,24 61:21 62:22 157:12 201:3,16 203:9 203:13 204:4,4
take 4:20 41:8 41:24 48:25 56:4 60:18 99:9 121:25 122:7,8 138:16 139:13 149:3 183:8 200:16
taken 1:15 59:10 62:25 63:13 69:19 71:14 99:14 149:5 200:17 226:11
takes 4:17

talk 28:19 69:13 177:13 197:20
talked 27:20 89:21
talking 12:23 20:15 22:23 24:15,16,17 51:14 114:12 114:12 150:14
talks 65:10,14 143:10
target 50:4
targets 164:24 187:4
taught 5:18,20 5:22
teaching 4:8
team 8:18,24 9:2 11:7,14 13:13 36:25
tell 7:14 25:19 30:6 32:7 33:20 34:12 37:8 64:15 97:8 133:22 138:16 160:18 163:19 166:23 166:23 167:23 168:24 175:12 179:18 211:3 220:18,18 221:17
telling 33:9,10 65:20 172:9
tells 163:16
temporary 44:22 46:13 61:9,11 62:5 63:25 64:10,11 65:10 66:13,16 66:25 67:18,19 68:9 69:3,10 74:18,21 75:25 76:2 88:16 90:9 91:11,11 92:12 93:17 94:9,10,11 100:21 103:21 112:6 116:13 154:9,14 155:5 195:6 199:4
ten 7:24 70:8 135:19,23 143:7 205:2
tend 88:16
tended 127:13
term 44:11 68:18 74:25 76:24 77:17 79:11 80:2 114:11,13 117:2,5,7 149:13,23 150:6 155:5 178:9 191:24
termination 92:3,21 93:4 94:18
terms 27:3,13 32:11 50:16 52:16 114:2,8 121:4 134:3,23 172:21 192:23 194:23 209:13
test 58:15 153:9 167:5 203:22
testified 3:6 6:23 7:2 81:14 87:23 100:9 110:7,14 119:19,24,25 187:9 212:20 212:21 219:18
testify 4:23 123:8,10
testimony 33:22 34:17 79:4 82:15,22 83:12 84:2 86:20 97:25 98:4,5,25 99:5 102:2,10,24 104:8,12,14 108:9 111:8,9 111:12,22 123:13 131:12 178:25 179:22 189:13 207:6 216:16 223:10 226:6,10,11,15
text 96:18 178:9
thank 23:15,15 221:22,24
theories 135:5
theory 127:9 196:14 197:8 201:21
thin 220:2
thing 83:11 103:15 104:15 117:14 127:8 158:5 159:20 159:21 170:3
things 35:5 46:16 62:4 70:20 71:7 72:10 74:4 80:5 85:18 86:8,19 92:9 115:13 202:18 202:20
think 5:8 6:25 12:25 29:15 30:3,5,10 32:5 35:23 36:23 37:5,18 39:12 40:20,21 41:2 46:8 56:23 59:13 62:16 67:11,25 71:25 72:7 73:23 76:9 77:4 78:15 79:3 80:4 82:20 83:7,10 84:10 84:22 89:18

90:5 91:6,25 92:8,20 93:11 99:5 107:5,25 109:2,8,24 116:19,20 117:12 119:11 121:3,19 124:5 127:7 141:10 145:9,12 149:25 150:24 152:10,13 153:17 171:14 175:8,11 178:9 182:14 183:10 186:9,13,14 187:13 188:11 191:8,25 192:2 192:11,12,25 193:18 197:11 198:20,22 199:11,16,21 200:6,20 202:25 206:13 209:18,24 211:12,15 214:11,16,22 220:11
thinking 136:4
third 20:16,19 32:19 63:18 69:20 70:5 157:19
thirty 14:20 17:25 18:5,18 20:17 32:18 65:7,7 126:2 126:19 127:2 128:4,17 132:25 133:21 134:9 151:6,12 153:23 183:24 184:8,20 185:10 201:24 206:4,9,17 210:11 218:5 218:11 220:15 221:13,16,17 221:20
thought 82:23 123:3
thousand 45:12 54:20 67:14 75:22
three 9:2 40:12 53:9,25 59:14 70:24 90:25 95:15 122:25 123:4,5 124:12 124:12,16,24 125:5 130:5 131:22,22 151:6,12 162:8 201:3,16 203:9 204:4,4,24
tie 134:17 140:25 144:13 212:22
time 4:13,18 5:10 34:11 36:9 41:2 46:12 54:12 59:7 62:20 67:2,21 68:5 68:10 69:6 73:17 74:22 75:10,18 76:16 83:19 85:19 87:11 91:13 92:2,16 93:18 94:13 97:23 101:19 102:18 103:18 104:2 104:13 123:18 130:12 138:18 143:16 144:6 145:11 162:2 168:15 169:24 170:15,22 173:6,9,9 174:6 185:22 192:25 197:4 198:13 199:2,6 199:10 205:7 213:21 221:23 222:3 226:8
times 14:12 15:13 19:24 30:11 31:2,23 32:24 35:3,12 70:24 92:8 93:10 95:2,15 106:15 135:22 176:18,20 178:6 179:14 188:25 189:14 219:18 221:19
timing 80:17 101:16 118:17 118:18 207:18 210:13 213:15 213:17
timings 39:2
title 96:13
titled 131:21
today 4:24 6:14 16:4
told 10:14 171:24
took 17:15 147:9
tootsie 12:21
top 128:4 134:8
total 17:3 18:8 28:22 60:14 70:25 162:16 163:3
trade 54:16 110:24 145:18 146:10 184:22 186:6
traded 12:19 54:21 105:17 105:19 145:12 145:20 146:2,6 146:18,19 151:16 152:8 152:16,22 153:2 210:15 213:16 214:15 214:19,20

215:11 216:11 216:12,13,24 217:6
trader 108:13 108:20,23 149:18,20,22
traders 104:19 105:19,23 106:19,24 108:12 148:6 149:6,14,16 150:6,10,15,15 154:10 155:7 155:10
trades 206:7 207:19 210:13 213:15
trading 1:5 51:18 54:3 67:5 70:9,12 70:24 71:10,21 72:6,12,13,15 85:3 104:24 105:2,5,6,10 107:2 158:16 173:17 185:23 201:18 202:15 208:3 218:14 219:10 223:1 227:1
trained 5:3
transaction 191:22 214:7,7 215:17,17
transactions 208:22
transcribed 226:12
transcript 223:5,10 226:14
translate 190:10
translates 190:3
treat 144:24
trial 119:22 188:12,14 189:4
tried 19:24 32:23 141:14 220:4
triggers 105:7
trivago 12:21
true 16:3 24:12 24:13 25:13,17 26:2 51:25 52:10,18 56:15 56:17,23 57:15 58:6,9,19,21 83:23 84:4 93:23 95:11,23 96:7 105:8 124:15 126:12 138:2 141:12 141:14 142:4 165:17,23 166:17 172:23 173:5,7 191:23 192:5,6,14 193:7 194:4,5 195:5,12 196:9 197:5,11 201:22 202:17 202:22 203:5 203:25 210:5 214:10 216:4 221:4 223:9 226:14
trusted 182:5
truth 34:10,12 34:13 167:23 168:24
try 73:9 173:11 196:24
trying 26:5 53:2 68:3 72:25 89:22 110:5 129:6 136:7,23 137:8 167:13,21 175:4 190:10 219:14
turki 37:2
turn 206:5
twelve 90:22 139:13,14 141:18
twenty 40:12 56:6,12 65:4,5 65:6,9,12,19 72:22 73:4 88:13,22,23 89:6 90:19 91:5,19,20 94:15,17 123:21 124:5,7 125:16,16,16 125:17,17,23 125:24,25 126:2 128:19 128:24 129:12 129:17,17 130:15,16,22 130:23 142:25 143:2,19 158:16 162:8 176:18 214:2
two 20:3 29:23 45:12 46:16 59:22,24 61:21 62:3 63:4 65:7 67:14 72:11 75:21 108:8 128:24 129:17 130:15,22 132:25 135:5 143:2 175:3 196:11 207:4 208:7
type 11:8 75:20 156:20
typical 56:10 56:13 209:25
typically 90:19 131:5 157:20 157:24 161:18 166:11 175:9 199:6

u

u.s. 144:23
ultimate 197:12
ultimately 119:17 189:6 217:23
unable 216:7
under 6:5 7:3 8:19 9:20 10:19,20 15:14 45:18 108:2 109:25 137:15 139:23 147:22 147:25 153:11 153:13 163:18 181:20 183:4 186:16 188:9 189:16,25 200:4 214:16 215:14 221:5 226:13
underlying 83:23 84:4
understand 23:21 24:25 62:12 77:23 219:5,14,22
understanding 25:12 38:5,9 39:12 51:2 75:18 76:5 78:16 89:12 118:4,7,11 131:8
understood 44:21 45:21 46:12 61:8 64:9 66:24 67:18 68:7,8 68:25 74:17,20 83:15 91:12,13 91:15 93:16 94:10 100:21 116:11 150:10 156:19 162:11
undertook 157:5
undervalued 141:8
underwriters 140:24
unexpected 127:14,17
unexplained 130:2
uninformed 141:6 149:14
united 1:2 105:11
university 3:22 4:4,7
unrelated 36:12 88:16 146:25 165:6
unsuccessful 128:10
upwards 140:9
usage 117:12
use 11:3 22:8 106:8 121:15 155:4 158:17 160:5 161:4 171:21 176:21 189:19 200:4
used 44:11 126:12 127:24 134:10 135:17 135:21 137:13 149:14 150:6 157:16 164:13 168:11 178:9 181:17 199:23 202:5 208:10 211:17 217:17
using 54:8 120:20 125:11 127:11 190:13 191:23 197:23 204:13 220:7
usual 215:15
usually 149:14 214:5

v

vague 8:6 17:23 106:2 114:21 217:10
validity 58:16
value 15:4,24 21:6,8,9 26:15 26:22 27:16,18 30:16 44:18,19 45:3,13 46:6 51:25 52:10,18 56:15,17,23 57:15 58:6,9 58:19,21 67:17 83:23 84:4 85:4 95:11,23 96:7 138:2 139:18 140:9 140:16 146:17 147:13,15,17 147:19,25 148:3,5 165:4 168:16 169:4 170:2,17,24 171:9,23 172:3 172:6 173:22 174:15,24 175:20,24 177:3 178:4,8 178:10,13,20 179:12 184:4 185:4,20 186:6 186:20,24 187:12 191:23 192:5,6,14 193:7 194:4 195:5,12 196:9 196:18 202:17 202:22 203:5 203:25 210:5 216:4,5 221:4
values 75:24
variable 160:2
variables 131:7 132:18

variation 129:25
various 16:23 61:6 65:3 92:10 139:3 158:8 189:25 201:4
vary 121:5
vast 15:21 183:25 184:24
verdict 188:13 188:15
versus 54:5 70:20 74:3 87:24 209:8
view 155:13
virtue 61:10
volatile 207:16
volatility 70:6 71:15 92:17 116:7 155:16
volume 54:9,11 54:13,15,17,22 55:5,6,9,12,14 55:16,20 131:22 141:4 193:20
voluminous 182:20

w

wall 14:25 17:14 18:16 22:11 25:7 97:13 144:2,19 144:19
want 8:2 21:18 23:11 33:19 34:25 41:8,9 53:14 62:11 83:3 91:16 105:13 115:3,7 122:8 139:20 168:23,24 173:6,11,14 175:13 210:10 211:7 213:23 221:19
wanted 110:23 173:15
wanting 91:23 184:17
wants 77:15
waste 221:20
way 5:23 18:12 25:4 30:22 31:18,22 33:17 37:3 43:15 44:17 52:4 54:5,7 56:23 67:25 68:15,23 73:25 75:7 76:14 84:8,10 105:14,21 115:14 117:25 119:3 136:10 136:12 137:2,7 155:23 156:8 159:9 166:13 167:22 191:23 193:11 197:17 198:4 199:16 200:15 208:12 209:3,11 214:18 215:14 216:22 218:2
wayne 1:18 226:4,25
ways 209:25
we've 41:6
week 67:15,23
weeks 45:12 75:22
weighted 54:9 54:11,13,15,17 54:22 55:5,6,9 55:12,14,20
went 17:5 26:20 28:3 29:2 45:11,24 60:9,16 75:21 127:25 166:19 171:7 174:22 205:20,21
werner 51:11 56:10,21 57:8 57:12 58:17 59:6 151:24 152:6 199:19 202:10 208:9 211:19 214:24 220:10
werner's 61:15 152:19 204:2 204:12
whereof 226:22
wide 33:13 47:9 108:6 194:20 197:7 197:23 199:24 215:6 217:18 219:4
widely 45:20 46:12 47:6 66:24 67:19 68:7,8,25 91:12,13,14 93:16 94:9,10 100:21 116:11 154:8,18
widespread 41:22 75:18 76:5 89:12
willing 147:20 147:21
win 196:13
witness 6:8 8:7 16:14 17:24 31:12,25 34:25 41:11 43:24 59:7 62:9 70:16 71:25 77:22 93:9 94:24 95:16 98:17 103:14 106:5 107:15 107:25 112:24 113:19 114:2 114:22 115:23 119:10 120:3,4

122:21 126:3 132:10 149:11 171:14 174:18 176:19 179:5 184:11 187:18 188:19,20 196:5 211:12 212:11 216:17 217:11 221:24 224:5 226:9,15 226:22
wonder 53:7
word 22:4,8 156:9 171:22
words 15:12 55:13 57:9 130:25 148:22 173:7
work 7:15 37:2 164:6 180:15 214:12 215:8
worked 8:20 9:13 10:4 190:16 220:12
working 8:19 9:19 10:20 120:17
works 136:2
world 67:12 68:4,21,22,24 136:22 137:6 208:6 209:5,8 209:13 212:14 212:16,17,18 214:15 215:11 216:11 218:17 221:12
world's 105:9
worries 53:6
write 184:6
writing 184:14
written 6:2 15:12 116:14
wrong 133:7 173:23 190:17 201:10 202:19 202:21
wrongdoing 56:18,19 95:22 152:17 193:15 209:9 213:12 214:9,21 215:19
wrongful 56:25 57:6 58:24 69:7
wrote 15:9 96:16 184:15

x

x 45:24 224:4,8 225:2,3

y

y 45:25
yeah 60:21
year 5:11 51:12 173:16
years 4:11 123:12 135:20 135:23 214:2 214:12
yergesheva 9:7
york 1:17,18,19 2:5,5,9,9 3:5 100:8 122:20 145:13 226:5

Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

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Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

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