

Exhibit 17

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

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UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

SECURITIES AND EXCHANGE)	
COMMISSION,)	
)	
Plaintiff,)	
)	Case No.
vs.)	20-Civ-10832 (AT) (SN)
)	
RIPPLE LABS, INC., BRADLEY)	
GARLINGHOUSE, and)	
CHRISTIAN A. LARSEN,)	
)	
Defendants.)	
)	

CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER
REMOTE VIDEO DEPOSITION OF
DANIEL R. FISCHER
Monday, February 28, 2021

STENOGRAPHICALLY REPORTED BY:
CHERYL L. SANDECKI, CSR, RPR
LICENSE NO. 084-03710
JOB NO. 220228LAK

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CHRISTIAN A. LARSEN,)	
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Defendants.)	
_____)	

The videotaped deposition of DANIEL R. FISCHER, called for examination pursuant to the Rules of Civil Procedure for the United States District Courts pertaining to the taking of depositions, taken before CHERYL L. SANDECKI, Certified Shorthand Reporter for the State of Illinois, at 110 North Wacker Drive, Chicago, Illinois, on February 28, 2022, at the hour of 9:15 a.m.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

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CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

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CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

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CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 A P P E A R A N C E S (Continued):

2

3 ALSO PRESENT:

4 EUGENE CANJELS, Ph.D, SEC

5 MAXWELL CLARKE, SEC

6 MARINA MARTYNOVA, SEC

7 ARTUR MINKIN, SEC

8 ANA GUARDADO, Ripple Labs

9 STELLA UVAYDOVA, SEC

10 DEREK LETELLIER, Videographer

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CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

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INDEX

WITNESS EXAMINATION

DANIEL FISCHEL

EXAMINATION BY MR. HANAUER 9

EXHIBITS

NUMBER MARKED FOR ID

Fischel Deposition Exhibit

Exhibit DF-1 Expert Rebuttal Report of Daniel R. Fischel Dated November 12, 2021 19

Exhibit DF-2 Amended Expert Report of [REDACTED], Ph.D. dated October 6, 2021 63

Exhibit DF-3 Article: Announcement Effects in the Cryptocurrency Market by Mohammad Hashemi Joo 73

Exhibit DF-19 Model Calculations 126

Exhibit DF-12 Declaration of Daniel R. Fischel In Re: Shah, et al., v. Zimmer Biomet Holdings, Inc., et al. 217

*** EXHIBITS BOUND SEPARATELY ***

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 THE VIDEOGRAPHER: This is media unit one.
2 We are now on the video record.

3 This is the videotaped deposition of
4 Daniel Fischel being taken on February 28, 2022.

09:17 5 The time is now 9:17 a.m. as indicated on the
6 video screen. We are located at 110 North
7 Wacker Drive, Suite 3800, Chicago, Illinois.

8 This deposition is being taken on
9 behalf of the plaintiff and video recorded on
09:17 10 behalf of the plaintiff in the matter of
11 Securities and Exchange Commission versus Ripple
12 Labs, Inc., et al. The case number is
13 20-Civ-10832, filed in the United States
14 District Court, Southern District of New York.

09:17 15 My name is Derek Letellier, certified
16 legal videographer representing Gradillas Court
17 Reporters with offices in Glendale, California.
18 The court reporter today is Cheryl Sandeckki also
19 of Gradillas Court Reporters.

09:17 20 Counsel, please identify yourselves for
21 the video record and state the parties that you
22 represent.

23 MR. HANAUER: I think we usually just type
24 them in.

09:17 25 THE VIDEOGRAPHER: Okay, that's fine. If the

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1 court reporter could please swear in the
2 witness.

3 (Witness administered an oath.)

4 DANIEL FISCHEL,
5 having been first administered an oath, was
6 examined and testified as follows:

7 EXAMINATION

8 BY MR. HANAUER:

9 Q. Could you please state and spell your
09:18 10 name for the record please?

11 A. Daniel Robert Fischel, F-i-s-c-h-e-l.

12 Q. And good morning, Mr. -- or Professor
13 Fischel. My name is Ben Hanauer. I represent
14 the plaintiff, the SEC in this case.

09:18 15 Is there any reason why you cannot give
16 accurate testimony today?

17 A. No.

18 Q. And how many preparation sessions did
19 you have for today's deposition?

09:18 20 A. Well, I had many, many discussions with
21 people that I work with at Compass Lexecon and
22 then I had one Zoom call with several counsel.

23 Q. Counsel for Ripple in this case?

24 A. Yes. I assume counsel for Ripple or
09:19 25 whoever else.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 Q. Which counsel was it? Who was it?

2 A. For -- well, certainly for Ripple, but
3 I don't know if Ripple is the only -- you know,
4 in other words, the defendant -- there is more
09:19 5 than one defendant.

6 Q. So who were the attorneys on the Zoom
7 call you just referenced?

8 A. Well, Mr. Figel was on. Mr. Flumenbaum
9 was on. I believe there was an attorney from
09:19 10 Cleary on. There might have been some others.

11 Q. And that was the only preparation
12 session you had with counsel to prepare for
13 today's deposition?

14 A. That's right.

09:19 15 Q. And did you review -- in preparing for
16 today's deposition, did you review any documents
17 other than the ones cited in your report that
18 you have considered in forming any opinion that
19 you will express in this case?

09:20 20 A. I looked at some of the studies on
21 studying whether cryptocurrencies trade in an
22 efficient market, some of the ones cited in my
23 report but also some others. I can't think of
24 anything else that I reviewed.

09:20 25 Q. And the ones you didn't cite in your

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 report, will you be disclosing those?

2 A. I have no objection to it. But it's
3 certainly not up to me.

4 Q. What are they?

09:20 5 A. I don't know the titles, but the --
6 there have been other articles written in
7 addition to the ones cited by Dr. [REDACTED]. And we
8 just did a more complete literature search.

9 Q. And who is "we"?

09:21 10 A. My firm, Compass Lexecon.

11 Q. And you considered those studies?

12 MR. FIGEL: Objection.

13 THE WITNESS: Well, considered, yes, in the
14 sense that I looked at them.

09:21 15 BY MR. HANAUER:

16 Q. And did those -- did you consider those
17 studies in forming any opinion you will be
18 expressing in this case?

19 A. I would say for the most part, they
09:21 20 were consistent with the opinions that I did
21 express in my report.

22 MR. HANAUER: Well, in that case, Counsel,
23 we're just going to put on the record that we
24 request that you disclose those studies pursuant
09:21 25 to Rule 26.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 MR. FIGEL: Your request is noted. We will
2 take it under advisement.

3 BY MR. HANAUER:

4 Q. Professor Fischel, how many times have
09:21 5 you had your deposition taken as an expert
6 witness?

7 A. I haven't counted, but I would say a
8 significant number of times.

9 Q. More than 200?

09:22 10 A. I don't think more than 200. Probably
11 more than 100, but I don't think more than 200.

12 Q. And if -- for the depositions you've --
13 the depositions that were taken of you as an
14 expert witness, those are listed on Appendix A
09:22 15 to your report?

16 A. Yes, they should be.

17 Q. How many times have you testified at
18 trial as an expert witness?

19 A. Also I haven't counted, but a
09:22 20 significant number of times as well.

21 Q. More than 50?

22 A. Probably more than 50.

23 Q. In this case, this lawsuit, were you
24 ever retained in a nontestifying or consulting
09:23 25 capacity?

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 MR. FIGEL: Objection.

2 You can answer.

3 THE WITNESS: My understanding is that we are
4 always retained in a nontestifying capacity
09:23 5 until a decision is made to disclose, so in this
6 case, me as an expert.

7 BY MR. HANAUER:

8 Q. How many of your testifying expert
9 witness cases were you engaged by the
09:23 10 government?

11 A. I don't know the exact number. But,
12 you know, a number of times.

13 Q. Would you say it's a large or a small
14 percentage of your engagements?

09:23 15 A. Well, as a percentage of the total, you
16 know, probably pretty small but, you know, in
17 some very important cases.

18 Q. When was the last time you provided us
19 expert testimony on behalf of the government?

09:24 20 A. I testified in a case, it was a couple
21 years ago, in connection with the Chrysler
22 bankruptcy. I'm sure it's on my CV and it's a
23 long-reported decision that came out of that
24 case.

09:24 25 Q. And who did you represent -- who

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 retained you in that case?

2 A. The justice department.

3 Q. Was that a criminal matter?

4 A. No.

09:24 5 Q. When was the last time you were
6 retained as an expert witness by the government
7 in a prosecution or enforcement matter?

8 A. In the last couple weeks.

9 Q. And what case was that?

09:24 10 A. It's -- it hasn't been disclosed yet,
11 so I'm not going to disclose it.

12 Q. You were engaged to be a testifying
13 expert?

14 A. You know, again, usually the
09:25 15 understanding, even if it's not explicit, is we
16 are retained to provide expert services and a
17 decision is made at a subsequent point in time
18 as to who is going to -- if anyone, is going to
19 be a testifying expert.

09:25 20 Q. Do you have any employment other than
21 being a law professor and your work at Compass
22 Lexecon?

23 A. Well, I would say right now my formal
24 sole employment is with Compass Lexecon, even
09:25 25 though I still have very close connections to

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 the University of Chicago, not just the law
2 school.

3 Q. So are you still a professor at the
4 University of Chicago?

09:26 5 A. I still have my title. I haven't
6 actively taught in the last couple of years. I
7 keep trying to fit it in because I'm always
8 asked. But the last couple of years I've just
9 gotten too busy to do it.

09:26 10 Q. Do you still receive a salary or
11 compensation from the University of Chicago?

12 A. No. But even when I was an active
13 faculty member, I donated all my compensation
14 back. So that really hasn't changed.

09:26 15 But as I said, I'm still very much
16 involved with the university.

17 Q. How much of your professional time do
18 you spend working as an expert witness as
19 opposed to being involved as a professor?

09:26 20 MR. FIGEL: Objection.

21 You can answer.

22 THE WITNESS: You know, I would say now and
23 in the recent past really a hundred percent of
24 my professional time is associated with my work
09:27 25 and role at Compass Lexecon.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 BY MR. HANAUER:

2 Q. In your role as a testifying expert,
3 has your expert testimony ever been excluded for
4 any reason?

09:27 5 A. For any reason? I guess I would have
6 to say yes to that.

7 Q. How many times?

8 A. You know, not very many and for, you
9 know, a series of different kind of reasons,
09:27 10 too. But I would say not on substance or
11 credentials, rather on other disclosed too late
12 or in one well-known case, the defendant's
13 disclosure was deemed by the District Court to
14 be inadequate and that led to a long series of
09:28 15 follow-up appellate and on bond-cum litigation
16 all involving the justification for the -- by
17 the District Court to allow me to testify as a
18 summary witness but not as an expert witness.

19 So -- and I guess there was one --

09:28 20 Q. What case was that, sir?

21 A. The criminal case, the United States
22 versus Nacchio. And then there was --

23 Q. In the Nacchio case, you performed an
24 event study in that case?

09:29 25 A. I don't remember. Very possibly, but I

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 don't remember.

2 Q. And I'm sorry, you were mentioning
3 another case when you spoke?

4 A. I just don't want my answer to be
09:29 5 incomplete and, therefore, misleading.

6 There was another case, the Pfizer
7 Securities Fraud Case in the Second Circuit
8 where a District Court did exclude my testimony.
9 Again, it's a complicated story behind that.

09:29 10 But then the Court of Appeals reversed the
11 District Court. Let me just finish, just to
12 give a complete answer.

13 The Court of Appeals ruled that -- if I
14 remember correctly, that the District Court did
09:29 15 not abuse its discretion in not allowing one
16 minor calculation to be admitted into evidence.
17 But the -- that was a very small part of my
18 testimony. The Court of Appeals said the rest
19 of my -- the District Court was reversed in not
09:30 20 allowing the rest of my testimony to be
21 presented to the jury.

22 Q. And that was the Pfizer securities
23 litigation?

24 A. That's right.

09:30 25 Q. And you performed an event study in

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 that case?

2 A. I'm sure I performed an event study. I
3 mean, I performed hundreds of event studies.
4 And in any kind of securities fraud case, I'm
09:30 5 sure I performed an event study.

6 Q. And the Second Circuit in the Pfizer
7 case affirmed the District Court's finding that
8 a portion of your testimony was unreliable?

9 A. One calculation -- small calculation, I
09:30 10 think as the Court of Appeals stated or, more
11 accurately, that the District Court did not
12 abuse its discretion in that finding.

13 Q. Any other cases where your testimony
14 was excluded?

09:31 15 A. Let's see. There was a case many years
16 ago where one opinion out of three of my
17 opinions -- it was actually a jointly-authored
18 report and the District Court ruled that one out
19 of three opinions, I think the court said,
09:31 20 wasn't relevant, if I remember correctly.

21 Q. What case was that?

22 A. You know, if I looked at my CV, I could
23 find it. But I don't remember the name of the
24 case. It was a long time ago.

09:31 25 Q. And --

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 A. I don't remember any others.

2 Q. You beat me to my question.

3 A. Yeah.

4 Q. So speaking of CV, probably a good time
09:32 5 as any, I put in front of you exhibit that's
6 been marked as DF-1. Do you see that?

7 A. Yes.

8 (Whereupon, Deposition
9 Exhibit DF-1 was marked for
09:32 10 identification.)

11 BY MR. HANAUER:

12 Q. And DF-1, that's a copy of the expert
13 rebuttal report you submitted in this case?

14 A. Yes.

09:32 15 Q. And I would like to ask you some
16 questions about your CV, which I believe is
17 Appendix A to Exhibit DF-1.

18 A. Okay.

19 Q. How many times has a court refused to
09:32 20 credit or to follow your expert opinion?

21 MR. FIGEL: Objection.

22 THE WITNESS: You know, I can't possibly
23 answer that question. You know, if you mean a
24 court did not rule in the way that -- or didn't
09:33 25 base a ruling on my expert testimony or

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 disagreed with my expert testimony, I can't
2 possibly answer that question.

3 BY MR. HANAUER:

4 Q. Okay. Has it been many times?

09:33 5 MR. FIGEL: Objection.

6 THE WITNESS: Well, I've testified a lot. I
7 would say the overwhelming majority of times
8 courts have -- where courts have commented on my
9 testimony have credited, agreed with it, cited
09:33 10 it, relied on it. And certainly there have been
11 a few times where the opposite occurred, where a
12 court disagreed with my testimony.

13 BY MR. HANAUER:

14 Q. So I would like to ask you, referring
09:33 15 to page 4 of the appendix, the United States v.
16 Bases and Pacilio case. You testified in that
17 matter?

18 A. I did.

19 Q. Here in Chicago?

09:34 20 A. I did.

21 Q. And what was your -- that was only this
22 past summer, correct?

23 A. That's right.

24 Q. And what was your opinion in that case?

09:34 25 A. That the economic evidence that I

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 reviewed did not support, it was really
2 inconsistent with the government's allegations
3 about spoofing.

09:34 4 Q. And the jury convicted the defendants
5 in that case?

6 A. It was actually a mixed verdict. The
7 jury acquitted on the spoofing count, which was
8 the count that I testified about; and convicted
9 on, I think, mail or wire-fraud counts, if I
09:34 10 remember correctly.

11 Q. And I want to ask you about turning to
12 page 9 of your CV. The Commodities Futures
13 Trading Commission versus Oystacher case. It's
14 the third one on page 9.

09:35 15 A. Yes, I see that.

16 Q. And you provided expert testimony at a
17 preliminary injunction hearing in that case?

18 A. That's right.

19 Q. And you critiqued the opinion of the
09:35 20 CFTC's expert witness?

21 A. That's correct.

22 Q. And Judge St. Eve in that case found
23 that your critiques did not undermine the CFTC's
24 expert's opinions?

09:35 25 MR. FIGEL: Objection.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 THE WITNESS: You know, I would want to see
2 the opinion. I basically remember the court --
3 well, I don't want to -- I don't want to
4 speculate. I would rather see the opinion.

09:35 5 BY MR. HANAUER:

6 Q. And on the next page of your CV,
7 page 10, you referenced SEC versus Wiley case.

8 A. Yes, I remember that case.

9 Q. And you provided trial testimony for
09:36 10 the defendant?

11 A. I can't remember if it was a trial or
12 some kind of preliminary injunction hearing or
13 something. But I certainly testified for the
14 defendant.

09:36 15 Q. What was your opinion in that case?

16 A. You know, as you go farther back in
17 time, I just need to see. If you have a copy,
18 show it to me and I'll -- it will refresh my
19 recollection.

09:36 20 Q. You don't remember as we sit here
21 today?

22 A. I don't remember it well; well enough
23 to describe.

24 Q. If you go to page 14 of your case --
09:37 25 I'm sorry, of your CV. And do you see the case

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 near the middle of the page SEC versus Carl
2 Jasper?

3 A. I do.

4 Q. In that case you performed an event
09:37 5 study on behalf of the defendant?

6 A. Actually, you know, that's over ten
7 years ago. I have no recollection what that
8 case was about.

9 Q. And going to page 17 of your CV, the
09:37 10 second case is a case called United States
11 versus Sanjay Kumar?

12 A. Yes, I remember that case.

13 Q. And in that case you provided an
14 opinion that challenged the government's expert
09:38 15 witness's event study?

16 MR. FIGEL: Objection.

17 THE WITNESS: I don't know if that's really a
18 fair characterization of what I did. I remember
19 I challenged the government's calculation of
09:38 20 economic loss, if I remember correctly, in a
21 sentencing hearing.

22 BY MR. HANAUER:

23 Q. And in that case the court accepted the
24 government's expert opinion and did not accept
09:38 25 yours?

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 MR. FIGEL: Objection.

2 THE WITNESS: Yeah, that's correct, to the
3 best of my recollection.

4 BY MR. HANAUER:

09:38 5 Q. Then going to page 29 of your CV, in
6 the middle of the page, do you see a case called
7 SEC versus First City Finance Corporation?

8 A. Yes, I see that.

9 Q. I know it's going a little bit back.
09:39 10 But do you --

11 A. That's 25 years ago.

12 Q. Did you provide expert testimony for
13 the defendant in that case?

14 A. Yeah, I was going to say I think it was
09:39 15 an affidavit, but it says it's testimony, so it
16 was probably testimony.

17 Q. Do you remember anything about that
18 testimony?

19 A. Believe it or not, I do.

09:39 20 I think it was about the economic
21 consequences of a 13(d) filing, if I remember
22 correctly.

23 Q. And in that case the court determined
24 that your opinion relied on purely speculative
09:39 25 hypothetical figures?

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 MR. FIGEL: Objection.

2 THE WITNESS: You know, again, something that
3 specific I would have to look.

4 BY MR. HANAUER:

09:39 5 Q. When was the last time that you
6 provided expert testimony against the government
7 and the defendant was found not guilty or not
8 liable?

9 MR. FIGEL: Objection.

09:40 10 THE WITNESS: So it can't be the times I've
11 testified for the government and the courts have
12 relied and cited extensively my testimony,
13 you're not including that in your question?

14 BY MR. HANAUER:

09:40 15 Q. That's not part of my question.

16 A. I don't remember.

17 Q. Who retained you in this case?

18 A. I think I was originally retained by
19 the -- at least in terms of who contacted me,
09:40 20 the Kellogg Hansen firm.

21 Q. And is -- did you sign like an
22 engagement letter or something like that?

23 A. I don't know because sometimes we have
24 engagement letters, sometimes we don't depending
09:41 25 on typically whether the client that's retaining

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 us wants an engagement letter.

2 Q. Who is the client that's retaining you
3 in this case?

4 A. Well, as I said, I believe it's all the
09:41 5 defendants, but I'm not a hundred percent sure
6 of that.

7 I know the company Ripple is retaining
8 us and possibly the other defendants as well.

9 Q. Are you providing testimony on behalf
09:41 10 of either of the individual defendants in this
11 case?

12 MR. FIGEL: Objection.

13 THE WITNESS: The testimony that I'm giving
14 is what's contained in my report and whatever --
09:41 15 and my answers to questions. As I said, I -- I
16 know that I'm being retained by Ripple. I
17 assume I'm being retained by the other
18 defendants, but I'm not a hundred percent sure.

19 BY MR. HANAUER:

09:42 20 Q. Your hourly rate on this engagement is
21 \$1,750?

22 A. That's right.

23 Q. Is that your standard rate?

24 A. Yes.

09:42 25 Q. When did you last raise rates?

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 A. Maybe a couple years ago.

2 Q. When were you first retained in this
3 case?

4 A. Well, the -- I don't remember exactly,
09:42 5 but, you know, probably sometime in 2021.

6 Q. Were you and Compass Lexecon retained
7 at the same time?

8 A. Compass Lexecon would be the party that
9 was retained. I'm not typically, or to the best
09:43 10 of my recollection, ever separately retained
11 from Compass Lexecon.

12 Q. You're the chairman and president of
13 Compass Lexecon?

14 A. I am.

09:43 15 Q. Are you also the founder?

16 A. No.

17 Q. How long have you been with Compass
18 Lexecon?

19 MR. FIGEL: Objection.

09:43 20 THE WITNESS: Well, Compass Lexecon is the
21 successor firm to Lexecon. If you count the
22 times when it was just Lexecon, I think I
23 affiliated with Lexecon the first time, I think,
24 in 1981, if I remember correctly.

25

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 BY MR. HANAUER:

2 Q. Did you found Lexecon?

3 A. No.

4 Q. How many Compass Lexecon experts have
09:44 5 been retained in this case?

6 MR. FIGEL: Objection.

7 THE WITNESS: Well, if you mean formal
8 employees of Compass Lexecon, I think I'm the
9 only one, as far as I know.

09:44 10 Although I'm not exactly sure whether
11 Laurentius Morais is an employee or
12 an independent contractor. I believe Allen
13 Ferrell is an independent contractor.

14 Those are the experts that I'm aware of
09:44 15 that, you know, we have some relationship with.

16 BY MR. HANAUER:

17 Q. Anyone else?

18 A. Not that I know of or not that I can
19 think of. But it's possible that there are
09:45 20 other experts that I'm just not aware of.

21 Q. How many other engagements have you
22 done for Ripple?

23 A. None as far as I'm aware.

24 Q. And when I say "Ripple," do you
09:45 25 understand that I'm referring to the defendant

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 in this case?

2 A. Yes, I understand that.

3 MR. FIGEL: Objection, Mr. Hanauer. I assume
4 when you talk about defendant, you're going to
09:45 5 distinguish among Ripple and the individual
6 defendants?

7 MR. HANAUER: Thank you, Counsel.

8 BY MR. HANAUER:

9 Q. I'll clare -- when I talk about
09:45 10 Ripple -- or when I say "Ripple," you understand
11 that to mean the defendant Ripple Labs in this
12 case?

13 A. Yes, that's what I understand.

14 Q. How many engagements have you done for
09:45 15 the Kellogg Hansen firm?

16 MR. FIGEL: You can answer it with a number
17 to start with.

18 THE WITNESS: You know, again, I -- a
19 nontrivial number, but I -- over a long period
09:46 20 of time. I don't know the exact number.

21 BY MR. HANAUER:

22 Q. More than ten?

23 A. It might be more than ten. Maybe right
24 around ten, just as a rough -- just as a rough
09:46 25 guess.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 Q. How many engagements have you done for
2 the Debevoise law firm?

3 MR. FIGEL: Again, why don't you start with a
4 number, if you know.

09:46 5 THE WITNESS: Yeah, I want some clarification.
6 Do you want me personally or the firm?

7 BY MR. HANAUER:

8 Q. Well, let's start with you.

9 A. Because if these questions are for the
09:46 10 firm, I really don't know. I can only speak
11 about the times I've -- I personally can
12 remember being involved in a case with the
13 Debevoise law firm only.

14 You know, again, a nontrivial number.
09:46 15 I don't know the exact number.

16 Q. Around the same as the Kellogg firm?

17 MR. FIGEL: Objection.

18 THE WITNESS: Maybe a little less, but, you
19 know, again, it's over a lot of years, so I'm
09:47 20 not a hundred percent sure.

21 BY MR. HANAUER:

22 Q. On this case, did the other testifying
23 Compass Lexecon experts and their support teams
24 coordinate any of their analysis or opinions?

09:47 25 MR. FIGEL: Objection.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 THE WITNESS: Well, I can't speak for others.
2 I can only speak for myself.

3 I did not coordinate with anyone.

4 BY MR. HANAUER:

09:47 5 Q. And does Compass Lexecon have any
6 processes or checks installed in place to ensure
7 that teams work independently and do not overlap
8 or coordinate?

9 MR. FIGEL: Objection.

09:47 10 THE WITNESS: I think that would be a
11 case-by-case determination on whether those
12 kinds of separations, structural separations,
13 are required.

14 BY MR. HANAUER:

09:48 15 Q. Were any employed in this case?

16 MR. FIGEL: Objection.

17 THE WITNESS: In terms of formal directions
18 that -- of the teams would be completely
19 separate, I would say no.

09:48 20 BY MR. HANAUER:

21 Q. How many hours did you work on this
22 engagement between the time you were engaged and
23 the completion of your report?

24 A. I don't remember exactly. You know, as
09:48 25 a rough guess, I would say somewhere between 25

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 and 50 but -- hours, but I'm not sure. I would
2 have to check.

3 Q. And how many hours have you billed
4 since completing your report?

09:49 5 MR. FIGEL: Objection.

6 THE WITNESS: You know, again, in terms of
7 the -- not all the time has been recorded yet,
8 so, you know, I'll just give the same rough --
9 excuse me, the same rough guess, you know, maybe
09:49 10 somewhere between 25 and 50.

11 BY MR. HANAUER:

12 Q. How much money has Compass billed to
13 Ripple on this case in total?

14 MR. FIGEL: Objection.

09:49 15 THE WITNESS: I don't know.

16 BY MR. HANAUER:

17 Q. How are you compensated by Compass?

18 MR. FIGEL: Objection.

19 THE WITNESS: I get a hundred percent of my
09:49 20 hourly rate. And then I also get some share of
21 the overall profits of Compass Lexecon.

22 BY MR. HANAUER:

23 Q. Do you receive a portion of the rates
24 charged by other experts and staff working on
09:50 25 this litigation?

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 A. No.

2 Q. But the full 1,750 an hour, that goes
3 to you?

4 A. Yes.

09:50 5 Q. You've been on emeritus status at the
6 University of Chicago since 2006?

7 A. I don't know the exact year, but
8 approximately that's right.

9 Q. When was the last article or
09:50 10 publication that you authored?

11 A. It's on my CV, so whatever that is.

12 Q. Why don't we just take a look so we
13 have it in the record.

14 A. Okay. It looks like 2006.

09:51 15 Q. Do you consider yourself an expert in
16 the field of blockchain technologies?

17 A. No.

18 Q. Do you consider yourself an expert in
19 the field of digital assets or cryptocurrencies?

09:51 20 A. No.

21 Q. Have you ever owned any digital assets
22 or cryptocurrencies?

23 A. No.

24 Q. Are you an expert on the issue of
09:51 25 whether digital assets are securities under the

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 federal securities laws?

2 MR. FIGEL: Objection.

3 THE WITNESS: Well, first of all, that's a
4 legal question, so I'm not offering any legal
09:52 5 testimony. But apart from that, the answer is
6 no.

7 BY MR. HANAUER:

8 Q. Are you offering an opinion on how
9 courts interpret the term "investment contract"
09:52 10 as it relates to the federal securities laws?

11 A. That's the same answer as I just gave.
12 It's a legal question. I'm not offering any
13 legal opinions. And in addition to that, the
14 answer is no.

09:52 15 Q. Will you be offering an opinion whether
16 any XRP transaction constituted or involved
17 sales or offers of investment contracts?

18 MR. FIGEL: Objection.

19 THE WITNESS: Again, that's a legal opinion.
09:52 20 I will not be offering any opinion like that.

21 BY MR. HANAUER:

22 Q. Are you offering or will you be
23 offering any opinion on whether any transaction
24 qualifies for an exemption from registration
09:53 25 under the federal securities laws?

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 A. That's the same answer as my last
2 several answers. That's a legal question. I'm
3 not offering any legal opinions.

4 And apart from that, I'm not going to
09:53 5 -- I don't have expertise on that issue.

6 Q. How many times have you provided an
7 expert opinion related to an event study?

8 MR. FIGEL: Objection.

9 You can answer.

09:53 10 THE WITNESS: Countless numbers of times.

11 BY MR. HANAUER:

12 Q. How many times have you performed an
13 event study as an expert witness?

14 MR. FIGEL: Objection.

09:53 15 THE WITNESS: Hundreds, if not thousands of
16 times.

17 BY MR. HANAUER:

18 Q. Have you ever performed an event study
19 related to a digital asset or cryptocurrency?

09:54 20 A. No, not that I can think of.

21 Q. Are you offering any opinion whether
22 there are specific adjustments that should be
23 made to an event study for digital assets as
24 compared to an event study for stocks?

09:54 25 MR. FIGEL: Objection.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 THE WITNESS: Well, I don't know if I would
2 say adjustments is the right word. I do think
3 one of the issues that always comes up with
4 event studies is the relationship between event
09:54 5 studies and the existence of efficient markets.
6 I'm extremely familiar with that issue.

7 And I do think there is a fundamental
8 difference between the use or the appropriate
9 use of event studies in connection with
09:55 10 cryptocurrencies as compared with, for example,
11 event studies in connection with publicly-traded
12 stocks on the New York Stock Exchange or NASDAQ
13 or any organized exchange, assuming that those
14 stocks on those exchanges satisfy the criteria
09:55 15 for an efficient market.

16 BY MR. HANAUER:

17 Q. So I understand that, but I guess my
18 question is: Are you offering an opinion about
19 any specific adjustments that should be made to
09:55 20 an event study for digital assets as compared to
21 an event study for stocks?

22 MR. FIGEL: Objection.

23 THE WITNESS: I guess the specific adjustment
24 is whether it's appropriate to use an event
09:55 25 study other than as a test for whether or not

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 cryptocurrencies trade in an efficient market.

2 BY MR. HANAUER:

3 Q. And I would -- what's your answer to
4 whether an event study is an appropriate test
09:56 5 for whether -- actually, strike that.

6 Again, I understand you're that saying
7 that there are differences between crypto
8 markets and stock markets. But are you going to
9 give the opinion that an adjustment needs to be
09:56 10 made to an event study for crypto assets as
11 opposed to an event study for stocks?

12 MR. FIGEL: Objection.

13 THE WITNESS: I've answered that question
14 several times. I think there is no event study
09:56 15 in the academic literature that finds that
16 cryptocurrencies trade in an efficient market.
17 And that raises the question, given that
18 finding -- and I discussed this in my report --
19 as to whether it's appropriate to use an event
09:57 20 study to reach conclusions about the
21 relationship between information and price
22 movements in the cryptocurrency context as
23 compared with the context where stocks trade in
24 an efficient market, such as the situations that
09:57 25 I've just described.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 BY MR. HANAUER:

2 Q. When you perform an event study for
3 expert testimony, does your expert report
4 typically include a description of the important
09:57 5 steps in your methodology?

6 MR. FIGEL: Objection.

7 THE WITNESS: Well, that's a pretty vague
8 question.

9 You know, I guess I frequently discuss
09:58 10 what's generally referred to as the Cammer
11 factors, which are criteria which are frequently
12 recognized as criteria for determining whether
13 stocks or bonds or, I guess, any financial asset
14 trade in a financial -- trade in an efficient
09:58 15 market.

16 So I guess in that sense, I would say
17 yes.

18 BY MR. HANAUER:

19 Q. When you perform an event study, do you
09:58 20 first start with identifying all significant
21 price changes and then check to see if those
22 changes can be linked to news, or do you start
23 by identifying news and then check to see if
24 there was a price reaction to the news
09:58 25 announcement?

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 MR. FIGEL: Objection.

2 THE WITNESS: Well, you know, first of all, I
3 would say every case depends on the relevant
4 facts and circumstances depending on the
09:59 5 question being analyzed.

6 But, generally speaking, in event
7 studies, you have particular periods of time
8 that you're analyzing, and you analyze the
9 relationship between price movements and what
09:59 10 happened in connection with events or the lack
11 of events on particular days.

12 BY MR. HANAUER:

13 Q. But do you first look for price changes
14 of an asset and then see if those price changes
09:59 15 can be linked to news, or do you start with news
16 and then look to see if the news is linked to
17 price changes?

18 MR. FIGEL: Objection.

19 THE WITNESS: As I said, every case is
09:59 20 different. So it depends on the relevant facts
21 and circumstances, but I would say most
22 typically neither of the alternatives that you
23 just posited.

24 Most typically you look at days. If
10:00 25 you're looking at -- and whatever the relevant

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 period of time is in connection with the inquiry
2 that you're providing, you look at all the days
3 and you look at the -- you have a -- you form a
4 statistical model and you perform a -- one or
10:00 5 more regressions to analyze, as I said, the
6 relationship between price movements, or the
7 lack of price movements, on a set of days that
8 you are analyzing.

9 BY MR. HANAUER:

10:00 10 Q. In event studies that involve repeated
11 public announcements or repeated the news
12 announcements, do you typically only use the
13 date of the earliest news release, or do you
14 include all event days when that same news is
10:01 15 repeated?

16 MR. FIGEL: Objection.

17 THE WITNESS: There's a difference between
18 what you look at and how you interpret what you
19 look at.

10:01 20 In terms of what you look at, generally
21 speaking, you don't make subjective judgments as
22 to which days you look at. You look at all the
23 days. And then how you interpret the results
24 depends on, you know, again, the particular
10:01 25 facts and circumstances that you're analyzing.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 So that if you see that there is a
2 series of days that have similar information or
3 identical information being disclosed, you take
4 that into account in how you interpret the
10:02 5 results.

6 BY MR. HANAUER:

7 Q. If the same news is announced on
8 multiple days, do you treat each day where there
9 is the same announcement as an event day?

10:02 10 MR. FIGEL: Objection.

11 THE WITNESS: Again, it just doesn't really
12 capture the typical way that event studies are
13 performed. You look at all the days.

14 Again, speaking at a high level of
10:02 15 generality, because as I said, every case is
16 different and you always have to take into
17 account the relevant facts and circumstances,
18 but you don't make subjective judgments about
19 what's an event day.

10:02 20 You look at all the days, and then you
21 see what happens on each day, if anything, and
22 what price reaction occurred on each day, if
23 anything. And you interpret the data as
24 appropriate depending on the relevant facts and
10:03 25 circumstances.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 BY MR. HANAUER:

2 Q. Before you perform an event study as an
3 expert witness, do you always check whether the
4 market for the financial product at issue is
10:03 5 sufficiently efficient?

6 MR. FIGEL: Objection.

7 THE WITNESS: I would say either explicitly
8 or implicitly, yes, I think you do.

9 BY MR. HANAUER:

10:03 10 Q. And what's the difference about how you
11 go about checking efficiency explicitly or
12 implicitly?

13 MR. FIGEL: Objection.

14 THE WITNESS: Well, many of my expert reports
10:03 15 go through the various Cammer factors, as I
16 stated, so I would say that's an explicit
17 treatment.

18 Sometimes there's no dispute and it's
19 just obvious. So if you take a very actively
10:04 20 traded stock on the New York Stock Exchange, for
21 example, it might just be assumed by everyone
22 that that stock trades in an efficient market so
23 there's no need to demonstrate what's obvious.
24 So, you know, that's also possible.

25

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 BY MR. HANAUER:

2 Q. So for certain of your event studies,
3 you don't start by performing a Cammer analysis --

4 MR. FIGEL: Objection.

10:04 5 BY MR. HANAUER:

6 Q. -- C-A-M-M-E-R?

7 A. Yes, I'm sure that's true.

8 Q. Did anyone -- referring to your report
9 in this case, Exhibit DF-1, did anyone assist
10:04 10 you in preparing the report?

11 A. Yes.

12 Q. And who was that?

13 A. I would say three people particularly.
14 David Gross, Eddie Grgeta, and Constance Kelly.

10:05 15 Q. And those three individuals, they are
16 all affiliated with Compass?

17 A. They're all employees of Compass
18 Lexecon, correct.

19 Q. Did you write the entirety of your
10:05 20 report?

21 A. You mean did I draft every word, no.

22 Q. Who did? Or who else did?

23 A. You know, probably -- probably the
24 latter two names that I mentioned were involved
10:05 25 in the drafting, working under my supervision.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 Q. Going through your report, are you able
2 to discern what portions you wrote and what
3 portions other people wrote?

4 A. No. Well, first of all, it's a very
10:06 5 interactive process.

6 Secondly, there were multiple drafts
7 that were written. And everyone was involved to
8 some extent.

9 But as I said, I would say primarily
10:06 10 the other people that did most of the drafting,
11 initial drafting, under my supervision were
12 Eddie Grgeta and Constance Kelly.

13 Q. And did those two folks, did they do
14 most -- did they draft most of your report?

10:06 15 MR. FIGEL: Objection.

16 THE WITNESS: I would say they -- they were
17 the most involved in implementing the opinions
18 that I wanted to give.

19 And, again, the report is a product of
10:07 20 multiple drafts. As I stated, it was very much
21 of a cooperative project in terms of talking
22 about it, thinking about it, organizing it,
23 obviously, all done under my supervision and
24 direction.

25

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 BY MR. HANAUER:

2 Q. Was anything in your report written by
3 Ripple's attorneys?

4 MR. FIGEL: Objection.

10:07 5 You can answer yes or no.

6 THE WITNESS: No.

7 BY MR. HANAUER:

8 Q. Did Ripple's attorneys direct you to
9 write anything?

10:07 10 MR. FIGEL: Objection. Give me just a
11 second, Mr. Hanauer.

12 Start with, you can answer yes or no.

13 THE WITNESS: No.

14 BY MR. HANAUER:

10:07 15 Q. Did you -- does your report incorporate
16 comments from Ripple's attorneys?

17 MR. FIGEL: Objection.

18 You can answer yes or no.

19 THE WITNESS: I don't think so, no.

10:08 20 BY MR. HANAUER:

21 Q. And you testified that there were three
22 Compass team members who primarily assisted in
23 preparing your report; is that correct?

24 A. Yes. In thinking about the case,

10:08 25 conceptualizing the case, discussing ideas about

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 the case, which ultimately led to the
2 preparation of the report and continued work
3 subsequently to the preparation of the work.
4 Those three that I mentioned.

10:08 5 Q. And how many other Compass Lexecon
6 personnel affiliated -- or assisted the three
7 people you mentioned?

8 MR. FIGEL: Objection.

9 THE WITNESS: There were certainly some
10:08 10 others. I don't know how many. I mean, I can
11 think of a couple names, and I'm sure there were
12 research assistants and others as well.

13 BY MR. HANAUER:

14 Q. How many Compass personnel billed time
10:09 15 in relation to your report?

16 A. I don't know.

17 Q. Who prepared Exhibits 1 and 2 to your
18 report?

19 A. Well, they were prepared after going
10:09 20 through Dr. [REDACTED] backup. I'm actually not
21 sure who actually, at least originally, went
22 through Dr. [REDACTED] backup to get the data to
23 prepare Exhibits 1 and 2.

24 Q. So understanding that you don't know
10:10 25 who went through Dr. [REDACTED] backup data, do you

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 know who was the person that prepared Exhibits 1
2 and 2 to your report?

3 MR. FIGEL: Objection.

4 THE WITNESS: Physically prepared the
10:10 5 reports -- the exhibits, excuse me? No, I would
6 say I went over the backup with the three people
7 that I mentioned. But how that backup got
8 physically translated into the exhibits, which,
9 as I said I went over, specifically went over
10:10 10 with the three people that I mentioned, I'm not
11 sure.

12 BY MR. HANAUER:

13 Q. Is there anything in your report that
14 is inaccurate?

10:10 15 A. Not that I know of.

16 Q. And when I say "your report," do you
17 understand that I'm referring to Exhibit DF-1?

18 A. Yes, I understand that.

19 Q. Is there anything in your report that
10:11 20 you need to correct?

21 A. Not that I'm aware of.

22 Q. Does your report contain a complete
23 statement of all the opinions you will express
24 in this case?

10:11 25 MR. FIGEL: Objection.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 THE WITNESS: Well, certainly, the opinions
2 that I was aware of at the time of my report.
3 I'm not aware of any other opinions as of now
4 that I would express if asked. But, obviously,
10:11 5 in cases of this complexity and magnitude,
6 things might come up.

7 I haven't, you know, reviewed the
8 testimony of Dr. [REDACTED], for example, or any other
9 expert, you know, so I don't know what I could
10:12 10 be asked, what additional work could be
11 performed.

12 But as of now, I don't have any
13 additional opinions to the ones that are
14 expressed in my report.

10:12 15 BY MR. HANAUER:

16 Q. So, I take it, you will not be
17 offering -- as you sit here today, are you aware
18 of any opinions that you will offer in this case
19 that are not contained in your report?

10:12 20 MR. FIGEL: Objection.

21 THE WITNESS: As I sit here today, I am not
22 aware of any other opinions. But, as I said, in
23 cases of this complexity and magnitude, it's my
24 experience that things tend to come up, you keep
10:12 25 working, you keep thinking of new things, you're

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 told about new things, you're aware of positions
2 that are being taken in the case. So things
3 could come up.

4 But as of now, I'm not aware of any
10:12 5 additional opinions to the ones that are
6 contained in my report.

7 BY MR. HANAUER:

8 Q. Have you been asked to prepare either a
9 supplemental report or an additional report in
10:13 10 this case?

11 MR. FIGEL: Start by answering yes or no.

12 THE WITNESS: No.

13 BY MR. HANAUER:

14 Q. Does your report contain all of the
10:13 15 bases and reasons for the opinions you're
16 offering?

17 MR. FIGEL: Objection.

18 THE WITNESS: I would say yes, combined with
19 my experience and expertise.

10:13 20 BY MR. HANAUER:

21 Q. Does appendix -- why don't we just look
22 at it. Can you pull up Appendix B to your
23 report, please.

24 Does Appendix B to your report identify
10:14 25 all the facts and data you considered in forming

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 the opinions expressed in your report?

2 A. That I relied on in my report, it
3 should.

4 Q. Different question. Not relied on.
10:14 5 Considered.

6 MR. FIGEL: Objection.

7 THE WITNESS: Well, "considered" is such a
8 broad term. Anything that I came in contact
9 with.

10:14 10 BY MR. HANAUER:

11 Q. "Considered" is the words from the
12 federal rules, so that's why I'm using that
13 word.

14 MR. FIGEL: Objection.

10:14 15 THE WITNESS: I would say considered in the
16 way that I used the material for purposes of my
17 report, I would say yes. But it's not all the
18 material that I've ever seen in connection with
19 this case. That's what I -- that's the
10:14 20 distinction that I would draw.

21 BY MR. HANAUER:

22 Q. Just so the record is clear on this,
23 does Appendix B to your report identify all the
24 facts and data you considered in forming the
10:15 25 opinions expressed in your report?

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 MR. FIGEL: Objection.

2 THE WITNESS: Considered in the way that you
3 described, yes.

4 BY MR. HANAUER:

10:15 5 Q. Does Appendix B list all of the
6 academic literature and textbooks you considered
7 in forming the opinions expressed in your
8 report?

9 A. Yes, with the caveat that I mentioned
10:15 10 in my earlier answer, that I'm aware of other
11 articles that analyze the efficiency of
12 cryptocurrency markets, other than those cited
13 by Dr. [REDACTED] that I looked at in connection with
14 the preparation of my report.

10:16 15 Q. And can you name any of those?

16 A. Not from memory, as I said earlier.

17 Q. Aside from those articles you just
18 mentioned, are there any facts or data that you
19 considered but did not rely upon for this
10:16 20 engagement?

21 MR. FIGEL: Objection.

22 THE WITNESS: Well, that's really the
23 distinction that I was drawing before. I'm sure
24 I saw a lot of paper in this case that I'm not
10:16 25 relying on. I don't know if that comes within

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 your definition of "considered."

2 BY MR. HANAUER:

3 Q. Did the articles you just mentioned
4 that you said you reviewed but can't remember
10:17 5 the names of them, were any of them published in
6 peer-reviewed journals?

7 A. I believe so, yes.

8 Q. All of them?

9 A. I don't know.

10:17 10 MR. HANAUER: And, again, Counsel, I'll just
11 repeat my request on the record for disclosure
12 of those materials considered by Professor
13 Fischel.

14 MR. FIGEL: We understand your request and we
10:17 15 will take it under advisement.

16 BY MR. HANAUER:

17 Q. Apart from the information contained in
18 the documents either identified in your report
19 or in Appendix B to your report, did you
10:17 20 consider any other facts or data in forming the
21 opinions stated in your report?

22 MR. FIGEL: Objection.

23 THE WITNESS: I don't have anything to add to
24 what I've already said. I don't recall anything
10:17 25 that I considered in connection with forming my

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 opinions, but I don't want to say that I didn't
2 see anything else in connection with my work in
3 this case.

4 BY MR. HANAUER:

10:18 5 Q. Did you consider any of the SEC's
6 interrogatory responses?

7 A. I think I -- didn't I cite some
8 interrogatory responses by the SEC in my report?
9 I think I did. Maybe I'm confusing that with --

10:18 10 Q. And I don't want to --

11 A. Footnote was what I was thinking of.

12 Q. Yeah. And I don't want to trip you up,
13 Professor. It looks like under Legal Documents
14 and Expert Reports, the only discovery response
10:19 15 you have listed is the SEC's Answers to the
16 First Set of Requests for Admission.

17 A. Yeah, that's what --

18 MR. FIGEL: Objection.

19 THE WITNESS: That's what I was just thinking
10:19 20 of in footnote 33.

21 BY MR. HANAUER:

22 Q. Okay. So I'll repeat my question.

23 Did you consider any SEC interrogatory
24 responses?

10:19 25 MR. FIGEL: Objection.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 THE WITNESS: Not in forming my opinions. I
2 don't remember if I ever saw any.

3 BY MR. HANAUER:

4 Q. Did you consider any request for
10:19 5 admission responses other than the SEC's
6 response to Defendant's First Set of Requests
7 for Admissions?

8 MR. FIGEL: Objection.

9 THE WITNESS: Same answer. I don't recall
10:19 10 one way or the other.

11 BY MR. HANAUER:

12 Q. Have you reviewed any deposition
13 transcripts in this case?

14 A. I don't believe so. I certainly plan
10:20 15 to look at Dr. [REDACTED] deposition at some point,
16 but I haven't as of yet.

17 Q. Have you read any other deposition
18 transcripts from this case?

19 A. No.

10:20 20 Q. You read the entirety of the amended
21 complaint in this case?

22 A. Well, when you say "the entirety," if
23 you mean every word, probably not.

24 Q. Are you offering the opinion that any
10:20 25 factual allegation in the complaint is untrue?

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 MR. FIGEL: Objection.

2 THE WITNESS: It's very hard to answer that
3 question. I'm certainly not generally offering
4 opinions about factual testimony one way or the
10:21 5 other. But what comes within your definition of
6 a "factual allegation," whether there is any
7 overlap between whatever your definition is and
8 the economic evidence and analysis that I
9 discussed in my report, I don't know.

10:21 10 So I think you'd have to be a little
11 bit more specific as to what you're including as
12 a factual allegation.

13 BY MR. HANAUER:

14 Q. Do you have first-hand knowledge of any
10:21 15 fact alleged in the complaint?

16 A. First-hand knowledge, no.

17 Q. In forming your opinions in this case,
18 did you consider any of the statements Ripple
19 made on its website?

10:22 20 MR. FIGEL: Objection.

21 THE WITNESS: I don't believe so, no.

22 BY MR. HANAUER:

23 Q. Did you consider any social media posts
24 by Ripple or its personnel?

10:22 25 MR. FIGEL: Objection.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 THE WITNESS: No.

2 BY MR. HANAUER:

3 Q. Did you consider any Ripple promotional
4 materials?

10:22 5 MR. FIGEL: Objection.

6 THE WITNESS: No.

7 BY MR. HANAUER:

8 Q. Did you speak with any purchasers or
9 holders of XRP?

10:22 10 A. No, not to the best of my knowledge.

11 Q. Did you review any documents to
12 determine any purchaser or holder, their intent
13 for obtaining XRP?

14 MR. FIGEL: Objection.

10:22 15 THE WITNESS: No.

16 BY MR. HANAUER:

17 Q. Did you do anything to determine
18 whether any purchaser intended to sell their XRP
19 for a profit?

10:22 20 A. No.

21 Q. Did you do anything to determine
22 whether any particular purchaser or holder
23 intended to profit based on Ripple's efforts?

24 MR. FIGEL: Objection.

10:23 25 THE WITNESS: No.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 BY MR. HANAUER:

2 Q. Are you offering any opinion about the
3 intent or expectation of any XRP purchaser or
4 holder?

10:23 5 MR. FIGEL: Objection.

6 THE WITNESS: No.

7 BY MR. HANAUER:

8 Q. So we've been going a little bit more
9 than an hour. I just want to check with you how
10:23 10 you're doing on time and breaks.

11 A. I'm fine either taking a break or not
12 taking a break, whatever your preference is or
13 other people's preference.

14 MR. FIGEL: Why don't we take a break.

10:23 15 Before we go off the record, just a
16 couple things. One, I assume we can have the
17 standard understanding that an objection by one
18 party constitutes an objection by all parties.

19 MR. HANAUER: So stipulated.

10:23 20 MR. FIGEL: And just since we are all dating
21 ourselves, I believe the Belzberg case was 35
22 years ago, not 25 years ago.

23 MR. HANAUER: Let's go off the record.

24 THE VIDEOGRAPHER: We are going off the
10:24 25 record. The time is 10:24 a.m.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 (Whereupon, a recess was had at
2 10:24 a.m., after which the
3 deposition was resumed at
4 10:44 a.m. as follows:)

10:44 5 THE VIDEOGRAPHER: We are back on the record.

6 The time is 10:44 a.m.

7 You may proceed.

8 BY MR. HANAUER:

9 Q. Professor Fischel, have you read
10:44 10 Ripple's well submission that it submitted in
11 this matter?

12 A. No.

13 Q. In preparing your report, did you
14 consider any academic research or digital assets
10:44 15 or cryptocurrencies?

16 A. The articles on cryptocurrencies and
17 efficient markets that I mentioned. I can't
18 think of anything else, but let me just check to
19 make sure.

10:45 20 No. Other than that general category,
21 I would say no.

22 Q. So with the exception of the two papers
23 cited on Appendix B to your report, the Joo
24 paper and the Feng paper, in preparing your
10:45 25 report did you consider any other academic

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 literature relating to digital assets for
2 cryptocurrencies?

3 MR. FIGEL: Objection.

4 THE WITNESS: I'm getting the -- the sequence
10:45 5 of when I saw articles a little bit fuzzy in my
6 mind. I can't remember if Dr. ██████ cited more
7 than those two. I think he did. But I
8 certainly looked at every article that he cited
9 on cryptocurrencies and efficient markets.

10:46 10 And as I said, I have looked at other
11 articles besides those two, but I can't remember
12 before or after. I know some after. But I
13 can't remember if there were also some before
14 other than those two.

10:46 15 MR. FIGEL: Excuse me, Mr. Hanauer, I'm not
16 sure if the -- I had an objection to the last
17 question. I'm not sure if that was the "chk."

18 THE COURT REPORTER: That was a check. I
19 didn't hear. Speak a little louder.

10:46 20 MR. FIGEL: Okay. Will do.

21 BY MR. HANAUER:

22 Q. Are you disputing the conclusions of
23 any academic paper cited by Mr. ██████?

24 A. Again, it's a pretty open-ended
10:47 25 question. You'd have to show me which

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 conclusion or which paper you're referring to
2 before I could answer one way or the other.

3 Q. Maybe we'll get to that in a little
4 bit.

10:47 5 Do any of the opinions in your report
6 rely on any assumptions?

7 MR. FIGEL: Objection.

8 THE WITNESS: Again, that's such a broad
9 open-ended question.

10:47 10 You know, the term "assumptions" is
11 pretty open-ended. But I think in terms of any
12 of the opinions formally being based on any
13 particular assumptions, I think the answer to
14 that is no.

10:47 15 BY MR. HANAUER:

16 Q. Did Ripple's -- did Ripple or its
17 attorneys ask you to make any assumptions in
18 this case?

19 MR. FIGEL: Objection.

10:48 20 You can answer yes or no. Don't reveal
21 any communications with Ripple's counsel.

22 THE WITNESS: No.

23 BY MR. HANAUER:

24 Q. Are you offering any opinions related
10:48 25 to the conduct of the individual defendants in

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 this case, Mr. Garlinghouse or Mr. Larsen?

2 MR. FIGEL: Objection.

3 THE WITNESS: I don't believe so, no.

4 BY MR. HANAUER:

10:48 5 Q. Will you be offering any opinion
6 related to industry custom and practice?

7 A. No.

8 Q. Will you be offering an opinion related
9 to any of the defendants' affirmative defenses?

10:48 10 MR. FIGEL: Objection.

11 THE WITNESS: You have to tell me what they
12 are.

13 BY MR. HANAUER:

14 Q. As you sit here today, can you think of
10:48 15 any opinion you're offering related to any of
16 the defendants' affirmative defenses?

17 A. I don't know because I don't know what
18 the affirmative defenses are from memory.

19 Q. Are you offering -- will you be
10:49 20 offering any opinion related to Ripple's fair
21 notice defense?

22 MR. FIGEL: Objection.

23 THE WITNESS: No.

24 BY MR. HANAUER:

10:49 25 Q. Will you be offering an opinion related

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 to either of the individual defendants' scienter
2 defenses?

3 MR. FIGEL: Objection.

4 THE WITNESS: No. I mean, obviously the
10:49 5 opinions I'm offering are the ones in my report.
6 So if there is any overlap between any of my
7 opinions in my report and any of your questions,
8 you know, obviously my -- I'm expected to
9 testify if asked about my report.

10:49 10 But in connection with all the
11 questions that you're asking me, I don't expect
12 to, at least as of now, offer any additional
13 opinions beyond what's in my report on those
14 subjects.

10:49 15 BY MR. HANAUER:

16 Q. The opinions you offer in this case are
17 rebuttals to opinions offered by Dr. [REDACTED] in his
18 amended report dated October 6, 2021?

19 A. Again, I'm not sure of the date. But
10:50 20 they are rebuttal opinions to the opinions of
21 Dr. [REDACTED]. That's correct.

22 Q. And just so it's in the record, a copy
23 of Dr. [REDACTED] report, that's Exhibit DF-2?

24 A. Yes, I see that. I wasn't aware of it.
10:50 25 I see the date as well.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 (Whereupon, Deposition
2 Exhibit DF-2 was marked for
3 identification.)

4 BY MR. HANAUER:

10:50 5 Q. Do your opinions in this case pertain
6 solely to the opinions set forth in Dr. [REDACTED]
7 report?

8 MR. FIGEL: Objection.

9 THE WITNESS: It's really an ambiguous
10:50 10 question. Some of the opinions are based on
11 economic theory or literature that's not based
12 on Dr. [REDACTED] more general.

13 But the opinions I'm offering in the
14 case are rebuttal opinions to the opinions of
10:51 15 Dr. [REDACTED].

16 BY MR. HANAUER:

17 Q. Are you offering any rebuttal opinions
18 to Dr. [REDACTED] rebuttal to Dr. Ferrell's report?

19 A. Same answer as I gave a minute ago.
10:51 20 Not specifically, except to the extent that
21 something in my report can be characterized as
22 also relevant to a criticism of -- in responding
23 to a criticism of Dr. Ferrell's report --
24 Professor Ferrell's report.

10:52 25 Q. Have you read Dr. [REDACTED] rebuttal

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 report?

2 A. You mean this exhibit, whatever it is,
3 Exhibit 2?

4 Q. No. The rebuttal expert report that
10:52 5 Dr. ██████ has submitted in this case.

6 A. I don't believe so, no.

7 Q. Will you be offering opinions regarding
8 any of the SEC's experts other than Dr. ██████?

9 MR. FIGEL: Objection.

10:52 10 THE WITNESS: Same answer. Again, not
11 specifically as far as I know, other than to the
12 extent that the opinions in my report have some
13 relevance, if they do, to responding to claims
14 by other experts as well.

10:53 15 BY MR. HANAUER:

16 Q. And if I refer to Dr. ██████ report, do
17 you understand that I'm referring to Exhibit
18 DF-2?

19 A. That is what I understand, correct.

10:53 20 Q. Have you reviewed any of the SEC's
21 expert reports in this case other than
22 Dr. ██████ report?

23 A. No.

24 Q. So I want to ask you some questions
10:53 25 about event studies.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 If you had been asked to conduct an
2 event study that assessed the claim -- I'm
3 sorry, let me start over.

4 If you had been asked to conduct an
10:53 5 event study that assessed claims of any link
6 between Ripple announcements and XRP prices,
7 would you have been able to do that?

8 MR. FIGEL: Objection.

9 THE WITNESS: It's very hard to answer that
10:53 10 question. Would I be given a purpose for why
11 I'm doing it, the context of why I'm doing it?

12 I'm not sure I can answer the question
13 without an answer to those questions.

14 BY MR. HANAUER:

10:54 15 Q. Well, Dr. [REDACTED], he did an event study
16 that looked at the impact of Ripple public
17 announcements and XRP prices, right?

18 MR. FIGEL: Objection.

19 THE WITNESS: Yes, he did that.

10:54 20 BY MR. HANAUER:

21 Q. If you wanted to conduct a similar
22 event study, could you do that?

23 MR. FIGEL: Objection.

24 THE WITNESS: Again, it's hard to answer that
10:54 25 question because if you just mean the actual act

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 of conducting an event study, you can conduct an
2 event study of the relationship between any
3 event and any price. It has nothing -- there's
4 nothing unique about cryptocurrencies.

10:55 5 The only issue is whether it's
6 appropriate to do it, what it shows you, what
7 you can infer from it. And that's why context
8 is important.

9 If you asked me to conduct an event
10:55 10 study between announcements by Kellogg's and the
11 price of Corn Flakes, you can do that.

12 In other words, an event study is just
13 a statistical technique to analyze the
14 relationship between what occurs on particular
10:55 15 days or events on particular days and price
16 movements.

17 It might not be valid for any purpose,
18 it might not tell you anything, but you could
19 physically conduct that statistical analysis for
10:56 20 anything.

21 But that's not really meaningful
22 outside the issue of for what purpose, whether
23 it's appropriate, and what it tells you. And,
24 again, that's one of the really fundamental
10:56 25 flaws, in my opinion, in Dr. [REDACTED] report and

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 why his methodology is so defective.

2 BY MR. HANAUER:

3 Q. Would you be able to conduct an event
4 study that validly or accurately determined a
10:56 5 link between Ripple public announcements and XRP
6 prices?

7 MR. FIGEL: Objection.

8 THE WITNESS: You know, again, it depends for
9 what purpose and it depends by what you mean by
10:57 10 "validly."

11 In other words, there are a series of
12 academic studies that have attempted to use
13 event studies to analyze whether cryptocurrencies
14 trade in an efficient market. If that's the
10:57 15 question that's being analyzed, then, yes, I
16 could -- if I were interested in analyzing that
17 question independently from the academic studies
18 that have analyzed that question, I could an --
19 I could do that, in the same way that academic
10:57 20 studies have already done that.

21 That's -- excuse me. That's why the
22 purpose of conducting an event study has to be
23 considered anytime you're asking the question of
24 what you can validly do or not do.

25

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 BY MR. HANAUER:

2 Q. So I think you said you could conduct
3 an event study to determine the efficiency of
4 the market for XRP?

10:58 5 MR. FIGEL: Objection.

6 THE WITNESS: That's right.

7 BY MR. HANAUER:

8 Q. Could you conduct an event study for
9 another purpose such as accurately determining
10:58 10 the impact of public announcements on XRP
11 prices?

12 MR. FIGEL: Objection.

13 THE WITNESS: Well, that gets a lot more
14 complicated because one of the findings in the
10:58 15 academic literature is -- one of the purposes of
16 determining whether it's possible to draw
17 meaningful conclusions about the relationships
18 between events and prices is the existence of an
19 efficient market because the definition of a
10:59 20 semi-strong efficient market is prices that
21 reflect publicly-available information quickly
22 and without bias.

23 And in the absence of a finding of an
24 efficient market, you don't have a -- those
10:59 25 criteria are not satisfied or may not be

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 satisfied or one or both may not be satisfied.

2 And that immediately is something that
3 has to be taken into account at the very least
4 and may call into question any conclusions that
10:59 5 are drawn in the absence of an efficient market.

6 But, again, you need to provide a
7 little more context and definition to answer
8 beyond that general answer.

9 BY MR. HANAUER:

11:00 10 Q. Did you conduct an event study in this
11 case?

12 A. No, other than -- not independently,
13 other than reviewing the academic literature and
14 reviewing the work by Dr. [REDACTED].

11:00 15 Q. Did anyone at Compass conduct an event
16 study related to this case?

17 A. Not to the best of my knowledge.

18 Q. Are you offering an opinion in this
19 case on the informational efficiency of the XRP
11:00 20 market?

21 MR. FIGEL: Objection.

22 THE WITNESS: Well, I think Dr. [REDACTED], for all
23 practical purposes, concedes that the XRP market
24 is not informationally efficient.

11:01 25 And apart from that, a number of the

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 academic studies concede the same thing. In
2 fact, the Joo article that he cites, if I
3 remember correctly, concludes that the XRP
4 market is one of the least efficient
11:01 5 cryptocurrency market, although he doesn't cite
6 that.

7 BY MR. HANAUER:

8 Q. What article is that?

9 A. The Joo article that he cites.

11:01 10 Q. J-O-O?

11 A. J-O-N, I think it is. Or maybe I'm
12 getting the name wrong.

13 Yeah, I'm sorry, J-O-O, you're right.

14 Q. Did you do any independent analysis to
11:01 15 test the efficiency of the XRP market?

16 A. No, other than what I just described of
17 reviewing the academic literature and looking at
18 the findings of Dr. [REDACTED].

19 Q. Did anyone at Compass do any
11:02 20 independent analysis to test the efficiency of
21 the XRP market?

22 A. Not to the best of my knowledge.

23 Q. As an expert witness, have you ever
24 performed an event study where you tried to
11:02 25 assess whether there was a link between a news

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 event and a price reaction, and you concluded
2 that there was no such link based on the
3 observation of abnormal reactions in price on
4 days with no news events?

11:02 5 MR. FIGEL: Objection.

6 THE WITNESS: You know, I've conducted a lot
7 of event studies in a lot of different contexts.
8 You know, I just don't know. I don't recall one
9 way or the other whether that situation has ever
11:03 10 occurred.

11 BY MR. HANAUER:

12 Q. Can you name any case, as you sit here
13 today, where you applied such an analysis?

14 MR. FIGEL: Objection.

11:03 15 THE WITNESS: Well, it's reached a particular
16 conclusion if I understood your -- based on an
17 assumed set of facts, if I understood your
18 question correctly.

19 I can't name any event study in the
11:03 20 hundreds or thousands that I've done where --
21 because there's so many different permutations
22 in so many event studies over so many years. I
23 just can't tell you one way or the other.

24 BY MR. HANAUER:

11:04 25 Q. So I want to ask you about the Joo

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 article, Announcement of Facts in the
2 Cryptocurrency Markets.

3 A. Okay.

4 Q. You read that article in connection
11:04 5 with your report?

6 A. Yes, that's correct.

7 Q. Do you dispute any of the findings in
8 the Joo article?

9 A. Well, again, you have to show me the
11:04 10 article and show me which finding you're
11 referring to.

12 Q. As you sit here today, can you name any
13 findings that you're able to dispute?

14 MR. FIGEL: Objection.

11:04 15 THE WITNESS: As I sit here, I don't remember
16 all the findings, so I don't know if there's any
17 that I disagree with without looking at the
18 findings themselves.

19 BY MR. HANAUER:

11:05 20 Q. Are you aware of any scholarly article
21 disputing any findings from the Joo article?

22 MR. FIGEL: Objection.

23 THE WITNESS: I'd have to look.

24 BY MR. HANAUER:

11:05 25 Q. As you sit here today?

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 A. I don't have the articles in front of
2 me. As I sit here today, I just don't know one
3 way or the other.

4 Q. Do you have any critiques of the design
11:05 5 of the event studies described in the Joo
6 article?

7 MR. FIGEL: Objection.

8 THE WITNESS: Again, I don't have the article
9 in front of me so I don't know.

11:05 10 (Whereupon, Deposition
11 Exhibit DF-3 was marked for
12 identification.)

13 BY MR. HANAUER:

14 Q. Is Exhibit DF-3 a copy of the Joo
11:06 15 article we've just been discussing?

16 A. It is.

17 What do you want me to look at?

18 Q. Well, I asked you some questions and
19 you said you'd need to have the report in front
11:06 20 of you so --

21 A. I thought you asked me some questions
22 about particular aspects of the Joo article.

23 Q. Okay. Do you have any critique of the
24 author's design of the event studies described?

11:08 25 A. You know, I haven't studied the design

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 of the empirical test in any detail. But just
2 looking over the article, I don't have any
3 particular specific criticisms.

4 Q. Did you -- in preparing your report,
11:08 5 did you consider the Feng article, Informed
6 Trading in the Bitcoin Market?

7 A. I think I considered it and discussed
8 it in -- I think it was a footnote in my report
9 if I remember correctly.

11:09 10 Q. Are you offering an opinion that
11 disputes any of the findings in that paper?

12 MR. FIGEL: Objection.

13 THE WITNESS: The same answer that I just
14 gave about this.

11:09 15 First of all -- this Joo article, first
16 of all, I don't have the article in front of me.

17 Secondly, even if I do have the article
18 in front of me, I'm not really trying to
19 duplicate the results and the kinds of things
11:09 20 you would really need to do to be able to know
21 if I had any disagreement with any of the
22 findings or the structure of the empirical
23 tests.

24 I did think the particular finding that
11:10 25 I put in the footnote of my report was

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 significant and, again, very similar to the
2 finding in the Joo report.

3 BY MR. HANAUER:

4 Q. And what finding is that?

11:10 5 A. The finding of inefficiencies in the
6 market creating arbitrage opportunities because
7 of the deviations from market efficiency that
8 exists in other contexts.

9 Q. Did you review the design of the event
11:10 10 study in the Feng article?

11 MR. FIGEL: Objection.

12 THE WITNESS: You know, as I would say -- I
13 would say the same thing as I said about the Joo
14 article. Not in any detail.

11:11 15 I certainly reviewed the article and
16 the findings and the conclusions. If there was
17 anything specific, you'd have to show me the
18 article.

19 But, as I said, even if you showed it
11:11 20 to me, I couldn't say definitively because that
21 wasn't really my intention in reviewing the
22 articles and I didn't try and duplicate the
23 results to see if I got the same answers as the
24 authors themselves got.

25

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 BY MR. HANAUER:

2 Q. Did you try and duplicate the results
3 of either the Gerritsen article or the Schaub
4 article cited in Mr. ██████ report?

11:11 5 A. No.

6 Q. So the Gerritsen report, Can Bitcoin
7 Investors Profit From Predictions by Crypto
8 Experts, you did not cite that report in
9 Appendix B to your own report, you did not cite
11:12 10 that paper.

11 Did you consider the Gerritsen paper in
12 preparing your report in this case?

13 MR. FIGEL: Objection.

14 THE WITNESS: Yes, I looked at all the
11:12 15 reports cited by Dr. ██████.

16 BY MR. HANAUER:

17 Q. Before you signed your report?

18 A. That's what I'm just a little bit
19 confused about in terms of timing. I'm not sure
11:12 20 if it was before or after.

21 Q. And as you sit here today, are you
22 offering any opinion disputing any of the
23 findings in the Gerritsen article?

24 MR. FIGEL: Objection.

11:13 25 THE WITNESS: The exact same answers that I

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 gave about the other two articles.

2 I don't have the article in front of
3 me, so I don't know which finding you're
4 referring to. But even if I did have the
11:13 5 article in front of me, I would give the same
6 answer, that I didn't really read the article
7 with the intention of trying to duplicate the
8 results to see if I agreed with everything that
9 was done and the results that were reported in
11:13 10 the article.

11 I was trying to survey the academic
12 literature to see what it revealed about certain
13 issues that were discussed in Dr. [REDACTED] report.

14 BY MR. HANAUER:

11:13 15 Q. Would your answer be the same for the
16 Mark Schaub article cited by Dr. [REDACTED]?

17 A. Yes --

18 MR. FIGEL: Objection.

19 THE WITNESS: Yes, it would.

11:14 20 BY MR. HANAUER:

21 Q. For Dr. [REDACTED] report, did you read the
22 entirety of it?

23 A. Yes.

24 Q. Are you offering any opinion whether
11:14 25 Dr. [REDACTED] is qualified to offer the opinions

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 expressed in his report?

2 A. No, I'm not. I'm not offering any
3 opinion on whether he is or he isn't.

4 Q. Do you have any reason to dispute his
11:14 5 qualifications?

6 A. No, I don't.

7 Q. Did you review Dr. [REDACTED] work for
8 errors?

9 MR. FIGEL: Objection.

11:15 10 THE WITNESS: I'm not sure what you mean by
11 "errors." Like computational errors or -- what
12 kind of errors are you talking about?

13 BY MR. HANAUER:

14 Q. Did you review his report for
11:15 15 computational errors?

16 A. No.

17 Q. Did anyone at Compass review Dr. [REDACTED]
18 work to see if there were computational errors?

19 A. I don't believe so, no.

11:15 20 Q. Did you review the data Dr. [REDACTED] used
21 to conduct his event study?

22 MR. FIGEL: Objection.

23 THE WITNESS: I mean, I reviewed the report
24 so I saw the data that Dr. [REDACTED] used in his
11:15 25 report. That's what I would say.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 BY MR. HANAUER:

2 Q. Did you review the backup data from
3 Dr. [REDACTED] report that the SEC produced to
4 Ripple?

11:16 5 A. Yes. I mean, as I said before, that's
6 where my Exhibits 1 and 2 came from, his backup
7 data.

8 Q. And did you review that data?

9 A. Well, again, I'm not sure what you mean
11:16 10 by "review that data." I reviewed the data in
11 his backup in order to create Exhibits 1 and 2.

12 Q. Did you or anyone at Compass find any
13 errors in Dr. [REDACTED] data?

14 MR. FIGEL: Objection.

11:16 15 THE WITNESS: We didn't really look for
16 errors. I don't know if anybody saw anything
17 that they thought was an error, if you mean like
18 a mechanical error or computational error.

19 BY MR. HANAUER:

11:16 20 Q. Did you or anyone working at your
21 direction attempt to replicate Dr. [REDACTED]
22 calculations?

23 A. No, as far as I know.

24 Q. And I believe that you testified that
11:17 25 neither you nor anyone at Compass conducted an

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 event study related to XRP?

2 A. I said that's certainly true of me.
3 And to the best of my knowledge, it's true of
4 others as well.

11:17 5 Q. Why didn't you or anyone at Compass try
6 and conduct an event study, excuse me, related
7 to XRP?

8 A. Because I thought the use of event
9 studies by Dr. [REDACTED] in his opinion was
11:18 10 methodologically flawed for a number of
11 different reasons in ways that could not be
12 corrected by performing another event study.

13 Q. Did you or anyone at Compass conduct an
14 event study related to any other digital assets?

11:18 15 MR. FIGEL: Objection.

16 THE WITNESS: No, to the best of my
17 knowledge.

18 BY MR. HANAUER:

19 Q. Did you conduct any study to test the
11:18 20 efficiency of the XRP market?

21 A. I think I've answered that already.

22 I think Dr. [REDACTED], I think in his
23 report, concedes that the XRP market is not
24 efficient. And apart from that, there is a
11:19 25 series of academic articles that conclude the

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 same thing.

2 Q. Did you attempt to apply the Cammer
3 factors to XRP?

4 A. I actually thought about that and I
11:19 5 thought about the Cammer factors. And, again,
6 it was obvious that XRP would not meet the
7 Cammer factors -- would not meet the
8 requirements for the finding of an efficient
9 market listed in the Cammer factors.

11:20 10 Q. Did you -- is there any written work or
11 analysis applying the Cammer factors to XRP?

12 MR. FIGEL: Objection.

13 THE WITNESS: I actually don't know the
14 answer to that because I specifically raised
11:20 15 that issue with people that I was working with,
16 and I didn't really follow up on it because the
17 answer is obvious.

18 But I don't know whether the people I
19 was working with actually implemented that
11:20 20 request in a -- or that idea in a formal way by
21 creating written work product. I just don't
22 know.

23 BY MR. HANAUER:

24 Q. Have you reviewed any event studies
11:21 25 related to XRP other than Dr. [REDACTED]?

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 A. And other than what's in the academic
2 articles, no.

3 Q. Okay. So what academic articles
4 performing an event study related to XRP have
11:21 5 you reviewed?

6 MR. FIGEL: Objection.

7 THE WITNESS: Whatever articles that I
8 reviewed discuss the efficiency of the market in
9 XRP's by looking, you know, for example, at the
11:21 10 speed of price adjustment, the existence of
11 serial correlation, the existence of arbitrage
12 opportunities. That's what I would say.

13 BY MR. HANAUER:

14 Q. And I'm just looking for which articles
11:22 15 actually discuss that for XRP.

16 So that's in the Joo article, right?

17 A. Yes, I think that's in a number of the
18 articles. But, again, I can't recite that from
19 memory without looking at all the articles.

11:22 20 Q. You can't name an article other than
21 the Joo article that performed an event study
22 related to XRP?

23 MR. FIGEL: Objection.

24 THE WITNESS: I can't name them from memory
11:22 25 without having the articles in front of me,

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 correct.

2 BY MR. HANAUER:

3 Q. Are you offering an opinion in this
4 case regarding Dr. [REDACTED] conclusions about the
11:22 5 link between XRP prices and the prices of other
6 digital assets?

7 MR. FIGEL: Objection.

8 THE WITNESS: I would say I didn't -- I
9 certainly saw Dr. [REDACTED] discussion of that
11:23 10 issue in numerous places, but I did not conduct
11 any separate analysis of that one way or the
12 other.

13 BY MR. HANAUER:

14 Q. Are you offering the opinion whether or
11:23 15 not Ripple's actions or public announcements
16 cause XRP price movements?

17 A. Well, first of all, you're using the
18 word "cause." That has a particular meaning in
19 event study analysis.

11:24 20 You know, what an event study can show
21 is correlation. I think that's what even -- if
22 I -- I don't remember exactly Dr. [REDACTED]
23 phraseology, but that's the right statistical
24 answer to what an event study shows. And then
11:24 25 by interpretation you might be able to reach a

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 conclusion about the causation.

2 So I don't really think Dr. [REDACTED] shows
3 that or even claims that. But I wouldn't rule
4 out that certain events -- certain announcements
11:25 5 by XRP resulted in price changes in the sense
6 that, in the absence of those announcements, the
7 exact same price changes would not have
8 occurred.

9 Q. And when you say announcements by XRP,
11:25 10 do you mean --

11 A. I'm sorry.

12 Q. -- announcements by Ripple?

13 A. I meant announcements by Ripple. Thank
14 you.

11:25 15 Q. So using the correlation language that
16 you just referenced, are you opining in this
17 case whether or not there's a correlation
18 between Ripple's actions or public announcements
19 and XRP price movements?

11:26 20 A. Again, it's very hard to answer that
21 question at the level of generality of your
22 question.

23 I think Dr. [REDACTED] study is
24 fundamentally flawed in a variety of different
11:26 25 ways, but I still would not rule out the

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 possibility that there were times when
2 announcements by Ripple were correlated at some
3 point in time with price movements by XRP.

4 I think that's a fair interpretation of
11:26 5 the data.

6 Q. And did you perform any work or
7 analysis to determine if there was a correlation
8 between Ripple's actions or public announcements
9 and XRP price movements?

11:27 10 MR. FIGEL: Objection.

11 THE WITNESS: You know, I guess I would say
12 some in the sense that as a result of background
13 and experience, if you pick certain events that
14 you can anticipate would have a big price
11:27 15 effects or see the price effects first and then
16 look backwards towards the events, I believe you
17 could imagine -- not just imagine, conclude that
18 there was a correlation between certain
19 announcements and certain price movements.

11:27 20 But, again, that might be true for my
21 Kellogg's and Corn Flakes example. Or maybe a
22 more relevant example would be De Beers
23 announcements.

24 In other words, for any price movement
11:28 25 that's related to a product, if you look over a

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 multi-year period, you can find announcements
2 that are likely going to be correlated with
3 price movements. And that's really all that
4 Dr. █████ did.

11:28 5 BY MR. HANAUER:

6 Q. And I don't want to talk about the
7 theoretical. I just want to talk about like
8 what you actually did.

9 And did you perform any analysis to
11:28 10 actually determine if there is a statistically
11 significant association between Ripple's actions
12 or public announcements and XRP's price
13 movements?

14 MR. FIGEL: Objection.

11:29 15 THE WITNESS: I will say not in a formal
16 statistical sense. I think we looked at some of
17 the biggest price movements and the events that
18 occurred around those price movements or the
19 announcements that occurred around those price
11:29 20 movements.

21 And as I said, I think it would be fair
22 to conclude that there was a correlation between
23 the biggest price movements and certain
24 announcements, even to the point of going beyond
11:29 25 what an event study can tell you itself and

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 conclude for certain isolated price movements.
2 Those were at a minimum correlated, possibly
3 even caused by those announcements, but, again,
4 in ways that you can find throughout the
11:30 5 different -- all the myriad of different
6 relationships between products and price
7 movements.

8 BY MR. HANAUER:

9 Q. How many Ripple announcements did you
11:30 10 find were correlated with statistically
11 significant XRP price movements?

12 MR. FIGEL: Objection.

13 THE WITNESS: Well, I didn't quite say that.

14 What I said was, what we did do was
11:31 15 look at some of the biggest price movements that
16 Dr. [REDACTED] found and then looked at certain
17 announcements that occurred around the time of
18 those price movements and concluded that, you
19 know, just based on a fair interpretation of the
11:31 20 data that there would -- there would likely be a
21 correlation between the announcements and the
22 price movements, and possibly even a stronger
23 relationship for that handful of announcements
24 and that handful of price movements.

25

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 BY MR. HANAUER:

2 Q. And how many such announcements did you
3 find?

4 A. I don't remember the exact number. But
11:31 5 I think we tried to find the biggest price
6 movements. I'm not sure how we -- exactly how
7 we defined the biggest price movements but --
8 what the cutoff was, but some relatively small
9 number just really to illustrate that if you
11:32 10 start with 500 announcements over a seven-year
11 period or whatever it was, you can find a
12 handful that there are big price movements where
13 there is a relationship with -- that there
14 appears to be a relationship with a handful of
11:32 15 really big price movements and particular
16 announcements.

17 Q. Do you agree that Dr. [REDACTED] procedures
18 flagged days with large positive price
19 reactions?

11:32 20 MR. FIGEL: Objection.

21 THE WITNESS: I'm not sure what you mean by
22 "flagged days." You can look at price reactions
23 on every single day if you have the data to do
24 it. And then you can create a model to tell you
11:33 25 what a large price movement -- to define what a

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 large price movement is.

2 So I don't know if that's what you mean
3 by flagging days. But, you know, that's
4 certainly what you can do with a series of price
11:33 5 movements.

6 BY MR. HANAUER:

7 Q. Did Dr. [REDACTED] miss any days with large
8 positive price reactions?

9 MR. FIGEL: Objection.

11:33 10 THE WITNESS: I don't know because I didn't
11 attempt to replicate his study.

12 BY MR. HANAUER:

13 Q. Do you dispute Dr. [REDACTED] conclusion
14 that he finds statistically significant evidence
11:34 15 that XRP prices react to news about Ripple's
16 actions?

17 A. That's a hard question to answer.
18 Because I -- I find that the study is so
19 methodologically flawed for numerous reasons.

11:34 20 But notwithstanding those
21 methodological flaws, I do not disagree for the
22 reasons that I just said, that you could
23 identify certain large price movements that are
24 associated with -- in terms of correlation,
11:35 25 possibly even causation, with certain

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 announcements by Ripple. But I don't believe
2 that supports any of the conclusions that -- or
3 any of the opinions that Dr. ██████ reached
4 because his analysis is so methodologically
11:35 5 flawed.

6 Q. So you discuss confounding news in your
7 report?

8 A. Among other things, that's right.

9 Q. Did you do any analysis to determine
11:35 10 whether Dr. ██████ results were actually
11 confounded by confounding information?

12 MR. FIGEL: Objection.

13 THE WITNESS: You mean other than what I said
14 in the report? I'm not sure I understand the
11:35 15 question.

16 BY MR. HANAUER:

17 Q. Well, your report identifies various
18 events that you claim could be confounding news,
19 right?

11:36 20 A. Or were confounded, correct.

21 Q. Did you do any testing or analysis to
22 determine the effect on XRP's price of the
23 announcements you claim to be confounding news?

24 MR. FIGEL: Objection.

11:36 25 THE WITNESS: Well, sometimes I think there

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 is some qualitative things that you can say, as
2 I did in the report, and as Dr. [REDACTED] himself
3 said in his report in terms of certain
4 concessions that he made.

11:36 5 But a lot of times you can't
6 disentangle confounding information. And when
7 that happens -- this is a very well-known
8 problem in event studies -- you can't draw --
9 you can't reach conclusions about the -- in this
11:37 10 case I'll use the word "cause" -- causes of the
11 price movement.

12 You know, so for an example, in more
13 conventional event studies, it's frequently the
14 case that on a particular day you have two
11:37 15 events that occur, let's say, at the same time
16 and you don't have a basis for distinguishing
17 which one was responsible for the price
18 movement.

19 So in that situation, when that occurs,
11:37 20 it would be a mistake to conclude that one of
21 the two confounding events was responsible for a
22 price movement if you can't distinguish between
23 them.

24 And there is a similar problem that
11:38 25 exists with the confounding events in Dr. [REDACTED]

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 event study, although with respect to certain of
2 the events you can go beyond that and make
3 qualitative statements, as Dr. [REDACTED] himself does
4 in his report.

11:38 5 BY MR. HANAUER:

6 Q. Did you make any attempt to, in your
7 words, disentangle the announcements you
8 identified as confounding?

9 MR. FIGEL: Objection.

11:38 10 THE WITNESS: Some qualitative effort, yes.
11 But a lot of times you can't disentangle, that's
12 the whole point, and that's one of the
13 criticisms of the inferences that Dr. [REDACTED] draws
14 to the extent that his event study is meant to
11:39 15 demonstrate a relationship between Ripple's
16 actions that reflect Ripple's, I'll use the
17 word, "entrepreneurial efforts" and other causes
18 of particular price movements.

19 BY MR. HANAUER:

11:39 20 Q. Did you look at intraday price
21 movements to see the effect of multiple
22 announcements on the same day?

23 MR. FIGEL: Objection.

24 THE WITNESS: That's not really the big
11:39 25 problem with confounding information in

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 Dr. [REDACTED] event study.

2 But as I said, a lot of times you can't
3 disentangle and that causes you to not be able
4 to reach conclusions about the causes of price
11:40 5 movements. But I certainly did make some
6 qualitative assessments, as Dr. [REDACTED] does
7 himself.

8 In other words, there is a basic
9 distinction between creating information and
11:40 10 reporting information. If you take an example
11 outside of event studies and, for example, a
12 newscaster, a newscaster can report an event
13 which has a big effect -- it could even have a
14 big effect on prices -- but the newscaster is
11:41 15 reporting an event that the newscaster didn't
16 have anything to do with or the newscaster is
17 just reporting an event that is the product of
18 actions by others.

19 But if you looked at the price reaction
11:41 20 to what the newscaster said, sometimes markets
21 can move based on what the newscaster said, even
22 though the newscaster had nothing to do with
23 creating the event.

24 And so if you drew the inference that
11:41 25 it was the newscaster's efforts that created the

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 price movement, you would be making a
2 fundamental mistake because you would be
3 ignoring the difference between creating
4 information and reporting information.

11:41 5 And so in the case of cryptocurrencies,
6 for example, in XRP and Dr. [REDACTED] report, when
7 he uses things like decisions by other platforms
8 to allow XRP to be traded on a different
9 platform and calls that a significant event by
11:42 10 XRP, an XRP announcement that results in a
11 significant price movement, forgetting any other
12 problems with that analysis, in many ways that's
13 like the newscaster example. That's ignoring
14 the distinction between creating information and
11:42 15 reporting information.

16 And there are a number of other
17 illustrations like that in Dr. [REDACTED] list of, I
18 guess what he calls, "event days" that have
19 significant price reactions. And that's really
11:43 20 what I discuss in my report. And actually it's
21 Dr. [REDACTED] himself acknowledges in his report
22 because he has one footnote -- I don't remember
23 exactly what the subject was -- and I'm sure I
24 could find it -- where he reports significant
11:43 25 results and I think he has a footnote saying

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 it's not clear whether Ripple had anything to do
2 with the underlying events which caused the
3 price movement, even though the announcement was
4 made by Ripple but the announcement was
11:43 5 announcing something that was done by others.

6 If you are trying -- if what you are
7 trying to test for is whether entrepreneurial
8 efforts by Ripple are correlated with price
9 movements, then you can't ignore the distinction
11:44 10 between creating information and reporting
11 information. And that's a basic confounding
12 problem that really permeates all of Dr. [REDACTED]
13 analysis, one of many really fundamental
14 methodological flaws.

11:44 15 BY MR. HANAUER:

16 Q. Did you look at any intraday price data
17 on this assignment?

18 MR. FIGEL: Objection.

19 THE WITNESS: I think I said no because
11:44 20 that's not the principal reason why I'm -- at
21 least this particular methodological flaw in
22 Dr. [REDACTED] study occurred.

23 BY MR. HANAUER:

24 Q. And you said you made a variety of
11:44 25 qualitative assessments about the effect of

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 confounding announcements. Did you perform any
2 quantitative assessments about the effect of
3 confounding announcements?

4 MR. FIGEL: Objection.

11:45 5 THE WITNESS: No. But, again, as I said, one
6 of the problems with confounding announcements
7 is frequently they can't be disentangled and
8 that occurs all the time in standard event study
9 analysis. And when that occurs, it has to be
11:45 10 recognized as a limitation of what you can infer
11 from the data. And that's exactly what Dr. [REDACTED]
12 did not do. That's another, as I said, basic
13 methodological flaw.

14 BY MR. HANAUER:

11:45 15 Q. Are you offering any opinions about the
16 appropriateness of how Dr. [REDACTED] decided to
17 categorize the various types of Ripple news
18 discussed in his report?

19 MR. FIGEL: Objection.

11:45 20 THE WITNESS: I think to some extent, yes.
21 It's totally subjective. He picked certain days
22 to analyze, ignores the vast majority of days.
23 He also analyzes public events but not negative
24 events.

11:46 25 I'm not aware of any event study in any

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 academic journal that describes as proper
2 methodology only analyzing the price reaction to
3 positive events as opposed to negative events or
4 positive price reactions as opposed to negative
11:46 5 price reactions.

6 I'm not saying that none exists. But
7 it seems so fundamentally inconsistent with
8 basic statistical analysis and basic event study
9 methodology. I'm just not aware of any support
11:47 10 in peer-reviewed journals or anywhere else for
11 that kind of approach.

12 BY MR. HANAUER:

13 Q. Did Ripple make any public
14 announcements that categorized XRP in a negative
11:47 15 light?

16 MR. FIGEL: Objection.

17 THE WITNESS: I don't know whether they did
18 or they didn't. But it's not only how Ripple
19 characterized the event; it's what the price
11:47 20 reaction is to the event.

21 And typically event studies analyzing
22 the relationship between events and price
23 movements don't limit themselves to positive
24 price movements. As I said, that's a departure
11:47 25 from any recognized event study methodology that

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 I've ever seen --

2 BY MR. HANAUER:

3 Q. Are you --

4 A. -- in any peer-reviewed journals that
11:48 5 I'm familiar with.

6 Q. Are you offering any opinions regarding
7 the appropriateness of Dr. [REDACTED] index modeling
8 in this case?

9 MR. FIGEL: Objection.

11:48 10 THE WITNESS: You know, that's -- he's got
11 all those 20 different regressions. I haven't
12 really thought about whether there were any that
13 could have been added or subtracted. So I guess
14 no, I don't have any specific criticisms of that
11:48 15 one issue.

16 BY MR. HANAUER:

17 Q. Can you please look at your report,
18 paragraph 14.

19 A. Okay, I have it.

11:49 20 Q. And do you see you say [as read]:
21 Based on my review of the economic evidence?

22 A. Yes, I see that.

23 Q. What do you mean by "economic
24 evidence"? What are you referring to?

11:49 25 A. The things that are referred to

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 immediately after.

2 Q. Well, what's immediately after are your
3 conclusions, right?

4 A. About economic evidence.

11:49 5 Q. So when you say "economic evidence," is
6 that the -- mean the same thing as the facts and
7 data you reviewed?

8 MR. FIGEL: Objection.

9 THE WITNESS: Well, I mean, if you look at
11:50 10 the sentence, it says [as read]: Based on my
11 review of the economic evidence, I have
12 concluded that Dr. [REDACTED] analysis is
13 fundamentally flawed for multiple reasons and
14 provides no support for the SEC's claim that XRP
11:50 15 is a security.

16 And then it lists the areas that I gave
17 as reasons based on economic evidence that
18 Dr. [REDACTED] analysis, in my opinion, is
19 fundamentally flawed.

11:50 20 BY MR. HANAUER:

21 Q. And the four romanettes in paragraph
22 14, those are the four general critiques you
23 have about Dr. [REDACTED] opinions?

24 A. Yes, that's right.

11:50 25 Q. And beyond the reasons cited in

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 paragraph 14, are you offering any other reasons
2 why you believe Dr. [REDACTED] analysis is
3 fundamentally flawed?

4 MR. FIGEL: Objection.

11:51 5 THE WITNESS: Well, you know, I think the
6 report speaks for itself. It's organized I
7 think consistently with these four areas. So
8 that's what I would say.

9 BY MR. HANAUER:

11:51 10 Q. I guess, though, is there an area
11 beyond the four identified in paragraph 14 that
12 you think makes Dr. [REDACTED] analysis
13 fundamentally flawed?

14 MR. FIGEL: Objection.

11:51 15 THE WITNESS: Really just what's contained in
16 my report.

17 BY MR. HANAUER:

18 Q. Can you look at paragraph 16, please.

19 A. Sixteen. Okay.

11:52 20 Q. And referring to the first paragraph --
21 or the first sentence of paragraph 16, is there
22 an accepted economics definition of security --
23 of a security?

24 A. I don't know if I would call it an
11:52 25 accepted economic definition. But what's stated

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 in the first sentence of paragraph 16 is a
2 general statement about the economic meaning of
3 a security.

4 Q. Is there an accepted economics
11:52 5 definition of an investment contract?

6 A. Again, I'm not sure whether something
7 is understood as an accepted definition. But at
8 least my understanding of the common economic
9 meaning of an investment contract is an
11:53 10 investment, the success of which varies based on
11 the success or lack of success or -- of whatever
12 the firm or venture that the economic actor is
13 investing in.

14 Q. In this lawsuit does the court decide
11:53 15 whether Ripple's XRP distributions violated the
16 federal securities laws using the economics
17 definition of investment contract or the
18 definition of investment contract as commonly
19 used under the federal securities laws?

11:54 20 MR. FIGEL: Objection.

21 THE WITNESS: I don't have an opinion on what
22 the court should rely on. That's obviously up
23 to the court.

24 BY MR. HANAUER:

11:54 25 Q. Are you offering the opinion that in

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 order for an investment product to be considered
2 a security under the federal securities laws the
3 holder of that investment product must have a
4 claim on the cash flows or some other asset of
11:54 5 the investment products issuer?

6 MR. FIGEL: Objection.

7 THE WITNESS: That's a legal opinion. I'm
8 not offering any legal opinions.

9 BY MR. HANAUER:

11:54 10 Q. So you cite the Supreme Court's
11 decision in SEC versus W.J. Howey Company?

12 A. That's right.

13 Q. And you refer to the Howey test?

14 A. Correct.

11:55 15 Q. And that's in paragraph seven of your
16 report?

17 A. That's right.

18 Q. Does Dr. [REDACTED] offer the opinion that
19 XRP is a security under the Howey test?

11:55 20 MR. FIGEL: Objection.

21 THE WITNESS: Well, you'd have to ask him. I
22 didn't see that particular opinion phrased that
23 way in his report.

24 BY MR. HANAUER:

11:55 25 Q. Does Dr. [REDACTED] report offer an opinion

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 whether any aspect of the Howey test is
2 satisfied?

3 MR. FIGEL: Objection.

4 THE WITNESS: If you mean does he literally
11:56 5 offer an opinion that says this element is
6 satisfied or not satisfied, again, you'd have to
7 ask him. But not that I recall.

8 BY MR. HANAUER:

9 Q. Does Dr. [REDACTED] opine whether any XRP
11:56 10 transactions constitute the offer of sale of
11 securities?

12 MR. FIGEL: Objection.

13 THE WITNESS: Same answer.

14 BY MR. HANAUER:

11:56 15 Q. And are you offering an opinion on
16 whether any of Ripple's XRP transactions
17 satisfied the Howey test?

18 A. Again, that's a legal opinion. So, no,
19 I'm not; I'm not offering any legal opinions.

11:56 20 Q. Did you consider yourself an expert on
21 how courts have applied the Supreme Court's
22 Howey decision?

23 MR. FIGEL: Objection.

24 THE WITNESS: That's another legal opinion.
11:56 25 And I'm not offering any legal opinions.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 BY MR. HANAUER:

2 Q. Did you have -- have courts provided
3 more recent guidance since Howey on how to
4 determine if transactions involve the offer or
11:57 5 sales of securities?

6 MR. FIGEL: Objection.

7 THE WITNESS: That's another legal opinion.
8 I'm not offering any legal opinions.

9 BY MR. HANAUER:

11:57 10 Q. Did you review any such decisions in
11 preparing your report?

12 A. No.

13 MR. HANAUER: Let's go off the record.

14 THE VIDEOGRAPHER: This is the end of media
11:57 15 unit one. We are going off the record. The
16 time is 11:57 a.m.

17 (Whereupon, a recess was had at
18 11:57 a.m., after which the
19 deposition was resumed at
12:18 20 12:19 p.m. as follows:)

21 THE VIDEOGRAPHER: We are back on the record.
22 This is the start of media unit two, the
23 deposition of Daniel Fischel. The time is
24 12:19 p.m.

12:18 25 You may proceed.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 BY MR. HANAUER:

2 Q. Professor Fischel, before we went on
3 break, you provided an economics definition of
4 investment contract.

12:19 5 Do you remember that?

6 A. I think I said I'm not sure there is
7 such a thing as an accepted definition, but
8 that's, I think, a general economic
9 understanding of what an investment contract is.

12:19 10 Q. I actually want to clarify that point.
11 Whatever definition you gave, does that come
12 from any academic textbook or scholarly article?

13 A. It very well might as a description. I
14 didn't search to see if that, I would say,
12:19 15 general understanding is contained in some type
16 of finance or business text. I would expect
17 that it would appear somewhere. But I didn't
18 check.

19 Q. Can you name one as you sit here today?

12:20 20 A. No, I can't because I didn't
21 investigate that question.

22 Q. Can I ask you to look at paragraph --
23 or page 10 of your report, please.

24 A. Sure. Okay.

12:20 25 Q. And do you see a heading A says [as

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 read]: The findings of Dr. [REDACTED] event study
2 methodology do not demonstrate that XRP holders
3 profit solely or primarily from the efforts of
4 Ripple?

12:20 5 A. Yes, I see that.

6 Q. Does Dr. [REDACTED] report offer the
7 opinion that XRP holders profit solely or
8 primarily from the efforts of Ripple?

9 MR. FIGEL: Objection.

12:20 10 THE WITNESS: Again, he doesn't use those
11 words. But in my opinion he reports his results
12 in a very misleading way because what he does
13 is, you know, for a series of the announcements
14 that he subjectively picks, he has a series of
12:21 15 exhibits where he just shows check marks to show
16 that there is, in his opinion, a statistical
17 relationship between the events out of the 500
18 that he picks and price reactions.

19 But if you look at his backup, and
12:21 20 that's the purpose of my Exhibit 1, you get a
21 very different reaction, a very different
22 understanding of what that relationship is,
23 meaning that on the overwhelming majority of
24 days where he says there are events, there is no
12:22 25 statistically significant price reaction. And

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 on a significant number of days where there is
2 no events, there is a statistically significant
3 price reaction. And you would never get that
4 understanding from his exhibits with checks.

12:22 5 And so I thought the way he reported
6 his results were very misleading, apart from the
7 other fundamental methodological flaws that I
8 discuss in my report, a few of which I referred
9 to already. And that's really the purpose of
12:22 10 this section.

11 BY MR. HANAUER:

12 Q. Did you perform any work or analysis to
13 test whether XRP holders profits solely or
14 primarily from the efforts of Ripple?

12:23 15 MR. FIGEL: Objection.

16 THE WITNESS: I think Dr. [REDACTED] own results
17 taken at face value, even apart from the
18 methodological flaws which exist, demonstrate
19 that XRP price changes are not, and therefore,
12:23 20 XRP's holders profits from price changes are not
21 solely or primarily attributable to Ripple's
22 efforts.

23 BY MR. HANAUER:

24 Q. I'm not asking what Dr. [REDACTED] did. I'm
12:23 25 asking what you did.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 Did you do any work or analysis to test
2 whether XRP holders profit solely or primarily
3 from Ripple's efforts?

4 MR. FIGEL: Objection.

12:23 5 THE WITNESS: As I said, I didn't think it
6 was necessary to do any tests because Dr. ██████████
7 own results demonstrate what I just said, which
8 is also included in this particular section of
9 my report and in Exhibit 1.

12:24 10 BY MR. HANAUER:

11 Q. Can the SEC satisfy the expectation of
12 profits prong of the Howey test by establishing
13 that under the circumstances Ripple promoted XRP
14 primarily as an investment?

12:24 15 MR. FIGEL: Objection.

16 THE WITNESS: That sounds like a legal
17 question. I don't have any opinion on that one
18 way or the other.

19 BY MR. HANAUER:

12:24 20 Q. Are you offering an opinion whether,
21 under all the circumstances, Ripple ever
22 promoted XRP primarily as an investment?

23 MR. FIGEL: Objection.

24 THE WITNESS: No, I'm not offering an opinion
12:24 25 on that.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 BY MR. HANAUER:

2 Q. Did you consider whether Ripple ever
3 promoted XRP primarily as an investment?

4 A. No, I didn't. For purposes of the
12:25 5 analysis in my report, I did not.

6 Q. Are you offering an opinion on whether,
7 under all the circumstances, Ripple promoted XRP
8 as a means whereby XRP purchasers could pool
9 their own activities, their money, and Ripple's
12:25 10 contribution in a meaningful way?

11 MR. FIGEL: Objection.

12 THE WITNESS: I'm not offering an opinion
13 about that.

14 BY MR. HANAUER:

12:25 15 Q. Did you consider whether Ripple ever
16 promoted XRP as a means whereby Ripple
17 purchasers could pool their own activities,
18 their money, and Ripple's contributions in a
19 meaningful way?

12:25 20 MR. FIGEL: Objection.

21 THE WITNESS: No. As with the previous
22 questions, it's not really. I didn't consider
23 it and it's not relevant for the purposes of my
24 analysis.

25

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 BY MR. HANAUER:

2 Q. Well, why is it relevant for you to
3 consider whether XRP holders profits solely or
4 primarily from the efforts of Ripple but not
12:26 5 whether Ripple promoted XRP as an investment?

6 MR. FIGEL: Objection.

7 THE WITNESS: For the reason that I just
8 said, that Dr. [REDACTED] has exhibit after exhibit
9 where he reports the existence of relationships
12:26 10 with check marks. But if you look at his
11 backup, you get a very different impression of
12 what's behind those check marks. And it's only
13 as a result of his subjective choice of dates to
14 look at and how he interprets price reactions in
12:27 15 connection with those dates that he can even get
16 the check marks that he shows.

17 But as I said, even apart from the
18 methodological flaws, which are pervasive in
19 Dr. [REDACTED] report, even taken at face value, I
12:27 20 think it's fair to say that he reports his
21 results in a very misleading way. And if you
22 look at his backup, you can see that the
23 relationships which he purports to find are
24 actually much weaker and look very different
12:27 25 than the way that he reports them.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 BY MR. HANAUER:

2 Q. Are you offering an opinion as to
3 whether XRP purchasers had a reasonable
4 expectation of profits to be derived from the
12:27 5 entrepreneurial or managerial efforts of Ripple?

6 A. I'm not offering an opinion about that.

7 Q. Did you consider whether XRP purchasers
8 had a reasonable expectation of profits to be
9 derived from the entrepreneurial or managerial
12:28 10 efforts of Ripple?

11 A. I didn't consider that in connection
12 with forming any of my opinions because it's not
13 relevant.

14 Q. Can you look please at page -- or
12:28 15 paragraph 18 of your report.

16 A. Okay.

17 Q. And I want to refer you to the second
18 sentence. And you write [as read]: In fact,
19 taken at face value, Dr. [REDACTED] analysis finds
12:28 20 that, (i), most days were significantly
21 positive, XRP returns had no news about Ripple's
22 efforts; and, (ii), most days with news about
23 Ripple's efforts did not have significantly
24 positive XRP returns.

12:28 25 Do you see that?

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 A. Yes, I see that.

2 Q. Are you offering the opinion that
3 either of those metrics identified in the two
4 romanettes, are you offering the opinion that
12:29 5 either of those are the determinative metrics
6 for event studies?

7 MR. FIGEL: Objection.

8 THE WITNESS: I don't understand that
9 question.

12:29 10 BY MR. HANAUER:

11 Q. Well, have you -- are you offering the
12 opinion that an event study gauges price
13 reaction by looking at the days where there is
14 significant returns but no -- no news
12:29 15 announcements?

16 MR. FIGEL: Objection.

17 THE WITNESS: I mean, an event study can show
18 you that. How relevant that is in a particular
19 case depends on the -- obviously the relevant
12:29 20 facts and circumstances of the case.

21 BY MR. HANAUER:

22 Q. Have you ever performed an event study
23 for litigation that based your finding on the
24 comparison of days with significantly positive
12:30 25 returns compared to the days without news

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 announcements?

2 MR. FIGEL: Objection.

3 THE WITNESS: Yeah, I think probably the
4 answer to that would be yes, I think.

12:30 5 BY MR. HANAUER:

6 Q. Can you name one, please?

7 A. I think there was some insider trading
8 cases that I have been involved in where that
9 kind of presentation was part of what we did,
12:30 10 showing basically the relationship between
11 trading days and events and showing -- and price
12 movements, and showing that a lot of days when
13 there were events, there was no trading in
14 advance of the events. And a lot of the days
12:31 15 when there were big price movements, there was
16 no trading or no events, something of that
17 nature. So I think the answer to your question
18 would be yes.

19 Q. Can you name one of the those cases, as
12:31 20 you sit here today?

21 A. For some reason the name Billy Bob
22 Harris sticks in my mind. I don't know if
23 that's a real person or I'm just imagining that
24 name. But I think there was a case involving
12:31 25 Billy Bob Harris. But I know there were others,

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 too.

2 But as I sit here, I don't remember the
3 exact names of the cases.

4 Q. Did you ever perform an event study for
12:32 5 litigation where the determining metric you
6 looked at was days with events not having
7 significantly positive returns?

8 MR. FIGEL: Objection.

9 THE WITNESS: What did you say? "The
12:32 10 determining metric"? You know, other than what
11 I just said, I can't think of any others, as I
12 sit here. But, again, I've done so many event
13 studies and so many different contexts over so
14 many years, it's very hard to generalize of what
12:32 15 I did or didn't do that would fit every single
16 example.

17 BY MR. HANAUER:

18 Q. Can I ask you to look at paragraph 20,
19 please --

12:33 20 A. Okay.

21 Q. -- of your report.

22 What is the significance of 76.3 to
23 89.5 percent of days with significantly positive
24 XRP returns having no news about Ripple's
12:33 25 efforts?

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 MR. FIGEL: Objection.

2 THE WITNESS: It's what I just said. It
3 demonstrates from Dr. [REDACTED] own backup exactly
4 what the relationship was between statistically
12:33 5 significant days with statistically significant
6 returns and whether or not there was news,
7 again, taking Dr. [REDACTED] study at face value,
8 including his subjective analysis of which of
9 the 500 days should be analyzed, which shouldn't
12:34 10 be analyzed, which are -- tell you something
11 that is probative in terms of the hypothesis
12 that he's testing.

13 But even just taking exactly what he
14 did at face value and forgetting all the
12:34 15 methodological criticisms that exist, this is
16 what his results show, which is very different
17 from the way he reports his results with checks.

18 MR. HANAUER: One second.

19 (Short pause in proceedings.)

12:34 20 BY MR. HANAUER:

21 Q. In order to determine whether Ripple
22 news announcements contribute to XRP prices,
23 should one check the magnitude of the price
24 reaction on news days?

12:35 25 MR. FIGEL: Objection.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 THE WITNESS: Well, again, your question
2 presumes that there is a basis for looking at an
3 inefficient market, a price reaction on days
4 where there are announcements.

12:35 5 And one of the whole significant
6 findings of the lack of an efficient market is
7 there is not really a theoretical or empirical
8 basis to do that.

9 But putting that fundamental criticism
12:36 10 to one side, as a matter of statistics, it's
11 generally accepted that there are well-accepted
12 methodological techniques to answer questions of
13 which price movements are large enough or which
14 returns, to be more precise, are large enough
12:36 15 that they are unlikely to be attributable to
16 chance alone.

17 BY MR. HANAUER:

18 Q. Did you perform any analysis in this
19 case to check the magnitude of price reaction of
12:36 20 XRP to Ripple announcements?

21 MR. FIGEL: Objection.

22 THE WITNESS: Not other than reviewing
23 Dr. [REDACTED] analysis and, again, with the
24 background of the relevant academic literature
12:37 25 that I've referred to several times.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 BY MR. HANAUER:

2 Q. Is it informative in event studies to
3 compare price reaction on news days to price
4 reaction on no news days?

12:37 5 MR. FIGEL: Objection.

6 THE WITNESS: Can be. I mean, I think it's a
7 function of what it is you're trying to test
8 under the relevant facts and circumstances at
9 the time.

12:37 10 BY MR. HANAUER:

11 Q. Did you perform any such analysis in
12 this case?

13 MR. FIGEL: Objection.

14 THE WITNESS: No, other than looking at the
12:37 15 results that Dr. [REDACTED] reported.

16 BY MR. HANAUER:

17 Q. Have you performed such analysis before
18 on other event studies for litigation?

19 MR. FIGEL: Objection.

12:38 20 THE WITNESS: Probably. I mean, comparing
21 the returns on news days with the returns on
22 non-news days, yeah. I think so, yes, for the
23 magnitude of returns, the volatility of returns.
24 Yes, I'm sure I have.

25

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 BY MR. HANAUER:

2 Q. Did you do any work or analysis on this
3 case to determine whether there was a difference
4 between significant returns on news days and no
12:38 5 news days?

6 MR. FIGEL: Objection.

7 THE WITNESS: In terms of the magnitude of
8 returns, I don't think so, but I'm not a hundred
9 percent sure.

12:39 10 BY MR. HANAUER:

11 Q. Did you do any work or analysis to
12 determine how much XRP returns on the news days
13 contributed to the total XRP returns during the
14 relevant periods -- relevant period?

12:39 15 A. You know, that's really, I think, the
16 same question you just asked me.

17 I don't think so in terms of that very
18 specific comparison, but I'm not a hundred
19 percent sure.

12:39 20 Q. Did you test the magnitude of abnormal
21 returns estimated by Dr. [REDACTED] on news days
22 compared to no news days?

23 THE COURT REPORTER: You said abnormal,
24 right? Okay.

12:40 25 MR. FIGEL: Objection.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 THE WITNESS: Yeah, as I've said a number of
2 times, I just analyzed Dr. [REDACTED] backup to look
3 at what he himself found, as opposed to
4 performing any completely independent event
12:40 5 studies.

6 What I'm not sure of is -- in response
7 to a couple of your questions is whether we took
8 his results and sliced them and diced them in
9 the ways that you're suggesting, as opposed to
12:40 10 the ways that are reported in my Exhibit 1.

11 BY MR. HANAUER:

12 Q. In your words, did you slice and dice
13 Dr. [REDACTED] results in a way that's not reflected
14 on Exhibit 1?

12:41 15 A. You know, as I said, I don't think so
16 in any systematic way, but I'm not a hundred
17 percent sure.

18 Q. Are you offering the opinion that
19 Dr. [REDACTED] event study is flawed based on the
12:41 20 number of no news days with significant returns?

21 A. You know, again, I think, you know,
22 that presumes, you know, among other things, the
23 efficiency of the market. And so I'm ignoring
24 some of the methodological criticisms that I
12:42 25 believe characterize Dr. [REDACTED] report.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 But in specific answer to your
2 question, again, that's, if I understand the
3 question correctly, different from the way I
4 reported Dr. ██████ backup in Exhibit 1. And so
12:43 5 I don't believe we did exactly what you just
6 said, but I'm not sure.

7 BY MR. HANAUER:

8 Q. Are you offering the opinion that
9 Mr. ██████ event study is flawed based on the
12:43 10 number of news days without significant returns?

11 A. As I said, I think Dr. ██████ reports his
12 results in a fundamentally misleading way, and I
13 think there are other methodological flaws that
14 undermine his event study.

12:43 15 And that's basically what I said in my
16 report and that's what I think.

17 Q. So in paragraph 20, the percentages in
18 romanettes (i) and (ii), does that come from
19 Exhibit 1 --

12:44 20 A. Yes.

21 Q. -- to your report?

22 A. Yes, it does.

23 Q. And do the metrics in those two
24 romanettes establish that XRP holders do not
12:44 25 profit solely or primarily from the efforts of

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 Ripple?

2 A. I think they are inconsistent with the
3 claim that XRP holders primarily -- that profit
4 primarily or solely from the profits of Ripple.

12:44 5 Q. So for Exhibit 1 to your report, can
6 you remind me who prepared that?

7 A. I'll just adopt all my previous answers
8 to that question. I'm not sure who actually
9 physically prepared the exhibit.

12:45 10 The exhibits are taken straight from
11 Dr. ██████ backup, which we analyzed to try and
12 get behind the way he reported his results in
13 his report.

14 Q. So whoever -- whoever it is that
12:45 15 prepared Exhibit 1 to your report, what did you
16 do to verify their work?

17 A. Again, we just took the exhibit
18 directly from Dr. ██████ backup to his report.
19 It wasn't an independent test that we did. It
12:45 20 was just reporting what Dr. ██████ himself found
21 but didn't include in his report.

22 Q. But you didn't prepare Exhibit 1,
23 right, to your report?

24 A. You mean personally did I create the
12:46 25 exhibit physically, as opposed to the idea of

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 showing that his own backup looks very different
2 from the way he reported his results in the
3 report? If that's what you're asking, yes, I
4 did not physically prepare the exhibit.

12:46 5 Q. So if you didn't prepare the exhibit,
6 what did you do, if anything, to verify the work
7 of whoever did prepare Exhibit 1 to your report?

8 A. Because the work, again, is taken
9 directly from Dr. ██████ backup.

12:46 10 I mean, did I check whether every
11 number is transcribed correctly? No, I didn't.
12 I assume we usually have some internal checking
13 process, so I assume that was done.

14 But this is -- again, these are not a
12:47 15 matter of any independent analysis that we did
16 other than looking at what Dr. ██████ found as
17 revealed in his backup and just moving those
18 findings from the backup to the exhibit.

19 Q. So referring to the second romanette on
12:47 20 Exhibit 20 where you cite the 70.5 to
21 84.8 percent figure, where on Exhibit M do those
22 numbers come from? Or, I'm sorry, where on
23 Exhibit 1 to your report do those numbers come
24 from?

12:47 25 A. Just one second, please.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 All right. If you look at Exhibit 1,
2 and you look at the first page of Exhibit 1, and
3 you look at the top two lines going across for
4 the very last vertical entry, percentage of
12:48 5 event days with significant returns and without
6 significant returns, okay, you see the two
7 numbers, 70.5 percent and 84.8 percent.

8 Q. So column M?

9 A. Column M, which are itself -- just one
12:49 10 second, please.

11 If you look at the pages behind the
12 first page and you look at all the entries under
13 exhibit -- under letter M, if everything is
14 working correctly, you should find a low number
12:50 15 of 70.5 and a high number of 84.8.

16 So, let's see. I see the 84.8 and I
17 see the 70.5.

18 Q. And the 84.8 number, that comes from
19 the two-sided nonparametric specification of
12:50 20 model one?

21 A. That's correct.

22 Q. And how did you calculate the numbers
23 in column M?

24 A. You know, frankly, I can't remember if
12:51 25 those calculations were by us to sort of -- to

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 take Dr. [REDACTED] numbers and just translate them
2 to percentages or whether they were in the
3 backup themselves. I just don't remember.

4 Q. So is the number M the function of
12:51 5 comparing any two other columns on Exhibit 1?

6 A. You know, again, I would have to check
7 myself if the -- you know, I just have to check.

8 Q. Okay.

9 A. I'm not sure.

12:53 10 Q. I think I figured it out how to do it,
11 but I'm going to ask you to verify it for me.
12 Okay?

13 A. Okay.

14 MR. HANAUER: Would you mind passing this
12:53 15 down.

16 THE WITNESS: Yeah, I'm not going to use your
17 little calculator or computer or whatever this
18 is. I mean, you can represent whatever numbers
19 you want to me based on your usage of this
12:53 20 instrument. And if I can agree, I will, or if I
21 can't agree, I'll say I need to independently
22 verify it.

23 BY MR. HANAUER:

24 Q. So if I ask you to type something into
12:53 25 a calculator, you won't do that?

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 A. I will do it, I'm just not going to do
2 anything more than type the numbers into the
3 calculator.

4 Q. Okay. And I won't ask you to. Okay?

12:53 5 A. Okay.

6 Q. So I think that the way you got to
7 column M is to divide column F by column D.

8 Can you try doing that for model 1,
9 two-sided nonparametric?

12:54 10 A. Yeah, you know, for --

11 MR. FIGEL: I object to this.

12 Mr. Hanauer, you obviously have a
13 calculator. You could have done it before this.
14 You can represent to him what the arithmetic is.

12:54 15 I don't think it's an appropriate use of
16 deposition time to have him go through a
17 rhetorical exercise of using a calculator.

18 THE WITNESS: Well, you know, for whatever
19 it's worth, I do think that is what it is. I
12:54 20 was just looking at the -- eyeballing the data.

21 But I can't perform the calculation in
22 my head, and I don't want to use your
23 calculator. But that is the way it looks to
24 me.

12:55 25

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 (Whereupon, Deposition
2 Exhibit DF-19 was marked for
3 identification.)

4 MR. FIGEL: As I suspected, you've already
12:55 5 done the math, so we'll take your
6 representations about the arithmetic.

7 MR. HANAUER: I've been told you may not want
8 the witness using a calculator.

9 BY MR. HANAUER:

12:55 10 Q. So, again, if I'm trying to figure out
11 how you arrived at column M, is it safe to say
12 that you divided, at least for the two-sided
13 nonparametric portion of model 1, did you divide
14 column F by column D?

12:56 15 A. You know, as I said, I think so. I
16 mean, that's what I thought so before you gave
17 me this sheet. I didn't perform these
18 calculations so it looks right to me. But, you
19 know, obviously, I want to have a chance to
12:56 20 check it myself.

21 Q. And that's why I put a calculator in
22 front of you.

23 A. Yeah, but I don't want to use your
24 calculator and I don't want to do these
12:56 25 calculations on the fly.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 That's the way it looks to me. I'm
2 willing to say that much. That's what I think.

3 But to be a hundred percent sure, I'd
4 want to check myself.

12:56 5 Q. Okay. Well, maybe if we're -- when we
6 have a break and you can use whatever instrument
7 you feel is appropriate, if you think my math is
8 wrong, please let me know.

9 MR. FIGEL: I have a proposal, Mr. Hanauer.
12:56 10 We'll take your representation that you've done
11 the math correctly. I will do a parallel check.
12 If I see something, I will bring that to your
13 attention.

14 I just don't think it's fair to ask the
12:57 15 witness to use an unfamiliar calculator and do
16 mathematical calculations on the record.

17 MR. HANAUER: Okay.

18 THE WITNESS: And just to be clear, I'm not
19 suggesting that I think your math is wrong. I
12:57 20 didn't say that.

21 BY MR. HANAUER:

22 Q. Well, there's a good chance it could
23 be, but that's neither here nor there.

24 So column M, it looks like that
12:57 25 calculates the frequency of event days without

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 significant returns among all event days.

2 Is that accurate?

3 A. That's the way it looks.

4 Q. And are you offering the opinion

12:57 5 that --

6 A. Actually, can you just hold on for one
7 second. There may be a simpler answer to this.

8 And I apologize for not thinking of
9 this right away. If you look at the last page
12:58 10 of Exhibit 1, there is a legend that tells you
11 how every column is calculated.

12 And column M is column F divided by
13 column D.

14 Q. There we go.

12:58 15 So having that --

16 A. It's on -- in other words, it's on the
17 exhibit.

18 Q. Exhibit 1 to your report?

19 A. Correct.

12:58 20 Q. So on Exhibit 1 to your report, does
21 column M calculate the frequency of event days
22 without significant returns among all event
23 days?

24 A. I mean, column M calculates whatever is
12:58 25 that's reflected on column M, which is what's

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 stated.

2 Q. So that would be significant -- the
3 frequency of significant returns, that's column
4 F, right? I'm sorry.

12:59 5 So column F is event days without
6 significant returns?

7 A. That's right.

8 Q. And column D is event days total?

9 MR. FIGEL: Objection.

12:59 10 THE WITNESS: Again, this is -- just to be
11 clear, this is Dr. [REDACTED] backup. It's not our
12 calculation. This is reporting what he found --
13 what he did based on his determination as to
14 what days counted and what days didn't count and
01:00 15 how you separate the days in different
16 categories in his subjective opinion.

17 But column D is -- again, the number of
18 the event days varies depending on which
19 specification you're looking at. Because for
01:00 20 some specifications, there were more trading
21 days -- or more days and therefore more event
22 days than others. He discusses that in his
23 report.

24 But with respect to the first
01:00 25 regression specification on page 2 of 6, there

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 are 105 -- according to Dr. [REDACTED], 105 total
2 event days; 16 of them have significant returns,
3 according to Dr. [REDACTED]; 89 of them do not have
4 significant returns.

01:01 5 Again, I'm just going to say, again,
6 this is accepting Dr. [REDACTED] conclusions and
7 analysis at face value and ignoring the
8 methodological flaws that exist. But these are
9 his reports -- these are his results, rather, as
01:01 10 reported in his backup.

11 BY MR. HANAUER:

12 Q. Have you ever prepared an event study
13 as a testifying expert that relies on the metric
14 frequency of event days without significant
01:01 15 returns among all -- among all event days that
16 relies on that metric to establish or disprove
17 the relationship between public announcements
18 and the price of a security?

19 A. Well, that was sort of a compound
01:02 20 question.

21 The closest thing that I can think of
22 is what I've said we've done in a number of
23 different insider trading cases, which I do
24 recall, of looking at some total set of days
01:02 25 that were at issue in the case and looking at

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 the days when there were price movements or were
2 not price movements and were trades -- was
3 trading around those days, there was not trading
4 around those days, and the various comparisons
01:02 5 that you get performing that analysis.

6 Q. And that was -- and if I were to ask
7 you to name a case --

8 A. The only name that came to me was Billy
9 Bob Harris. But I do think there are other
01:03 10 cases as well.

11 Q. Are you aware of any academic or
12 scholarly literature that supports using that
13 metric to support an event study?

14 MR. FIGEL: Objection.

01:03 15 THE WITNESS: I don't know what you mean,
16 "support an event study." These are the --
17 these are Dr. [REDACTED] results of his event study.
18 They neither support or don't support. It's
19 just what the event study shows, according to
01:03 20 Dr. [REDACTED].

21 BY MR. HANAUER:

22 Q. Are you aware of any academic or
23 scholarly literature that supports using that
24 metric as a way to criticize an event -- the
01:03 25 results of an event study?

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 A. I'm not criticizing the results of an
2 event study. The results are what the results
3 are.

4 Again, putting aside the methodological
01:03 5 criticisms that I have, these are the results
6 that are reported. What I have said is the way
7 that Dr. [REDACTED] reported these results, his own
8 results, with just checks and not showing how
9 weak the relationships are even if under his
01:04 10 test choosing the days that he wants to look at,
11 ignoring the vast majority of days, you know,
12 defining his own test of statistical
13 significance, these are just all his results
14 just taken at face value.

01:04 15 And I do think both because of the
16 subjectivity, the fact that there was an
17 inefficient market, the fact that he's only
18 looking at one-sided events, he's not looking at
19 negative events, as well as some other
01:05 20 methodological criticisms that are even more
21 fundamental, for the most part, I'm ignoring all
22 of those right now.

23 I'm just looking at, this is what he
24 found. But he didn't report this is what he
01:05 25 found. What he reported was a series of check

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 marks. And I think the check marks are
2 misleading in light of the actual results of the
3 event studies that he himself performed.

4 Q. Let me ask you about column L on
01:05 5 Exhibit 1 to your report.

6 A. Okay.

7 Q. And that represents the frequency of
8 event days that had significant returns?

9 A. That's right.

01:05 10 Q. And it looks like -- does Exhibit 1
11 have -- contain the data you would need to
12 calculate the frequency of nonevent days with
13 significant returns?

14 MR. FIGEL: Objection.

01:06 15 THE WITNESS: Well, if you look at columns G,
16 H, and I, if I understand the question
17 correctly, they deal with the number of nonevent
18 days and the number of significant returns and
19 the number of nonsignificant returns, according
01:06 20 to Dr. [REDACTED] in his own event study in all these
21 -- in all these different specifications.

22 BY MR. HANAUER:

23 Q. So if I wanted to find the frequency of
24 nonevent days with significant returns using
01:07 25 Dr. [REDACTED] data, would I divide column H by

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 column G?

2 A. The number of nonevent days with
3 significant returns, that's the question? Yes,
4 I think that's what you would do.

01:07 5 Q. So I'd like to refer you to model 1,
6 two-sided nonparametric specification.

7 A. Okay.

8 Q. So if I wanted to divide H by G for
9 that model, would it be 104 divided by 2,264?

01:08 10 A. I believe so, yes, that's what it would
11 be.

12 Q. And if we look at exhibit -- my Exhibit
13 DF-19, it says 104 divided by 2,264 equals
14 4.6 percent?

01:08 15 A. That's what it looks like.

16 Q. Do you have any reason to doubt that
17 calculation?

18 A. No, I don't.

19 Q. Are you familiar with the concept of
01:08 20 false positives in statistical tests?

21 A. Yes.

22 Q. What is the typical expectation for
23 false positives in a statistical test?

24 MR. FIGEL: Objection.

01:08 25 THE WITNESS: At the level of generality of

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 your question, I'm not sure there is an
2 expectation.

3 BY MR. HANAUER:

4 Q. Isn't the level of -- you would
01:09 5 typically expect false positives in statistical
6 tests between five and ten percent?

7 A. Those are conventional levels of
8 statistical significance.

9 In event studies, I'm not sure they
01:09 10 would apply always, no matter what the test was.
11 But generally you would expect to find,
12 depending if you had a one-tailed test or a
13 two-tailed test, a price reaction that's
14 statistically significant randomly, even if not
01:09 15 attributable to, not correlated with or caused
16 by a particular event. Solely by chance, in
17 other words.

18 Q. So if we think about that 4.6 percent
19 number of the nonevent days with significant
01:10 20 returns, is it possible that some of those
21 significant nonevent observations with
22 significant returns could be false positives?

23 MR. FIGEL: Objection.

24 THE WITNESS: I'm not sure I'd call them
01:10 25 false positives. I mean, they are what they

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 are.

2 MR. HANAUER: Now a good time for a break?

3 MR. FIGEL: Sure.

4 THE VIDEOGRAPHER: We are going off the
01:10 5 record. The time is 1:11 p.m.

6 (Whereupon, a recess was had at
7 1:11 p.m., after which the
8 deposition was resumed at
9 2:22 p.m. as follows:)

02:21 10 THE VIDEOGRAPHER: We are back on the record.
11 The time is 2:22 p.m.

12 You may proceed.

13 BY MR. HANAUER:

14 Q. Professor Fischel, could I ask you to
02:21 15 please look at page 18 of your report.

16 And do you see a heading D in between
17 paragraphs 30 and 31?

18 A. Yes, I do.

19 Q. Does Dr. [REDACTED] report offer the
02:22 20 opinion that XRP holders are engaged in a common
21 enterprise with Ripple?

22 A. He doesn't say those words, as far as I
23 can recall.

24 Q. Did you perform any work or analysis to
02:22 25 determine whether or not XRP holders are engaged

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 in a common enterprise with Ripple?

2 A. Well, I would say one of my
3 methodological criticisms of Dr. [REDACTED] is his
4 entire event study proves nothing about any of
02:23 5 the competing claims in this case. Not only it
6 doesn't prove anything, it doesn't shed any
7 light on any of the competing claims in this
8 case.

9 And to the extent that one of the
02:23 10 claims in this case related to whether or not
11 XRP is a security, which is clearly a legal
12 question, according to what Dr. [REDACTED] has done,
13 his whole approach, even the way he sets up his
14 hypothesis that he's testing in paragraph 30,
02:24 15 has nothing to do with anything in terms of the
16 disputed issues in the case.

17 And so that's a really basic criticism,
18 but it's really a basic methodological
19 criticism. In other words, if you wanted to
02:24 20 show that this event study that Dr. [REDACTED] did
21 sheds some light on any of the issues in the
22 case, you would want to say that these results
23 that he finds, apart from some of the other
24 methodological criticisms, show something of
02:25 25 consequence in terms of the relationship between

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 XRP and Ripple that does not exist in multiple
2 other contexts.

3 So just to give one example, if you --
4 I think I mentioned this earlier. If you took
02:25 5 De Beers and you took seven years of price --
6 seven years of announcements and seven years of
7 analysis of the prices of diamonds, I haven't
8 done the analysis, but I have no doubt that if
9 you took hundreds of announcements over seven
02:26 10 years, you would find some announcements that
11 had a price effect on diamonds.

12 And that would be true about oil. I
13 even mentioned earlier about a less direct
14 example, but, nevertheless, the same point about
02:26 15 a food -- a food manufacturer like Kellogg's and
16 a product like, you know, the price of Corn
17 Flakes.

18 And so to the extent that the event
19 study doesn't have any claim -- doesn't have any
02:26 20 relationship, doesn't even purport to have any
21 relationship to any of the issues that are
22 relevant in an economic or legal sense to what's
23 disputed in the case, including the issue of
24 whether Ripple and XRP are in a common
02:27 25 enterprise, I think that's a really major

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 methodological flaw.

2 Q. Okay. And I understand that your --
3 you disagree with Dr. █████ conclusion -- well,
4 you disagree with a contention that there's a
02:27 5 common enterprise, right?

6 MR. FIGEL: Objection.

7 THE WITNESS: Well, common enterprise is, in
8 part, a legal term. But, you know, whatever it
9 means as a matter of economics, Dr. █████ does
02:27 10 not show that the relationship between Ripple
11 and XRP is any different than the relationship
12 between De Beers and diamonds or oil companies
13 and oil or food manufacturers and food prices,
14 and doesn't even purport to.

02:28 15 He never even states what he's testing
16 in ways that distinguish the relationship
17 between De Beers -- excuse me, the relationship
18 between Ripple and XRP from all of these other
19 examples.

02:28 20 You know what, when I looked at
21 paragraph 30 of his report -- and I remember the
22 number -- I think all you have to do is look at
23 that paragraph and realize that the entire
24 exercise that Dr. █████ is conducting is really
02:28 25 fundamentally flawed from a methodological point

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 of view.

2 Because, for example, he doesn't have
3 any control group. If you wanted to do this in
4 some kind of an academic way, you would want to
02:28 5 try and show that the relationship -- forgetting
6 all the subjectivity and the lack of efficient
7 markets, you'd want to show that the
8 relationship between Ripple and XRP, for
9 example, is different than the relationship
02:29 10 between other cryptocurrencies, between their
11 founders' companies and price movements.

12 You'd want to show that it's different
13 from commodities, such as diamonds.

14 BY MR. HANAUER:

02:29 15 Q. And excuse me, Professor, I think
16 you're steering a little from my question, so if
17 you don't mind, I'm going to try and rephrase.

18 MR. FIGEL: Objection. I'd like the witness
19 to be able to finish his answer. You
02:29 20 interrupted him.

21 MR. HANAUER: Well, I move to strike his
22 answer as nonresponsive.

23 MR. FIGEL: Well, I'd like to have him finish
24 it and then you can make whatever motion you'd
02:29 25 like.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 BY MR. HANAUER:

2 Q. Is there anything else you'd like to
3 add to the question of: You disagree with the
4 contention that there's a common enterprise?

02:29 5 A. I think for the reasons that I just
6 stated, and the lack of a control group, a lack
7 of a comparison.

8 Again, that's just a basic and
9 fundamental methodological flaw because it sheds
02:30 10 no light on this relationship, has any different
11 characteristics than an infinite number of other
12 relationships that have nothing to do with
13 securities or cryptocurrency.

14 And so in terms of what it has to do
02:30 15 with common enterprise, to the extent that
16 there's some intended relationship between what
17 Dr. [REDACTED] has done and the -- to shed any light
18 on the relevant issues that need to be decided
19 in this case, including the issue of common
02:30 20 enterprise, he hasn't done that. He doesn't
21 purport to do that.

22 And, again, that just fails all basic
23 recognized standards for proper methodological
24 approaches. And that's a fundamental defect.

02:31 25 Q. So I understand that you disagree with

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 Dr. ██████ methodology.

2 What I'm asking you, though, is: Did
3 you perform any affirmative work or testing or
4 analysis to try and test whether XRP holders are
02:31 5 engaged in a common enterprise with Ripple?

6 MR. FIGEL: Objection.

7 THE WITNESS: You know, as I've indicated
8 multiple times, my report is a rebuttal report
9 to Dr. ██████.

02:31 10 The conclusion that I've reached is for
11 reasons that I've just stated and other reasons
12 that I've previously stated or are contained in
13 my reports, I don't believe that Dr. ██████
14 entire analysis, because it is so methodologically
02:32 15 flawed and violates all standards of appropriate
16 methodology and peer-tested -- and peer-reviewed
17 journals, sheds any light on the question of
18 whether or not the relationship between Ripple
19 and XRP is one that you could call a common
02:32 20 enterprise.

21 BY MR. HANAUER:

22 Q. But did you do any testing on your own
23 to answer that question?

24 MR. FIGEL: Objection, asked and answered two
02:32 25 or three times now.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 THE WITNESS: Yeah, I don't have anything to
2 add. The analysis that I did on my own was my
3 analysis and critique of Dr. [REDACTED]. That's what
4 I did.

02:32 5 BY MR. HANAUER:

6 Q. Is there an accepted economics
7 definition of common enterprise?

8 A. Again, you've asked me this question in
9 connection with other terms. I don't know if
02:32 10 I'd say there's an accepted definition. There's
11 frequently an understanding of what a common
12 enterprise is.

13 Q. In the economics literature?

14 A. As a matter of economics.

02:33 15 Q. So if I wanted to test, from an
16 economic perspective, whether a common
17 enterprise exists or not, what would I do?

18 MR. FIGEL: Objection.

19 THE WITNESS: Well, it depends a little bit
02:33 20 on the context. But one thing you would want to
21 do is you'd want to see if the relationship
22 between the parties creates some commonality in
23 terms of what's good news for one is good news
24 for the other and what's bad news for one is bad
02:33 25 news for the other.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 Again, I don't know if I'd call that an
2 accepted definition, but that's a usual economic
3 understanding of the term common enterprise.

4 BY MR. HANAUER:

02:34 5 Q. And are you offering the opinion that
6 XRP holders are not engaged in the common
7 enterprise with Ripple?

8 MR. FIGEL: Objection.

9 THE WITNESS: The opinions that I'm offering
02:34 10 are exactly what I've said and what's contained
11 in my report.

12 BY MR. HANAUER:

13 Q. I'm asking a yes or no question.

14 MR. FIGEL: Objection.

02:34 15 THE WITNESS: You know, you told me -- you
16 cut me off before, so I don't want to repeat
17 what I just said. But if you want me to repeat
18 it again, I will.

19 I'm offering the opinion that the
02:34 20 analysis that Dr. ██████ has performed is
21 fundamentally flawed, violates various basic
22 requirements of standard methodology established
23 in peer-reviewed journal after peer-reviewed
24 journal.

02:34 25 And for all those reasons, including

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 ones that I've stated in my previous answers and
2 the ones contained in my report, I believe his
3 report sheds no light whatsoever on the issue of
4 whether or not Ripple and XRP are engaged in a
02:35 5 common enterprise, however common enterprise is
6 defined.

7 BY MR. HANAUER:

8 Q. So the question you just identified
9 "engaged in a common enterprise," why is that
02:35 10 question even relevant to this case?

11 MR. FIGEL: Objection.

12 THE WITNESS: Well, whether it's legally
13 relevant or not is a question for the court to
14 decide, not for me to decide.

02:35 15 I mean, I think those words are used in
16 the Howey test itself, you know. But, you know,
17 again, I'm not offering any legal opinions.

18 The basic opinion I'm offering is that
19 if you look at the test that Dr. [REDACTED] claims he
02:35 20 is performing, look at paragraph 30 -- I'm happy
21 to read it into the record if you want me to
22 read it into the record -- it's a generic
23 question that has nothing to do with the
24 relationship between Ripple and XRP in a way
02:36 25 that's any different from the relation of

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 countless other firms and products of firms or
2 investments in firms, however you want to phrase
3 it.

4 BY MR. HANAUER:

02:36 5 Q. So you cite to Howey. Does Howey use
6 the terms "engaged in a common enterprise"?

7 MR. FIGEL: Objection.

8 THE WITNESS: Well, you know that better than
9 I do. But let's see what -- I quoted it, so I
02:36 10 don't want to paraphrase it.

11 BY MR. HANAUER:

12 Q. I want to make sure we're right on the
13 terminology here.

14 A. The words "common enterprise" appear in
02:37 15 paragraph seven.

16 Q. I asked you engaged in a common
17 enterprise. Is that language anywhere in Howey?

18 MR. FIGEL: Objection.

19 THE WITNESS: I don't see those exact words
02:37 20 in Howey.

21 BY MR. HANAUER:

22 Q. And, in fact, Howey --

23 A. At least not in this quote that I have.

24 Q. And, instead, Howey uses the words
02:37 25 "invests money in a common enterprise," correct?

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 A. That's what it says.

2 Q. Are you offering an opinion whether or
3 not XRP purchasers invested money in a common
4 enterprise?

02:37 5 A. Well, I think if you're asking whether
6 I'm expressing an opinion whether holders of XRP
7 invested in Ripple, you know, there is certainly
8 not a one-for-one correlation there.

9 Q. That wasn't my question.

02:38 10 Are you offering an opinion whether or
11 not holders of XRP invested money in a common
12 enterprise?

13 A. Your question doesn't really make any
14 sense. Ripple is the common -- I don't
02:38 15 understand. What is your definition of what the
16 common enterprise is in your definition -- in
17 your question?

18 Q. Unfortunately, I'm the one that asks
19 the questions.

02:38 20 A. Then I don't understand the question.

21 Q. What I'm trying to determine is why are
22 you using the term "engaged in a common
23 enterprise" when the test is "invested money in
24 a common enterprise"?

02:38 25 MR. FIGEL: Objection.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 THE WITNESS: You know, as I said, I'm not
2 offering any legal opinions. The judge can
3 decide if what I said about a criticism -- a
4 fundamental criticism in Dr. [REDACTED] methodology
02:39 5 because he doesn't distinguish -- among the
6 other fundamental methodological criticisms
7 because he doesn't distinguish in any way the
8 relationship between Ripple and XRP from the
9 relationship between De Beers and diamonds, oil
02:39 10 companies and oil, and countless other examples,
11 and he doesn't even claim to.

12 And if you look at his paragraph 30,
13 it's generic. It applies to every single one of
14 the examples that I just mentioned. The judge
02:39 15 can decide if that's a valid criticism or not a
16 valid criticism, but that's my opinion.

17 BY MR. HANAUER:

18 Q. Did Ripple pool the money it received
19 from selling XRP to different purchasers?

02:39 20 MR. FIGEL: Objection.

21 THE WITNESS: I don't know. I don't have an
22 opinion on that one way or the other.

23 BY MR. HANAUER:

24 Q. Did Ripple deposit the funds it
02:40 25 received from selling XRP into a single bank

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 account?

2 MR. FIGEL: Objection.

3 THE WITNESS: I don't know. I have no
4 opinion on that one way or the other.

02:40 5 BY MR. HANAUER:

6 Q. Did Ripple separately manage the funds
7 it received from different XRP purchasers?

8 MR. FIGEL: Objection.

9 THE WITNESS: I don't know. I have no
02:40 10 opinion on that one way or the other.

11 BY MR. HANAUER:

12 Q. Did Ripple use the money it received
13 from selling XRP to fund its operations?

14 MR. FIGEL: Objection.

02:40 15 THE WITNESS: You know, at one point I think
16 I've seen some data on that, on the sources of
17 funds that Ripple had. You know, I guess all I
18 can say is I've seen some funds -- I've seen
19 some data on that, but I haven't really
02:40 20 conducted any study of it.

21 BY MR. HANAUER:

22 Q. Did Ripple use the money it received
23 from selling XRP to fund the construction of the
24 Ripple ecosystem?

02:41 25 MR. FIGEL: Objection.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 THE WITNESS: It really would be the same
2 answer. I think I've seen some data on that,
3 but I haven't really studied that question.

4 BY MR. HANAUER:

02:41 5 Q. Did Ripple endeavor to increase the
6 range of goods and services that holders of XRP
7 would find beneficial to buy and sell using XRP?

8 MR. FIGEL: Objection.

9 THE WITNESS: Same answer.

02:41 10 BY MR. HANAUER:

11 Q. Did the success of the digital asset
12 ecosystem that Ripple built drive demand for
13 XRP?

14 MR. FIGEL: Objection.

02:41 15 THE WITNESS: The phrase "drive demand" is
16 too vague, so I'm not sure how to answer the
17 question.

18 BY MR. HANAUER:

19 Q. Well, if Ripple creates a product that
02:42 20 uses XRP to make the product work, is Ripple
21 driving demand for XRP by increasing the use of
22 that product?

23 MR. FIGEL: Objection.

24 THE WITNESS: You know, I guess you could say
02:42 25 that. But that's exactly the same generic point

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 that doesn't distinguish the relationship
2 between Ripple and XRP from countless other
3 relationships that have nothing to do with
4 securities or allegations about securities.

02:42 5 It's just -- presumably when a firm creates a
6 product, it's frequently the case or typically
7 the case that by creating the product the firm
8 is taking steps to increase the demand for the
9 product. So by definition -- because if the
02:43 10 product didn't exist, there wouldn't be demand
11 for it.

12 But that's exactly the criticism I'm
13 making of Professor Metz. He has this
14 completely generic test that has nothing to do
02:43 15 with anything that distinguishes this
16 relationship from countless other relationships,
17 and he doesn't even claim that it does.

18 And your question is, you know, subject
19 to exactly the same response, that, yes, Ripple,
02:43 20 by creating XRP increases the demand for XRP by
21 definition because XRP didn't otherwise exist.
22 And that's true for every single -- maybe
23 overstating slightly -- but as a general matter,
24 that is true for every single creator of a
02:43 25 product where the success of the product is

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 based in some way on market acceptance of the
2 product.

3 BY MR. HANAUER:

4 Q. Are you offering any opinion on what
02:44 5 drove demand for XRP?

6 MR. FIGEL: Objection.

7 THE WITNESS: Not a separate opinion. But I
8 discuss a lot of different examples of different
9 ways, I guess you could say, in which demand for
02:44 10 XRP existed.

11 BY MR. HANAUER:

12 Q. Does Dr. [REDACTED] report offer the
13 opinion that an event study can establish
14 whether or not offers or sales of securities
02:44 15 took place?

16 MR. FIGEL: Objection.

17 THE WITNESS: Again, I don't think he uses
18 those words. But as I've tried to indicate,
19 presumably, he didn't go to all this effort to
02:45 20 conduct a study that has no relationship to the
21 issues in the case. And one of my fundamental
22 criticisms is exactly that; that his study in no
23 way distinguishes the relationship between
24 Ripple and XRP from countless other
02:45 25 relationships that have nothing to do with the

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 facts and circumstances of this case, let alone
2 have nothing to do with the issue whether
3 something is a security.

4 BY MR. HANAUER:

02:45 5 Q. And I guess you used the example of an
6 oil company, right?

7 A. As one example, that's right.

8 Q. Does any oil company own the majority
9 of all the oil in existence?

02:45 10 MR. FIGEL: Objection.

11 THE WITNESS: Not that I know of.

12 BY MR. HANAUER:

13 Q. Did any oil company or its founders
14 create oil?

02:46 15 A. You mean discover oil or you mean
16 chemically create? I'm not sure exactly what
17 you mean.

18 Q. The latter.

19 A. Did they chemically create oil? Not to
02:46 20 the best of my knowledge, but I don't really
21 know for certain.

22 Q. Does oil have use independent of
23 trading or speculation?

24 A. Trading or speculation? Yes, it does.

02:46 25 Q. Are you offering an opinion in this

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 case whether uses of XRP exist other than for
2 trading or speculation?

3 MR. FIGEL: Objection.

4 THE WITNESS: I'm not -- you know, I assume
02:46 5 you're not suggesting any of these questions
6 have anything to do with Dr. [REDACTED] study. I
7 mean, that's what I'm responding to. So I just
8 want to make sure the context of my answers is
9 clear.

02:47 10 BY MR. HANAUER:

11 Q. Okay. Can you answer my question?

12 A. I did answer it.

13 Q. Are you offering an opinion in this
14 case on any use of XRP other than for trading or
02:47 15 speculation?

16 MR. FIGEL: Objection.

17 THE WITNESS: I would say I have some
18 background familiarity with that issue, but I am
19 not expressing any separate opinion on that
02:47 20 issue.

21 BY MR. HANAUER:

22 Q. Are you offering an opinion about the
23 date by which any of Ripple's products that use
24 XRP became commercially operational?

02:47 25 MR. FIGEL: Objection.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 THE WITNESS: No, I'm not.

2 BY MR. HANAUER:

3 Q. Are you offering the opinion that XRP
4 cannot be offered or sold as an investment
02:48 5 contract -- let me rephrase.

6 Are you offering the opinion that XRP
7 cannot be offered or sold as an investment
8 contract under any circumstances?

9 MR. FIGEL: Objection.

02:48 10 THE WITNESS: That sounds like a legal
11 opinion. I'm not offering any legal opinions on
12 any subject.

13 BY MR. HANAUER:

14 Q. Can I ask you to look at page 12 of
02:48 15 your report.

16 A. Okay.

17 Q. So you talk about in paragraph -- in
18 section B of your report, you talk about
19 confounding news or confounding information.

02:49 20 A. That's right.

21 Q. And I'm trying to figure out what you
22 mean by "confounding news."

23 Are you talking about public
24 announcements that Dr. [REDACTED] identified but
02:49 25 didn't place on one of the 105 event days, or

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 are you talking about announcements from those
2 105 event days that weren't really -- that, in
3 your opinion, weren't really announcements about
4 Ripple's efforts?

02:49 5 MR. FIGEL: Objection.

6 THE WITNESS: I don't think either one of
7 those alternatives fairly describes the content
8 of this particular section of my report.

9 BY MR. HANAUER:

02:50 10 Q. Okay. Well, then why don't you tell me
11 what you mean by "confounding information" as it
12 pertains to opinion B on page 2 of your report.

13 A. All right. Opinion B has a discussion
14 of two different types of confounding
02:50 15 information.

16 One type is a fundamental problem that
17 I described earlier of -- many of Dr. [REDACTED]
18 announcements are not -- to the extent there is
19 a claim of a price reaction that's correlated
02:50 20 with those announcements are not solely a
21 product of Ripple's entrepreneurial efforts, but
22 rather are a combination of Ripple's efforts and
23 new information about supply and demand in the
24 marketplace.

02:51 25 And as I said earlier, there is

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 basically a continuum from situations where both
2 effects are occurring and it's really difficult
3 or really impossible to disentangle them.

4 In other situations where Professor --
02:51 5 excuse me, Dr. [REDACTED] himself recognizes the
6 problem and just states as a matter of fact that
7 it's not clear in some of his examples whether
8 Ripple is even involved in the event itself that
9 Ripple is announcing. That's closer to the
02:52 10 example that I gave about the difference between
11 creator of information and reporter of
12 information. So that's one type of confounding
13 information.

14 And the other type really relates to
02:52 15 the fact that XRPs are not traded in an
16 efficient market. And when you have information
17 that's not traded in an efficient market, you
18 don't really have a definitive theory of when
19 prices are going to react to that information,
02:52 20 whether they're going to react to that
21 information without bias.

22 And, therefore, when you have
23 confounding events, other I should say
24 compounding news because I don't mean to limit
02:52 25 myself to Dr. [REDACTED] 105 event days. But when

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 you have other news, even news that's contained
2 in Dr. ██████ -- I think it's Exhibit C with his
3 500-plus announcements -- within a window -- and
4 I describe different windows around the
02:53 5 so-called event day -- because you're in a world
6 of inefficient markets, you can't really
7 attribute, even as a correlation, the price
8 reaction to the event that Professor ██████ --
9 excuse me, Dr. ██████ is claiming that there is a
02:53 10 correlation because you can't exclude the
11 possibility in an inefficient market.

12 The other news announcements in the
13 different windows of time that I describe in
14 Exhibit 2 also are responsible, at least in
02:54 15 part, as well as other announcements in --
16 outside even of the windows that I identified
17 that could have had an effect on the prices that
18 Dr. ██████ claims are correlated with particular
19 announcements -- with announcements on
02:54 20 particular event days.

21 Q. Did you perform any work or analysis to
22 quantify the impact of confounding news on XRP
23 prices?

24 MR. FIGEL: Objection.

02:54 25 THE WITNESS: Again, I think the whole point

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 of an inefficient market is you can't quantify
2 it because you don't have a theory of how
3 quickly prices react to information. That's one
4 of the characteristics of an inefficient market.

02:55 5 So what you can do, what I did do is
6 identify other news that occurred in the same
7 time period in the different windows that I
8 describe in Exhibit 2 at the same time as the
9 information that Dr. [REDACTED] claims as an event day
02:55 10 that's correlated with a particular price
11 reaction.

12 And that, as I stated in my report,
13 really underestimates the significance of the
14 fact that XRPs do not trade in an efficient
02:55 15 market. Because in an inefficient market, there
16 is no way to say, there is no way to conclude
17 that those confounding announcements also didn't
18 have an effect on the price that Dr. [REDACTED] claims
19 is correlated with a particular announcement on
02:56 20 a particular event day.

21 BY MR. HANAUER:

22 Q. If you had wanted, could you have been
23 capable of checking for the -- if you had
24 wanted, could you have been capable of trying to
02:56 25 quantify the effect of confounding news?

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 MR. FIGEL: Objection.

2 THE WITNESS: I think under the facts and
3 circumstances of this case, given the fact that
4 XRP is trading in an inefficient market, I think
02:56 5 it would be very difficult. I'm not sure how
6 you do it.

7 BY MR. HANAUER:

8 Q. Did you perform any work or analysis to
9 determine whether Dr. ████████ results would
02:56 10 change if he excluded confounding news days?

11 A. No, I didn't perform any such analysis
12 since I think -- if you look at the two
13 different types of confounding information, I'm
14 not even sure how you would decide what to
02:57 15 exclude.

16 Q. So going back to I think the first of
17 the two definitions you talked about in
18 describing confounding, the one where you said
19 the Ripple news announcement, it's more about
02:57 20 supply and demand than Ripple's efforts -- do
21 you understand what I'm talking about or
22 referring to?

23 A. I understand what you're talking about,
24 but that's not an accurate paraphrase of what I
02:57 25 said.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 Q. Okay. You understand which of the
2 versions of confounding I'm referring to?

3 A. Yes, I do understand that.

4 Q. Okay. So for those events, how did you
02:58 5 determine whether a Ripple announcement related
6 to, on one hand, Ripple's efforts, or the other
7 information about the supply, demand, or
8 expectation of market participants other than
9 Ripple?

02:58 10 MR. FIGEL: Objection.

11 THE WITNESS: Again, that's a
12 mischaracterization of what I said. It's not a
13 matter of one or the other; it's both are
14 occurring simultaneously, in effect. Because an
02:58 15 announcement can reveal an effort by Ripple and
16 it can also reveal information about supply and
17 demand in the marketplace. So they can both be
18 occurring at the same time.

19 And, again, it is like the problem of
02:59 20 confounding information in more traditional
21 event studies where, when you have confounding
22 information, when you can't disentangle, it
23 makes it impossible to reach a conclusion about
24 the -- what part of the price reaction is
02:59 25 attributable to one aspect, one part of the

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 confounding information versus another part.

2 Sometimes there is external sources of
3 information that you can look to to, you know,
4 possibly reach some judgments depending, you
02:59 5 know, obviously on the relevant facts and
6 circumstances. But sometimes it's just
7 impossible. And you have to recognize that, and
8 that's something that Dr. ██████ doesn't do.

9 But, again, I want to emphasize,
03:00 10 sometimes it's possible to say something
11 stronger than that. And I keep coming back to,
12 you know, the example of an event which produces
13 news that's announced by a third party. And the
14 announcement by a third party can be what causes
03:00 15 the price reaction, but it's just disclosing
16 events that are not caused by the party
17 disclosing the information.

18 In a situation like the example that I
19 used before of third parties deciding to allow
03:01 20 XRP to trade on their platforms, it's similar to
21 that. Ripple is announcing that other parties
22 are now allowing XRP to trade on their
23 platforms. And Dr. ██████ somewhere has a
24 footnote where it's either that example or some
03:01 25 other example where he says it's not even clear

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 that Ripple had any involvement in any of the
2 events that it's announcing.

3 And those type of situations, which are
4 part of Dr. Ripple's [sic] 105 days, the days
03:01 5 that he considers relevant as opposed to the 400
6 or so that he, for all practical purposes,
7 ignores, that really highlights the problem,
8 those type of situations. Because those
9 situations are not only compounded, but they
03:02 10 really highlight the distinction between, as I
11 said, creating information and reporting
12 information, which professor -- excuse me,
13 Dr. ██████ ignores. And that's the problem.

14 BY MR. HANAUER:

03:02 15 Q. So in Exhibit C -- or I'm sorry,
16 Appendix C to Dr. ██████ report, he actually
17 lists all the news announcements he covered in
18 his event study?

19 A. That's my understanding.

03:02 20 Q. And did you read the contents of all
21 those news announcements?

22 A. No, I did not.

23 Q. Did you read the contents of any of
24 those news announcements?

03:03 25 A. You know, at least parts that Dr. ██████

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 quoted in his report.

2 Q. Only the ones he quoted in his report?

3 A. I think so. I don't remember doing any
4 kind of systematic investigation of the ones
03:03 5 that he either ignored entirely or even the ones
6 that he used as part of event days.

7 I guess I read what he considered
8 relevant.

9 Q. Well, do you know whether Dr. [REDACTED] read
03:03 10 the entirety of all those reports?

11 MR. FIGEL: Objection.

12 THE WITNESS: No. You would have to ask him.

13 BY MR. HANAUER:

14 Q. Are you offering any opinions on the
03:03 15 efforts Ripple took to increase demand for XRP?

16 MR. FIGEL: Objection.

17 THE WITNESS: Not in isolation, no, I'm not.

18 BY MR. HANAUER:

19 Q. Are you offering any opinions on
03:04 20 whether Ripple's efforts affected demand for
21 XRP?

22 MR. FIGEL: Objection.

23 THE WITNESS: I'm not offering a separate
24 opinion on that subject.

25

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 BY MR. HANAUER:

2 Q. Could Ripple take efforts that would
3 increase demand for XRP?

4 A. Yes, obviously.

03:04 5 Q. Are you offering any opinions on the
6 efforts Ripple took to impact supply of XRP?

7 MR. FIGEL: Objection.

8 THE WITNESS: Again, I have, you know, some
9 background in my report on what Ripple did with
03:04 10 respect to supply of XRP. That's like some of
11 the other questions that you asked, part of
12 background, part of the facts and circumstances
13 of the case. But I'm not offering a separate
14 opinion about it.

03:05 15 BY MR. HANAUER:

16 Q. Are you offering any opinions on
17 whether Ripple -- Ripple's efforts actually did
18 affect the supply of XRP?

19 MR. FIGEL: Objection.

03:05 20 THE WITNESS: Again, I'm not offering any
21 separate opinions about that. I have discussion
22 of that in the background section of my report,
23 but it's not a separate opinion.

24 BY MR. HANAUER:

03:05 25 Q. And all things being equal, from an

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 economics perspective, if demand for an asset
2 stays flat and the supply of that asset goes
3 down, should we expect the price of that asset
4 to go up?

03:05 5 MR. FIGEL: Objection.

6 THE WITNESS: Well, it would depend on the
7 shape of the supply curve. But, you know,
8 that's certainly a reasonable assumption that
9 that would happen frequently, I guess. I don't
03:06 10 know what else to say.

11 But in any particular situation,
12 obviously you'd have to analyze the relevant
13 facts and circumstances and look at the data to
14 form a conclusion.

03:06 15 BY MR. HANAUER:

16 Q. Are you offering any opinions on the
17 efforts Ripple took to increase the price of
18 XRP?

19 MR. FIGEL: Objection.

03:06 20 THE WITNESS: No, I'm not, not as a separate
21 opinion.

22 BY MR. HANAUER:

23 Q. Are you offering any opinions on
24 whether any of Ripple's efforts actually did
03:06 25 affect XRP's price?

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 A. I think I said earlier that we did try
2 and look at the biggest price reactions of XRP
3 and look at certain disclosures by Ripple at
4 very -- at the same period as the price
03:07 5 reactions or very close to the price reactions.

6 And I think I said it seemed
7 reasonable, with respect to that handful set of
8 price reactions, to conclude that there was at
9 least a correlation between the announcements
03:07 10 and -- with respect to those few announcements,
11 those announcements and price reactions and
12 even, you know, be stronger than that and, you
13 know, at least as a working hypothesis, you
14 know, conclude that there was likely a causal
03:08 15 relationship.

16 Q. Are you offering any opinions on
17 whether Ripple's efforts, independent of public
18 news announcements, affected XRP's price?

19 MR. FIGEL: Objection.

03:08 20 THE WITNESS: I'm not offering any separate
21 opinions on that subject.

22 BY MR. HANAUER:

23 Q. Are you offering any opinions on the
24 efforts Ripple took to increase the liquidity of
03:08 25 XRP?

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 MR. FIGEL: Objection.

2 THE WITNESS: Same answer.

3 BY MR. HANAUER:

4 Q. Are you offering any opinions on how
03:08 5 liquidity of XRP affects its price?

6 MR. FIGEL: Objection.

7 THE WITNESS: No, I'm not.

8 BY MR. HANAUER:

9 Q. Can I ask you to look at paragraph 22
03:09 10 of your report.

11 A. Okay.

12 Q. And what do you mean when you say that
13 [as read]: Statistically significant XRP
14 returns are correlated with announcements
03:09 15 related to the expected supply and demand for
16 XRP or other market conditions?

17 A. Well, I mean, there's a whole paragraph
18 that describes it. I mean, there's a -- there's
19 a couple of points.

03:10 20 One, just like all the questions that
21 you just asked me, the company's associated
22 products want those profits to be successful in
23 terms of whatever it is, increasing demand,
24 increasing liquidity, increasing price,
03:10 25 affecting supply.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 So, again, there's no distinction
2 between any of those outcomes or intentions by
3 companies that in any way is linked to whether
4 or not something is a security.

03:10 5 That's like the other things that I've
6 already described, which are completely generic
7 that have nothing to do with whether something
8 is a security. And that's just a continual
9 methodological flaw in Dr. ██████ analysis.

03:11 10 Q. I apologize because I think we're --
11 you may not have understood the question or I
12 did a bad job of asking it.

13 Can I just ask you: What did you mean
14 when you were referring to statistically
03:11 15 significant XRP returns?

16 A. Okay. That's a completely different
17 question.

18 Q. Yeah, and I'm sorry. That's the one I
19 would like for you to discuss.

03:11 20 A. That's fine.

21 I meant returns that, in Dr. ██████
22 event study, he found to be statistically
23 significant in either a parametric or a
24 nonparametric test in either a one- or a
03:11 25 two-tailed test.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 Q. And are you -- did you do any work or
2 analysis that disputes that finding of
3 statistical significance?

4 A. You mean whether Dr. [REDACTED] calculated
03:11 5 statistical significance correctly using the
6 model that he used?

7 Q. Yes.

8 A. And the days that he chose? No, other
9 than, you know, describing the extreme
03:12 10 subjectivity of what he did and looking at
11 positive results, not negative results.

12 I mean, there's a lot of criticisms,
13 but the actual calculation that he did of what's
14 a statistically significant return based on the
03:12 15 model that he used, I didn't do any work to see
16 whether his regression -- his regression result,
17 given the regression that he used and the data
18 that he used for the regression, that the data
19 that he reported was an accurate description of
03:12 20 the data resulting from the regression.

21 Q. And what was your methodology for
22 trying to determine if an announcement related
23 to supply, demand, or expectations of market
24 participants on one hand or Ripple's efforts on
03:13 25 the other?

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 A. The methodology was to highlight how
2 various announcements have both effects going on
3 simultaneously. And some of the announcements,
4 as I've said several times, and as Dr. ██████
03:13 5 himself concedes, are announcements about
6 actions by third parties that have very little,
7 if anything, to do with actions by Ripple
8 itself.

9 Q. For Ripple's own announcements, what
03:13 10 was your methodology for determining whether the
11 announcement related to supply or demand, as
12 opposed to Ripple's efforts?

13 A. It's basically what I've already said.

14 Q. Can you elaborate?

03:14 15 A. Yeah. I just highlighted how various
16 announcements contain information about Ripple's
17 efforts, as well as new information about supply
18 and demand conditions in the marketplace where
19 it's very hard, if not impossible, to
03:14 20 disentangle those two.

21 But also, there are certain events that
22 Dr. ██████ includes in his event days where he
23 himself concedes that there's no obvious
24 relationship or any relationship between
03:14 25 Ripple's actions and the effect of the

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 announcement that Ripple itself makes.

2 Q. For the announcements that you didn't
3 actually read, what was your basis for
4 determining whether those announcements related
03:15 5 to supply or demand as opposed to Ripple's
6 efforts?

7 MR. FIGEL: Objection.

8 THE WITNESS: Because I read how Dr. [REDACTED] in
9 his report characterized them, his justification
03:15 10 for why he included them, and how he described
11 them, and was able to reach the conclusions that
12 I reached as described in my report.

13 BY MR. HANAUER:

14 Q. Could another expert reasonably reach
03:15 15 the conclusion that the announcements Dr. [REDACTED]
16 analyzed did, in fact, relate to Ripple's
17 efforts as opposed to supply and demand?

18 MR. FIGEL: Objection.

19 THE WITNESS: That's, again, a
03:15 20 mischaracterization of my opinion and what I've
21 said. As to what another expert could conclude,
22 you'd have to ask them.

23 BY MR. HANAUER:

24 Q. You talk about how some of the
03:16 25 announcements Dr. [REDACTED] looked at related to the

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 expectations of market participants as opposed
2 to Ripple's efforts; is that right?

3 A. You know, I think there is some
4 sentences to that effect, if I remember
03:16 5 correctly. But why don't you point me to
6 whatever it is that you're referring to so I can
7 respond directly.

8 Q. So in paragraph 21 of your report.

9 A. Okay.

03:16 10 Q. I think in the third sentence you say
11 how information about Ripple's efforts could be
12 confounded about information about the
13 expectations of market participants.

14 MR. FIGEL: Mr. Hanauer, just so the record
03:17 15 is clear, would you mind reading the sentence
16 you're referring to?

17 BY MR. HANAUER:

18 Q. The third sentence of paragraph 21 of
19 your report. Do you see that?

03:17 20 A. Beginning "Such confounding
21 information"?

22 Q. Correct.

23 A. Okay, I've read it.

24 Q. So the expectations of market
03:18 25 participants, is that one of the factors of the

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 Howey test?

2 MR. FIGEL: Objection.

3 THE WITNESS: That's a legal question. I
4 don't have any legal opinions that I'm offering
03:18 5 in this case.

6 BY MR. HANAUER:

7 Q. Well, you state in your report a
8 section of Howey and then you say it's referred
9 to as the Howey test.

03:18 10 MR. FIGEL: Objection.

11 BY MR. HANAUER:

12 Q. Paragraph seven.

13 A. I say my understanding is that's a
14 description of the Howey test, correct.

03:18 15 Q. And one of the factors that you
16 describe the Howey test involves the expectation
17 of market participants?

18 A. Are you saying -- is that contained in
19 what I quoted in paragraph seven? I'm not sure
03:18 20 what you're asking me.

21 Q. So I'm guessing -- or I'm asking: Why
22 is it proper to consider Ripple announcements
23 that discuss the expectation of market
24 participants a confounding event if that is one
03:19 25 of the factors of a Howey test?

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 MR. FIGEL: Objection.

2 THE WITNESS: Again, that sounds like partly
3 a -- or entirely a legal -- asking for a legal
4 opinion, which I'm not giving.

03:19 5 But you're also not focusing or looking
6 at the whole sentence which describes what's
7 meant not in terms of a legal opinion, but in
8 terms of how to interpret price movements.

9 BY MR. HANAUER:

03:19 10 Q. Did you do anything to determine
11 whether the expectation of market participants
12 was impacted by their expectation of Ripple's
13 efforts?

14 MR. FIGEL: Objection.

03:20 15 THE WITNESS: You know, again, that's too
16 vague a question.

17 But it also, again, is a kind of
18 generic question that does not in any way
19 distinguish the relationship between Ripple and
03:20 20 XRP and countless other examples of exactly the
21 same thing that have nothing to do with any of
22 the issues relating to what's -- what is a
23 security, if what you're asking me is, is there
24 any relationship between Ripple's efforts and
03:20 25 investors' expectations about XRP. If that --

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 that's the way I understood the question.

2 BY MR. HANAUER:

3 Q. That's not my question.

4 My question is --

03:20 5 A. Okay. Then maybe I misunderstood the
6 question.

7 Q. -- is whether you did anything to
8 determine whether the expectation of any market
9 participant was impacted by that participant's
03:21 10 expectation of Ripple's efforts?

11 MR. FIGEL: Objection.

12 THE WITNESS: All right. Well, at least to
13 me that's the same question.

14 I didn't do any independent analysis.
03:21 15 I don't have any independent opinion on that
16 subject other than to the extent that
17 relationship exists; it is a generic
18 relationship having nothing to do with anything
19 that's specific to the relationship between
03:21 20 Ripple and XRP but has to do with the
21 relationship between efforts of firms or
22 companies or founders, whatever the relevant
23 issue that's being -- or situation that's being
24 analyzed, and whatever the firm or product --
03:21 25 firm or founder or, again, whatever the

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 situation is that's being analyzed, what they
2 are doing and how that affects expectations of
3 whatever, whether it's a product or an
4 investment, whatever it is.

03:22 5 It's a completely generic question
6 that, no matter how it's resolved, has nothing
7 to do with anything specific about the
8 relationship between Ripple and XRP.

9 BY MR. HANAUER:

03:22 10 Q. Did you do anything to determine the
11 expectation of any particular market
12 participant?

13 A. No, I did not.

14 MR. HANAUER: What do you say we take a break
03:22 15 right now.

16 THE VIDEOGRAPHER: We are going off the
17 record. The time is 3:23 p.m.

18 (Whereupon, a recess was had at
19 3:23 p.m., after which the
03:22 20 deposition was resumed at
21 3:23 p.m. as follows:)

22 THE VIDEOGRAPHER: This is the end of media
23 unit two. We are going off the record. The
24 time is 3:23 p.m.

25

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 (Whereupon, a recess was had at
2 3:23 p.m., after which the
3 deposition was resumed at
4 3:42 p.m. as follows:)

03:42 5 THE VIDEOGRAPHER: We are --

6 MR. FIGEL: Before we -- could we just get a
7 time check?

8 THE VIDEOGRAPHER: Oh, I'm sorry. Yeah,
9 we've been on the record for 4 hours and
03:42 10 14 minutes.

11 MR. FIGEL: And not holding you to anything
12 Ben, but do you think we're going to go the full
13 whole seven?

14 MR. HANAUER: I hope not.

03:42 15 MR. FIGEL: Okay, good.

16 THE VIDEOGRAPHER: All right. We are back on
17 the record. This is the start of media unit
18 three, the deposition of Daniel Fischel. The
19 time is 3:42 p.m.

03:42 20 You may proceed.

21 BY MR. HANAUER:

22 Q. Professor Fischel, can I please refer
23 you to paragraph 23 of your report.

24 A. Okay.

03:42 25 Q. And do you see in romanette (i) you

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 talk about how announcements about Ripple's
2 equity financing provide information about the
3 state of the market for XRP?

4 A. Yes, I see that.

03:43 5 Q. What information do Ripple's financing
6 amount -- I mean financing announcements provide
7 about the state of the market of XRP?

8 A. Well, as the paragraph describes,
9 Ripple has different sources of -- different
03:43 10 sources of funds. Equity issuances and selling
11 XRP units are two different sources of funds.

12 So the more Ripple relies on one source
13 of funds, all else equal can communicate
14 information to market participants about their
03:44 15 need to use alternative sources of funds, such
16 as selling units of XRP.

17 So I would say that's an example of
18 what -- as the section describes, as a compound
19 announcement. The announcement itself is about
03:44 20 an equity issuance by Ripple.

21 But one of the reasons it has a price
22 effect is not because of just the equity
23 issuance by Ripple itself, which does not
24 directly involve XRP, but rather information
03:45 25 that it communicates about XRP.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 And that's, again, an example of what I
2 refer to as a compound announcement because it's
3 an announcement about one thing that has nothing
4 to do with XRP but it communicates information
03:45 5 about market conditions for XRP, and, therefore,
6 it's a compound announcement.

7 Q. Did you do anything to determine
8 whether obtaining equity financing actually
9 decreased the supply of XRP?

03:45 10 MR. FIGEL: Objection.

11 THE WITNESS: Well, first of all, that's not
12 what the paragraph says. But the answer, did I
13 actually investigate that question, no, I
14 didn't.

03:46 15 BY MR. HANAUER:

16 Q. Could Ripple increase its capital
17 expenditures and research and development
18 spending using the newly-obtained equity
19 financing while keeping its XRP sales at the
03:46 20 same level?

21 MR. FIGEL: Objection.

22 THE WITNESS: Is that possible? Yes, it's
23 possible.

24 BY MR. HANAUER:

03:46 25 Q. Do you know whether or not Ripple did

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 that?

2 A. No, I don't. I didn't investigate that
3 question.

4 But, again, that's not the point of the
03:46 5 paragraph.

6 Q. If Ripple ceased to exist as a company,
7 how would that impact the market for XRP?

8 MR. FIGEL: Objection.

9 THE WITNESS: I don't know. One would have
03:46 10 to speculate about the future, which is not so
11 easy.

12 And I don't know if it would be
13 possible to give a definitive answer because one
14 doesn't know what could happen in the future.

03:46 15 BY MR. HANAUER:

16 Q. Do you have an opinion one way or the
17 other?

18 MR. FIGEL: Objection.

19 THE WITNESS: I don't.

03:47 20 BY MR. HANAUER:

21 Q. Does Ripple going out and obtaining
22 equity financing, does that involve efforts by
23 Ripple?

24 A. Well, it's a decision made by Ripple
03:47 25 for sure. And what's done to the method for

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 what Ripple -- the steps that Ripple takes to
2 raise equity funds, you just have to investigate
3 that. I can't answer that in the abstract.

03:47 4 Q. Do you know how much money Ripple spent
5 to obtain equity financing?

6 A. No, I don't, not from memory.

7 Q. Did you review any documents that would
8 have shed light on how much money Ripple spent
9 to obtain equity financing?

03:48 10 MR. FIGEL: Objection.

11 THE WITNESS: Not that I recall.

12 But, again, I wasn't looking for that
13 information, so it's possible that it was in
14 some document that I saw, but I don't recall any
03:48 15 discussion of that in any document that I
16 remember reviewing.

17 BY MR. HANAUER:

18 Q. And do you have any understanding of
19 whether the parties that provided equity
03:48 20 financing to Ripple, whether those parties
21 sought out Ripple on their own or were they
22 solicited by Ripple?

23 A. I don't know.

24 Q. And in paragraph 23, romanette (i), you
03:48 25 mention Ripple's decision to escrow 55 billion

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 XRP tokens?

2 MR. FIGEL: Objection.

3 THE WITNESS: Yes, that's right.

4 BY MR. HANAUER:

03:49 5 Q. Was that an effort of Ripple to escrow
6 the 55 billion XRP?

7 A. Well, it was a decision by Ripple, yes,
8 it was.

9 Q. Could that escrowing have occurred
03:49 10 without Ripple's efforts?

11 MR. FIGEL: Objection.

12 THE WITNESS: Well, by definition, no, it
13 couldn't.

14 BY MR. HANAUER:

03:49 15 Q. And in paragraph 23 (i), you also --
16 or, I'm sorry, paragraph 23 romanette (i), you
17 talk about Ripple receiving New York's first
18 BitLicense.

19 A. Yes, that's right.

03:50 20 Q. And did Ripple have to undertake
21 efforts to obtain that license?

22 A. I don't know.

23 Q. Do you know how much money Ripple spent
24 associated with applying for the BitLicense?

03:50 25 A. No, I don't.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 Q. In the next paragraph, paragraph 23,
2 romanette (ii), you talk about the trading
3 platforms.

4 A. Yes, I see that.

03:50 5 Q. Do you know what efforts Ripple
6 undertook to get listed on any particular
7 exchange?

8 MR. FIGEL: Objection.

9 THE WITNESS: No, I haven't studied that
03:51 10 either.

11 BY MR. HANAUER:

12 Q. Do you know whether Ripple paid money
13 to get listed on any exchange?

14 MR. FIGEL: Objection.

03:51 15 THE WITNESS: No, I don't.

16 BY MR. HANAUER:

17 Q. Do you know any particular exchange's
18 reasons for listing XRP?

19 A. No, I don't.

03:51 20 Q. If Ripple paid an exchange to list XRP,
21 would that exchange listing of XRP involve
22 Ripple's efforts?

23 A. It would -- yes. If I make that
24 assumption, it would involve Ripple's efforts,
03:51 25 but that's not the same as saying that the

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 information communicated would be solely as a
2 result of Ripple's efforts.

3 And even with respect to Ripple's
4 efforts, what I've referred to several times,
03:52 5 but I didn't have Dr. ██████ report in front of
6 me, is paragraph 49 -- I'm sorry, footnote 49,
7 where he states -- or at least it's -- or
8 there's a reference to his report Figure 16,
9 where on page 34 of Dr. ██████ report where he
03:52 10 acknowledges that the majority of the 11
11 announcements involve Ripple's actions.

12 Q. But did Dr. ██████ actually look to --
13 did Dr. ██████ do anything to determine why any
14 particular exchange listed XRP?

03:52 15 MR. FIGEL: Objection.

16 THE WITNESS: You'll have to ask him. I
17 don't know what he did. I know what he
18 acknowledged.

19 BY MR. HANAUER:

03:53 20 Q. In that same paragraph 23, romanette
21 (ii), you talk about how other cryptocurrencies
22 such as Bitcoin are listed on platforms without
23 the effort of a company like Ripple.

24 A. Yes, I see that.

03:53 25 Q. Do you know what cryptocurrencies other

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 than Bitcoin have been listed on exchanges
2 without the effort of a sponsoring company?

3 MR. FIGEL: Objection.

4 THE WITNESS: No, I don't.

03:54 5 BY MR. HANAUER:

6 Q. At the time the first exchange listed
7 Bitcoin, was there a company that owned the
8 majority of Bitcoin in existence?

9 A. I don't believe so.

03:54 10 Q. Has there ever been a company that
11 owned the majority of Bitcoin in existence?

12 A. Not as far as I know.

13 Q. So I want to refer you now to the next
14 two subparagraphs, paragraph 23, romanette (iii)
03:54 15 and (iv).

16 Do you see those?

17 A. Yes, I see that.

18 Q. Do you know what efforts Ripple
19 undertook to get users to use its products?

03:55 20 MR. FIGEL: Objection.

21 THE WITNESS: No, I haven't studied that
22 question.

23 Again, it's like so many questions, one
24 of his completely generic questions having
03:55 25 nothing to do with any particular relationship

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 between Ripple and XRP.

2 BY MR. HANAUER:

3 Q. Do you know whether Ripple paid
4 rebates, incentives, bonuses, or other
03:55 5 compensation in order to get users to use
6 Ripple's products and software?

7 MR. FIGEL: Objection.

8 THE WITNESS: No, I don't.

9 BY MR. HANAUER:

03:55 10 Q. Do you know any particular user's
11 reasons for using Ripple's products?

12 A. Other than they made a decision it was
13 in their interests to do so, no, I don't.

14 Q. If Ripple paid someone to use its
03:55 15 products, would that person's decision to use
16 the product involve Ripple's efforts?

17 MR. FIGEL: Objection.

18 THE WITNESS: Yes. But --

19 MR. FLUMENBAUM: Objection.

03:56 20 THE COURT REPORTER: He said objection. Got
21 it.

22 MR. FLUMENBAUM: Thank you. I didn't hear
23 Reid.

24 MR. FIGEL: I did object, Marty.

03:56 25 MR. FLUMENBAUM: Good.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 THE WITNESS: I just wanted to finish my
2 answer.

3 The point is not that all these actions
4 had no involvement by Ripple, although some of
03:56 5 them apparently did not have any, at least
6 according to Dr. [REDACTED].

7 But the point is that the information
8 content of the announcement was not solely a
9 product of Ripple's actions.

03:56 10 And one of the ways that you can tell
11 that is that the actions frequently don't even
12 involve XRP. They involve use of Ripple's
13 software, use of Ripple's equity issuances. But
14 they have a price effect on XRP.

03:57 15 Now, why is that? Again, taking
16 Dr. [REDACTED] findings and his analysis at face
17 value, the reason is that the information
18 content of an announcement that has nothing to
19 do with XRP communicates information to market
03:57 20 participants about market conditions for XRP
21 and, therefore, there is a price reaction for
22 XRP, at least according to Dr. [REDACTED], a
23 correlation with the price reaction for XRP in
24 connection with an announcement that on its face
03:57 25 has nothing to do with XRP.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 And that's, again, a simple and clear
2 example of why these announcements are compound
3 announcements with respect to explanations of
4 price movements of XRP, even taking Dr. [REDACTED]
03:58 5 findings at face value.

6 BY MR. HANAUER:

7 Q. So which of Dr. -- the announcements
8 analyzed by Dr. [REDACTED], which of those
9 announcements had nothing to do with XRP?

03:58 10 MR. FIGEL: Objection.

11 THE WITNESS: Announcements that don't refer
12 to XRP but at least what I'm just referring to,
13 announcements that refer to actions by Ripple
14 independent of actions about XRP, such as
03:59 15 Ripple's equity issuances and use by customers
16 of Ripple's software.

17 BY MR. HANAUER:

18 Q. Can you name any of the announcements
19 Ripple made about its software that involved
03:59 20 software that did not require the use of XRP?

21 MR. FIGEL: Objection.

22 THE WITNESS: It's not whether the software
23 could be used for XRP. That is one of the
24 factors that explains -- or that communicates
03:59 25 information about potential increase in demand

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 for XRP.

2 But the point is the announcement is
3 itself -- the announcement itself is about
4 decisions by third parties to use Ripple's
04:00 5 software. And that, notwithstanding the fact
6 that the announcement itself is about a decision
7 to use Ripple's software, again, as the
8 paragraph states, that also communicates
9 information about the expected supply and demand
04:00 10 for XRP from users of the XRP ledger.

11 BY MR. HANAUER:

12 Q. Do you know which of Ripple's products
13 required the use of XRP?

14 A. No, not without studying the issue.
04:00 15 But I don't have any opinion on that.

16 Q. Are you aware that some of Ripple's
17 products and software required XRP to work?

18 A. I think Ripple had a number of
19 different products, some related to XRP, some
04:00 20 not, some payment system products not related to
21 XRP.

22 But beyond that, I haven't studied the
23 issue and I certainly don't have an opinion
24 about it.

04:01 25 Q. Can we look at Exhibit 2 to your

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 report, please.

2 A. Okay.

3 Q. Who prepared Exhibit 2 to your report?

4 A. This is just like Exhibit 1. We looked
04:01 5 at Dr. [REDACTED] backup. He has a series of
6 columns, as I recall, about other announcements
7 in his Exhibit C within certain periods of his
8 event days. And we just took that data that he
9 himself reports and just transferred it to
04:02 10 Exhibit 2.

11 Q. I asked who prepared it.

12 A. You mean who -- again, I'm sorry the
13 same question who physically prepared Exhibit 2?

14 Q. Yes.

04:02 15 A. I don't know who physically prepared
16 Exhibit 2. It might have been a research
17 assistant.

18 Q. Did you do anything to verify the
19 accuracy of Exhibit 2?

04:02 20 A. Well, something. I mean, I looked at
21 the various documents in Dr. [REDACTED] event study
22 to see how the numbers on Exhibit 2 were
23 created. You know, I guess that's what we did.

24 Q. Does Exhibit 2 to your report, does it
04:03 25 only identify news announcements that Dr. [REDACTED]

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 identified that were not included in his 105
2 news days?

3 MR. FIGEL: Objection.

4 THE WITNESS: It refers to other
04:03 5 announcements on Dr. [REDACTED] Exhibit C
6 surrounding one or more of Dr. [REDACTED] event
7 days. But, frankly, I'm not sure from memory
8 without checking whether any of the confounding
9 announcements were also themselves event days.
04:04 10 I would have to check to make sure.

11 BY MR. HANAUER:

12 Q. Did Dr. [REDACTED] determine that the
13 announcements that were not in his five select
14 categories would not be expected to move XRP
04:05 15 prices?

16 MR. FIGEL: Objection.

17 THE WITNESS: I think that's what he said in
18 his report.

19 BY MR. HANAUER:

04:05 20 Q. And did you do any work or analysis to
21 determine whether the excluded events actually
22 did affect Ripple -- or XRP's price?

23 MR. FIGEL: Objection.

24 THE WITNESS: I didn't. But the point is
04:05 25 there is kind of a selection bias, a

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 subjectivity that produces a selection bias.

2 If you want to test the effective
3 announcements on prices, if you start by picking
4 your subjective judgment of the events that have
04:06 5 -- are the most likely to have an effect on
6 prices, it's no big surprise that your
7 subjective judgment, if you do it competently,
8 is more likely to produce events that are
9 correlated with price movements because that's
04:06 10 your selection criteria.

11 If you select important events, you're
12 going to get a result that reflects your
13 selection bias, that you're starting with
14 important events that you subjectively identify
04:06 15 and your results are going to reflect that.

16 It's different than analyzing the
17 number of -- the percentage of statistically
18 significant results and not statistically
19 significant results. If you don't use that
04:07 20 selection bias, then you start with all 500
21 days, for example, you would get different
22 results.

23 BY MR. HANAUER:

24 Q. Of the approximately 400 events that
04:07 25 Dr. [REDACTED] excluded from his analysis, how many of

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 those news announcements did you read the
2 contents of in their entirety?

3 MR. FIGEL: Objection.

4 THE WITNESS: You know, I would say, unless
04:07 5 their results were quoted somewhere, probably
6 none. In terms of the description of them, I
7 certainly read the description provided by
8 Dr. [REDACTED] of them and why he, in his opinion,
9 decided not to include them in his results.

04:08 10 BY MR. HANAUER:

11 Q. Are you offering the opinion that any
12 particular of the announcements that Dr. [REDACTED]
13 excluded from his analysis actually confounded
14 or otherwise affected Dr. [REDACTED] analysis?

04:08 15 MR. FIGEL: Objection.

16 THE WITNESS: Well, clearly it affected his
17 analysis because he ignored 400 out of the 500
18 days, rounding. Yes, that affects your
19 analysis.

04:08 20 If you have a percentage of days with
21 significant results and a percentage of days
22 without significant results, even if you're just
23 talking about correlations, forgetting all the
24 other methodological flaws that I've identified,
04:08 25 obviously it affects your results if you throw

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 out 400 days and don't consider them and only
2 look at 100 and of those 100 only look at a
3 small subset of those days when there are
4 statistically -- you find a correlation with
04:09 5 statistically significant results. Obviously
6 that affects your results and your analysis.

7 BY MR. HANAUER:

8 Q. Did you perform any work or testing to
9 see how [REDACTED] analysis would have changed if
04:09 10 any of the excluded events had, in fact, been
11 included?

12 MR. FIGEL: Objection.

13 THE WITNESS: I think the point is obvious
14 from what I said. Assuming that there was some
04:09 15 principal reason for choosing -- selecting the
16 100 events to test and excluding the 400, if you
17 used 500 events, you would get a much lower
18 percentage of statistically significant days
19 relative to 500 days than you do relative to 100
04:10 20 days, rounding. I think it's 105 days, but it's
21 the same point.

22 BY MR. HANAUER:

23 Q. But did you actually do any testing
24 that included the events that Dr. [REDACTED] excluded?

04:10 25 A. I didn't do any testing. But Dr. [REDACTED]

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 himself states that in his report as the reason
2 why he excluded the 400 other events or the
3 400 -- you know, events have sort of a double
4 meaning in this case. So why he excluded the
04:10 5 400 other announcements is probably more
6 accurate.

7 Q. And if I wanted to see how the results
8 would change by including events that Dr. [REDACTED]
9 excluded, would that require doing another
04:11 10 iteration of the event study with additional
11 events in it?

12 MR. FIGEL: Objection.

13 THE WITNESS: Well, additional announcements
14 -- and, again, in answering these questions, I'm
04:11 15 just accepting Professor -- Dr. [REDACTED] analysis
16 at face value, meaning I'm not focused on the
17 deficiency caused -- deficiencies caused by the
18 fact that you're interpreting -- or Dr. [REDACTED] is
19 interpreting price reactions in relation to
04:11 20 announcements in an inefficient market, which,
21 you know, creates serious problems of its own.

22 But putting that all to one side, it
23 would be possible to duplicate what Dr. [REDACTED]
24 did, accepting all of his conditions, selection
04:12 25 criteria, and putting to one side all the

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 methodological flaws associated with doing that,
2 and do the exact same announcements with -- the
3 exact same analysis with 500 announcements as he
4 does with 100 announcements, again rounding the
04:12 5 500 and the 100.

6 BY MR. HANAUER:

7 Q. It would be possible to do that
8 testing?

9 A. Yes, absolutely it would be possible.

04:12 10 Q. Did you or Compass, in fact, do that
11 testing?

12 A. No, for the reason that I stated. And
13 it's also described by Dr. [REDACTED] himself as part
14 of his methodology and the reasons why he used
04:12 15 that methodology.

16 Q. I would ask you to assume that Dr. [REDACTED]
17 was correct, that the excluded events should not
18 be included in his testing.

19 If we were to accept that assumption,
04:13 20 would Exhibit 2 still support the opinion that
21 the announcements Dr. Metz analyzed may be
22 confounded by other contemporaneous
23 announcements?

24 MR. FIGEL: Objection.

04:13 25 THE WITNESS: Yes. The point would still

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 apply.

2 BY MR. HANAUER:

3 Q. And why is that?

4 A. Because you don't have to have a
04:13 5 statistically significant price reaction to have
6 an effect on prices. And particularly in an
7 inefficient market, you cannot confidently, even
8 as a matter of correlation, associate particular
9 price movements with particular announcements.

04:14 10 And if you have multiple announcements, you
11 can't tell if the, for example, the announcement
12 that you are calling statistically significant
13 is only statistically significant because it's
14 partly reflecting the effects of another
04:14 15 announcement in the same window, you know, just
16 as an example.

17 It's just another illustration of --
18 about Dr. █████ recognizing that he's dealing
19 with an inefficient market but not appreciating
04:14 20 the significance and the consequence and the
21 implications of that admission.

22 Q. Did you look at any news announcements
23 beyond the 504 -- 514 identified by Dr. █████?

24 A. Not that I recall.

04:15 25 Q. Do you consider repetitive news as

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 value relevant news that should be considered
2 separately for measuring price impact?

3 MR. FIGEL: Objection.

4 THE WITNESS: Again, it depends entirely on
04:15 5 the relevant facts and circumstances. It is
6 certainly possible that information that would
7 generally be referred to as stale, the price
8 reaction to that would have to be interpreted in
9 light of the fact that the information is stale.

04:15 10 On the other hand, sometimes repetition
11 of the same information makes the information
12 more important, not less important. It just
13 depends on the relevant facts and circumstances.

14 BY MR. HANAUER:

04:16 15 Q. Did you do any work or analysis to
16 determine whether any of the events identified
17 by Dr. [REDACTED] were stale or were repetitive?

18 MR. FIGEL: Objection.

19 THE WITNESS: No, I didn't. I saw what
04:16 20 Dr. [REDACTED] did as a justification for excluding
21 certain announcements. As I said, there is a
22 lot of subjective decision making by Dr. [REDACTED] as
23 to which announcements counted, which
24 announcements don't count.

04:16 25 It's one thing to interpret results in

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 a particular way. It's another thing to
2 subjectively decide which observations need to
3 be included in terms of analyzing what the
4 results of a particular study show.

04:16 5 And I think one always needs to be
6 careful, again, as a lot of support for this in
7 the academic literature about subjectively
8 including or excluding which announcements or
9 which events you include in a particular
04:17 10 analysis absent a principal basis for doing so.

11 BY MR. HANAUER:

12 Q. Is there an objective way to determine
13 which news should be included in Dr. [REDACTED]
14 analysis?

04:17 15 MR. FIGEL: Objection.

16 THE WITNESS: Well, you know, I guess one
17 starting point is you could report results for
18 all 514 announcements. That would be a good way
19 to start.

04:18 20 BY MR. HANAUER:

21 Q. Do the figures on your table in
22 Exhibit 2 to your report, do those figures
23 include repetitive or stale news?

24 A. I don't know without looking. But,
04:18 25 again, to say something is repetitive is not the

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 same thing as saying that it's stale.

2 And, again, that's a function of
3 interpretation depending on the relevant facts
4 and circumstances. Sometimes the repetition of
04:18 5 an announcement can have a smaller or no effect
6 because the effect of the announcement was
7 earlier.

8 Other times you can have exactly the
9 reverse, that a particular announcement, when
04:19 10 it's made the first time, has a very small or no
11 effect, but when it's made the second time has a
12 big effect precisely because it's being
13 repeated.

14 And, therefore, to arbitrarily exclude
04:19 15 announcements because they've been in one's
16 subjective judgment made at an earlier or
17 something similar has been made at an earlier
18 point in time is really an error. Because the
19 fact that information is repeated doesn't tell
04:19 20 you by itself whether that -- whether the
21 repetition makes the information more important
22 or less important.

23 That's just another methodological flaw
24 in what Dr. █████ did.

04:20 25 Q. Can you please pull out Dr. █████

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 report.

2 A. Okay. I have it.

3 Q. And look at page 29.

4 A. Okay, I have it.

04:20 5 Q. Look at footnote 67, please.

6 A. Okay. Just give me a second to look at
7 it.

8 Okay, I've looked at it.

9 Q. And do you see how Dr. [REDACTED] writes [as
04:20 10 read]: On May 16, 2017, Ripple announces its
11 plan to escrow 55 billion XRP tokens. A
12 newsroom article from May 26, 2017, again
13 reports Ripple's plan to escrow 55 billion XRP
14 tokens. I exclude the May 26, 2017, event from
04:21 15 my analysis as stale?

16 A. Yes, I see that.

17 Q. Should the May 26, 2017, event
18 referenced in that footnote, should that be
19 considered as confounding news for the May 16th
04:21 20 announcement?

21 A. Confounding news? I wouldn't call it
22 confounding news.

23 Q. Would the May 26, 2017, announcement
24 show up within the ten -- plus or minus ten-day
04:22 25 window on Exhibit 2 to your report?

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 MR. FIGEL: Objection.

2 THE WITNESS: It might and it should.

3 BY MR. HANAUER:

4 Q. Why is that when you just said that the
04:22 5 May 26th announcement would not be confounding
6 news?

7 MR. FIGEL: Objection.

8 THE WITNESS: Because previously we were
9 using the term to be situations where
04:22 10 confounding news was information either -- in my
11 report, either information that communicated
12 information about Ripple's efforts, if there
13 were efforts, and new information about supply
14 and demand conditions, as well as multiple
04:23 15 announcements within a particular event window
16 and different event windows that you cannot
17 exclude the possibility, have an effect on
18 price, particularly because of the
19 acknowledgement that XRP is trading in an
04:23 20 efficient market.

21 So let's take this particular example
22 of excluding 5/26. One of the things that I've
23 written about in my own articles about event
24 studies is the need to avoid "I know it when I
04:23 25 see it" tests to decide what's important or not

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 important just based on your own subjective
2 judgment, as opposed to doing the analysis
3 yourself, looking at the price reaction and
4 deciding whether or not the price reaction
04:24 5 demonstrates that the announcement, in this
6 case, the second announcement, relative to the
7 first announcement is bigger, smaller, what --
8 or the same.

9 That's the proper methodology to use.
04:24 10 You don't know without looking based on an "I
11 know it when I see it" test what the
12 relationship is between the price effects of
13 these two different announcements. And because
14 what's involved is an inefficient market, there
04:24 15 is no theory for when information is reflected
16 in prices in an information market.

17 So it may be that some of the price
18 reaction on the one announcement, either one of
19 them, is a product of other information from the
04:25 20 other announcement just not being reflected in
21 prices on that day but on the other day or
22 they're combined in some way. There is no way
23 to know without actually doing the analysis and
24 actually looking at the effect on prices or the
04:25 25 correlation, to be more precise, using

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 Dr. [REDACTED] term, as opposed to making a
2 subjective judgment and arbitrarily including
3 some announcements but not other announcements.

04:25 4 Again, I just think that's a basic
5 methodological error.

6 BY MR. HANAUER:

7 Q. On Exhibit 2 you say that the events
8 Dr. Metz included may have been confounded
9 without actually doing any analysis to determine
04:26 10 the impact of potentially confounding
11 announcements?

12 MR. FIGEL: Objection.

13 THE WITNESS: I wouldn't say there is no
14 analysis. The announcement is the proximity in
04:26 15 time and the significance of the proximity in
16 time, particularly in a situation where you're
17 dealing with an inefficient market when there is
18 no theory for what time period information is
19 reflected in prices, when that occurs and
04:26 20 whether it occurs without bias, and if there is
21 bias when the bias disappears.

22 That's the point of Exhibit 2.

23 BY MR. HANAUER:

24 Q. Did you do any analysis or testing to
04:26 25 make a quantitative determination on the impact

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 of any particular piece of potentially
2 confounding news?

3 MR. FIGEL: Objection.

4 THE WITNESS: You know, again, I've tried to
04:27 5 make this point several times. It's very hard
6 to do really and sometimes impossible to do in
7 an inefficient market because you don't know
8 when the price effects of any particular
9 announcement, when they are reflected in prices
04:27 10 or when they're fully reflected in prices, when
11 they're reflected in prices without bias.

12 If you have an efficient market, you
13 have a premise for stating that for certain
14 types of information there is empirical support
04:27 15 for those types of announcements in an efficient
16 market, what the speed of price adjustment is to
17 new information.

18 In fact, that is one of the key
19 provisions in the Cammer factors that we
04:28 20 discussed earlier.

21 But with an inefficient market you
22 don't have a theory of the speed of price
23 adjustment to new information. And that's why
24 the existence of multiple announcements in a
04:28 25 particular window is particularly important in

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 creating, at a minimum, caution in attributing a
2 correlation between a price -- between a
3 particular announcement and a price movement
4 when there are other announcements in the same
04:28 5 window as the announcement that, in this case,
6 Dr. [REDACTED] is attributing correlation to. And
7 that's what Exhibit 2 is meant to illustrate.

8 BY MR. HANAUER:

9 Q. Are you offering any opinion as to the
04:29 10 quantitative impact of any potentially
11 confounding news?

12 MR. FIGEL: Objection.

13 THE WITNESS: I would say no for the reasons
14 that I just described.

04:29 15 BY MR. HANAUER:

16 Q. How many -- besides the May 26, 2017,
17 example, how many other news repetitions are
18 included in your analysis on Exhibit 2 to your
19 report?

04:29 20 MR. FIGEL: Objection.

21 THE WITNESS: Well, first of all, I'm not
22 sure about the premise of your question.

23 When you said that the May 26th
24 announcement is included -- it might be -- but I
04:30 25 don't have a way of knowing that for sure as I

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 sit here --

2 BY MR. HANAUER:

3 Q. Well, you included all of Dr. [REDACTED]

4 514 announcements, right?

04:30 5 MR. FIGEL: Just to -- just so the record is
6 clear, Dr. Fischel, Professor Fischel, did you
7 finish your answer before Mr. Hanauer asked a
8 clarifying question?

9 THE WITNESS: No. I was trying to finish my
04:30 10 answer.

11 MR. FIGEL: Do you want the court reporter to
12 read back the question on where you were?

13 THE WITNESS: No, I remember the question.

14 What I was about to say is, as I said,
04:30 15 you might be right in what you said about the
16 May 26th announcement. But I don't have the --
17 I have the number of other announcements within
18 the same windows as what's reflected in
19 Exhibit 2, but I don't have the list of
04:30 20 announcements themselves in front of me.

21 So I can tell you what Exhibit 2 says,
22 but I cannot say with certainty which specific
23 announcements are included because I don't have
24 them in front of me.

25

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 BY MR. HANAUER:

2 Q. Do you know how many repetitive or
3 stale announcements are included on Exhibit 2?

4 A. That's what I was trying to answer.

04:31 5 I don't -- first of all, a repetitive
6 announcement is not the same as a stale
7 announcement for reasons that I've said several
8 times. A repetitive announcement may have a
9 much bigger effect than the initial
04:31 10 announcement.

11 So to assume that they're stale and
12 they have no effect and you can ignore them,
13 that's a fundamental error in an event study
14 analysis.

04:31 15 So let me just start there.

16 Apart from that, I don't know which
17 announcements you're considering to be
18 repetitive or stale; so, therefore, I do not
19 know how many of whatever you're considering to
04:32 20 be repetitive or stale, even for the moment
21 ignoring the error in equating repetitive with
22 stale, how many of what you are defining in a
23 particular category, how many of those
24 announcements are included in Exhibit 2.

04:32 25 Q. Did you do any work to determine

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 whether -- strike that.

2 Did you do any work to determine the
3 amount, if any, of repetitive or stale events
4 included in Exhibit 2?

04:32 5 MR. FIGEL: Objection.

6 THE WITNESS: I would say no because that
7 would not be relevant for purposes of the
8 analysis that I did in Exhibit 2.

9 BY MR. HANAUER:

04:33 10 Q. So the title of Exhibit 2 is [as read]:
11 Event days analyzed in Dr. ██████ select
12 categories test may be confounded by other
13 announcements on or near the event day.

14 A. That's right.

04:33 15 Q. And that's your opinion?

16 A. That's right, particularly in the
17 context of identifying characteristics of
18 inefficient markets and the implications of what
19 an inefficient market means.

04:33 20 Q. Are you offering an opinion that goes a
21 step further than that, that the events analyzed
22 in Dr. ██████ select categories' test are
23 confounded by other announcements?

24 MR. FIGEL: Objection.

04:34 25 THE WITNESS: I think what I've said multiple

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 times is in inefficient markets when there's no
2 theory of when information is reflected in
3 price, it is impossible to know, if you have
4 multiple announcements in a particular time
04:34 5 period, what price reactions can be confidently
6 attributed to one announcement as compared to
7 both announcements or even compared to neither
8 announcement. That's the point.

9 BY MR. HANAUER:

04:35 10 Q. So do you have any specific examples of
11 news events from Dr. [REDACTED] analysis that were
12 confounded on the same day with other news?

13 A. I'd have to check. That's a good
14 question. I'd have to check to be sure.

04:35 15 I don't know --

16 Q. You don't know --

17 A. I don't know without checking.

18 I mean, it's in the data, but I -- from
19 memory, I don't remember.

04:35 20 Q. So on Exhibit 2 to your report, can we
21 look at row number one.

22 A. I'm sorry, this is [REDACTED].

23 Okay, I have it.

24 Q. And how many days are in the windows
04:36 25 reflected in row number one?

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 A. Ten days, plus or minus, from the event
2 day.

3 Q. So is that 21 days total?

4 A. Yes, that would be 21 days total.

04:36 5 Q. And what is the fourth row, the row
6 titled Average? What does that represent?

7 A. That means if you look at all of the
8 event days and look at all of the other
9 announcements within that event window and you
04:37 10 average them all from, again, a minimum of zero
11 to a maximum of 14 with a median of 4, you get
12 an average of 5.

13 Q. And from Exhibit 2, can we tell if
14 those average of five other announcements are in
04:37 15 the first ten days of the 21-day window?

16 A. No, you can't.

17 Q. Do you know -- can you tell how many of
18 the average of five events are on the last ten
19 days of the 21-day window?

04:38 20 A. I mean, you could by checking, but you
21 can't tell just looking at this exhibit.

22 Q. Is it fair to say that to reach the
23 conclusion from Exhibit 2 to your report, that
24 event days analyzed in Dr. [REDACTED] category may
04:38 25 be confounded by other announcements, that to

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 reach that conclusion, it doesn't matter if the
2 other announcements are before, on, or after the
3 event day analyzed by Dr. [REDACTED]?

4 MR. FIGEL: Objection.

04:38 5 THE WITNESS: I don't know if I'd say it
6 doesn't matter. Although, one of the articles,
7 I actually discuss it in my report, on the
8 existence or lack of existence of an efficient
9 market, does exactly what is in this exhibit of
04:39 10 looking at arbitrage opportunities both before
11 and after particular events.

12 So there's support in the academic
13 literature for analyzing the issue the way I
14 did. But you -- on the exhibit itself, you
04:39 15 cannot tell whether the announcements are before
16 or after, or most before or most after.

17 BY MR. HANAUER:

18 Q. Does it affect your analysis?

19 A. For this purpose, no, it does not
04:39 20 affect my analysis.

21 Q. Does Exhibit 2 to your report
22 distinguish between announcements in Dr. [REDACTED]
23 select categories on one hand and announcements
24 in Dr. [REDACTED] other categories on the other?

04:40 25 MR. FIGEL: Objection.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 THE WITNESS: You know, you asked me that
2 before, and I said I'd have to check.

3 I think most of the -- if I remember
4 correctly, most of the other announcements
04:40 5 around the event day are not in Dr. [REDACTED]
6 select categories, but I don't remember if all
7 of them are.

8 BY MR. HANAUER:

9 Q. Does it matter for your analysis?

04:40 10 A. No.

11 Q. Did you test if any of the news
12 announcements outside of the five categories
13 analyzed by Dr. [REDACTED] were associated with
14 statistically significant price returns?

04:41 15 MR. FIGEL: Objection.

16 THE WITNESS: Did I specifically test that?
17 No, I don't think I did.

18 BY MR. HANAUER:

19 Q. Did you test how quickly the effect of
04:41 20 news announcements were incorporated into XRP's
21 price?

22 MR. FIGEL: Objection.

23 THE WITNESS: I mean, that's -- one of the
24 characteristics of an inefficient market is you
04:41 25 don't really have a theoretical basis for

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 analyzing that question.

2 BY MR. HANAUER:

3 Q. So the answer is no?

4 A. There's no test that you can conduct
04:41 5 that can definitively answer that question if
6 it's an inefficient market.

7 You can have shorter event windows,
8 larger event windows, there's tradeoffs with
9 respect to both of those strategies. And the
04:42 10 reason why you have different event windows is
11 because you can't answer the question
12 definitively and there's no theoretical basis
13 for doing so.

14 That's the reason to have different
04:42 15 event windows.

16 Q. When you perform an event study, do you
17 always look for confounding news and make
18 adjustments to account for confounding news?

19 MR. FIGEL: Objection.

04:42 20 THE WITNESS: Again, every case depends on
21 the relevant facts and circumstances. But when
22 you're dealing with an efficient market, again,
23 one of the definitions of an efficient market is
24 publicly available information is reflected
04:43 25 quickly and without bias in prices. And there

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 has been a number of studies of how quick that
2 is, whether or not there's bias.

3 So there is a framework in the academic
4 literature for what the logical length of time
04:43 5 to look at to determine the effect of a piece of
6 publicly available information, whether from an
7 announcement or otherwise.

8 And that doesn't exist in inefficient
9 markets. And that's why there are these
04:43 10 different trading windows -- trading event
11 windows in the study that is -- I discuss in my
12 report about arbitrage opportunities before and
13 after particular events demonstrating market
14 insufficiently with cryptocurrencies.

04:44 15 BY MR. HANAUER:

16 Q. That's the Joo paper?

17 A. No. I think that's the -- I just want
18 to look just to make sure that what I just said
19 is accurate. But it's not the Joo paper, I
04:44 20 don't believe.

21 Q. Would it be the Feng paper then?

22 A. Yeah, it's footnote 71.

23 MR. HANAUER: Do you mind if we take a quick
24 break?

04:44 25 MR. FIGEL: Not at all.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 MR. HANAUER: Off the record, please.

2 THE VIDEOGRAPHER: We are going off the
3 record. The time is 4:45 p.m.

4 (Whereupon, a recess was had at
05:11 5 4:45 p.m., after which the
6 deposition was resumed at
7 5:11 p.m. as follows:)

8 THE VIDEOGRAPHER: We are back on the record.
9 The time is 5:12 p.m.

05:11 10 You may proceed.

11 BY MR. HANAUER:

12 Q. Professor Fischel, in other of your
13 testifying expert engagements, have you prepared
14 reports that test the market efficiency for a
05:11 15 specific security?

16 A. Certainly I analyzed that question.
17 I'm trying to remember if any of my reports on
18 that issue were ever filed.

19 MR. HANAUER: Exhibit 12.

05:12 20 THE WITNESS: And I'd have to check.
21 Certainly, I filed a number of reports concluding
22 that markets were efficient.

23 (Whereupon, Deposition
24 Exhibit DF-12 was marked for
05:12 25 identification.)

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 BY MR. HANAUER:

2 Q. Is Exhibit DF-12 a copy of the expert
3 report you submitted in a case called Shah
4 versus Zimmer Biomet Holdings, Inc., in the
05:13 5 Northern District of Indiana?

6 A. Yes, it appears to be.

7 Q. And in the Shah case, did you test the
8 market efficiency of a specific security?

9 A. You know, I actually don't remember
05:13 10 very well, but let me just look and I can answer
11 that question.

12 Yes, I did.

13 Q. And was one of the ways you tested for
14 market efficiency in the Shah case was by
05:14 15 performing an event study?

16 A. Yes.

17 Q. In this case did you perform an event
18 study to test the efficiency of the XRP trading
19 markets?

05:14 20 A. No, for the reasons that I've stated.

21 Q. Did you perform any work or analysis to
22 assess XRP price movement independent of
23 Bitcoin?

24 MR. FIGEL: Objection.

05:15 25 THE WITNESS: I would say no unless one of

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 Dr. [REDACTED] different 20 regression
2 specifications, you might be able to draw
3 inferences about that question by looking at his
4 different regressions and the explanatory power
05:15 5 of different independent variables.

6 But in terms of any independent
7 analysis, no, I didn't.

8 BY MR. HANAUER:

9 Q. Did you perform any work or analysis to
05:16 10 assess XRP price movement independent of any
11 other digital asset other than Bitcoin?

12 MR. FIGEL: Objection.

13 THE WITNESS: Really, the same answer as I
14 just gave.

05:16 15 BY MR. HANAUER:

16 Q. When you're defining market efficiency,
17 is it a black-and-white issue where markets can
18 only be efficient or not efficient?

19 MR. FIGEL: Objection.

05:16 20 THE WITNESS: I think it depends. Define for
21 what purpose. For purposes of interpreting
22 price movements in an event study, I think
23 market efficiency and satisfying the conditions
24 for semi-strong market efficiency, I think
05:17 25 that's quite important.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 I would say more generally market
2 efficiency in a pure economic sense without
3 consideration of the context of how market
4 efficiency is either being used or not used,
05:17 5 it's probably more accurate to say that markets,
6 depending on which market you're talking about,
7 it's probably more accurate to talk about a
8 continuum of market efficiency to complete
9 inefficiency to somewhere in between.

05:17 10 BY MR. HANAUER:

11 Q. So that continuum you just discussed,
12 does that apply to market efficiency as it
13 relates to event studies?

14 A. Not so much. I mean, that -- that's
05:17 15 what I was describing a second ago, that if you
16 want to attribute correlation, let alone
17 causation, between a particular event and a
18 particular price movement, you need some
19 empirical basis, some theoretical and empirical
05:18 20 basis generally from existing academic
21 literature, but also tests that you yourself can
22 perform, that gives you a basis for concluding
23 that particular events or announcements can be
24 confidently associated with or correlated with
05:19 25 particular price movements.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 Q. For -- as they relate to -- as it
2 relates to event studies, what's the difference,
3 if any, between a market being less efficient
4 and a market being not efficient?

05:19 5 A. Not very much in terms of the way event
6 studies are usually used for purposes of
7 analyzing the relationship between public
8 announcements or events and price movements.

9 Q. So are you saying that -- can an event
05:19 10 study be performed to accurately test the impact
11 between news announcements and prices when the
12 market is less efficient but not not efficient?

13 MR. FIGEL: Objection.

14 THE WITNESS: Well, again, I'm trying to
05:20 15 distinguish between how event studies can be
16 used in ways that you have confidence about the
17 results versus how they could potentially be
18 used.

19 So, for example, if you try and do an
05:20 20 event study with an asset that's never traded,
21 then it would be -- that's really one end of the
22 spectrum of inefficiency, but then you get all
23 kinds of intermediate cases that can exist where
24 you still cannot confidently establish
05:21 25 correlation between particular events and

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 particular price movements, again, depending on
2 the event and depending on the price movement
3 because there may be things that you know from
4 other sources that allow you to -- in
05:21 5 particular, the situations reach inferences
6 whether or not the market is efficient.

7 And that's -- that's the logic in these
8 academic studies of having all kinds of
9 different windows, short windows, medium
05:21 10 windows, long windows. But, again, there's
11 tradeoffs because let's say with a market that
12 is not efficient but it's not like the market
13 where nothing ever trades, and so you don't
14 really have a basis for knowing how quickly
05:22 15 prices react to new publicly available
16 information.

17 And the way you deal with that, the way
18 a number of academic studies do, is you extend
19 the event window. So instead of one day, you
05:22 20 look at ten days or seven days.

21 And that's a way to try and compensate
22 for the fact that you don't really have a basis
23 or a theory for why the effect should be
24 immediate. But the problem when you do that is
05:22 25 you introduce the possibility that other things

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 are occurring in the seven days or the ten days
2 that are also having an effect other than what
3 it is that you're measuring.

4 And it's very hard to basically solve
05:23 5 both things at the same time, to expand event
6 windows before and after to try and capture the
7 fact that you don't know how quickly information
8 is being reflected in prices and at the same
9 time not introduce the possibility that you're
05:23 10 also taking -- now taking into account -- or
11 possibly taking into account the effect of other
12 events that may have an influence on price but
13 are not the events that you're trying to
14 measure.

05:23 15 So that's the basic reality. And
16 that -- lengthening those event windows might be
17 the best you can do, but then you have to
18 interpret the results in the context of the
19 tradeoffs that exist and the limitations that
05:24 20 occur when you're in that position, something
21 that Dr. [REDACTED] did not do.

22 So, you know, I guess that's what I
23 would say.

24 BY MR. HANAUER:

05:24 25 Q. So is it Dr. [REDACTED] opinion that the

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 XRP markets are less efficient than the stock
2 market or is it that they're not efficient at
3 all?

4 MR. FIGEL: Objection.

05:24 5 THE WITNESS: Well, you have to ask him. I
6 assume he would not say that they're not
7 efficient at all; because if they were not
8 efficient at all, then price movements would
9 just be completely random in relation to
05:25 10 announcements or events. And I assume he
11 doesn't believe that. So if --

12 BY MR. HANAUER:

13 Q. Do you believe that?

14 A. Do I believe that the XRP market was
05:25 15 completely inefficient, meaning there's no
16 relationship between announcements and price
17 movements? No, I don't believe that.

18 Q. Did you do any work in this case to
19 determine whether the XRP trading markets were
05:25 20 less efficient as opposed to not efficient?

21 MR. FIGEL: Objection.

22 THE WITNESS: You know, I reviewed a lot of
23 academic literature, peer-reviewed literature on
24 this question, as well as looking at Dr. [REDACTED]
05:26 25 own analysis. You know, you're coming up with

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 categories that are not really typical.

2 But I wouldn't say that I have an
3 opinion or there's a finding in the academic
4 literature that there's no connection of any
05:26 5 kind between announcements and price movements,
6 no correlation ever. I wouldn't say that no
7 correlation ever exists because that would be
8 too strong.

9 BY MR. HANAUER:

05:26 10 Q. Are you offering the opinion that the
11 XRP trading markets are not sufficiently
12 efficient to perform an event study that
13 accurately measures the impact of news
14 announcements on price?

05:26 15 MR. FIGEL: Objection.

16 THE WITNESS: Yes. I'm saying one of the
17 characteristics of an inefficient market, which
18 is what the academic literature finds and what
19 Dr. [REDACTED] concedes, is it has implications for
05:27 20 how confident you can be, that you're accurately
21 measuring the effect or the correlation between
22 particular events or announcements and
23 particular price movements. That's the meaning
24 of an inefficient market.

25

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 BY MR. HANAUER:

2 Q. Does Dr. [REDACTED] concede that XRP does not
3 trade in an efficient market?

4 MR. FIGEL: Objection.

05:27 5 THE WITNESS: Well, you'd have to ask him.

6 But when he reports the findings of academic
7 studies which conclude that when he talks about
8 the existence of serial correlation and comes up
9 with attempted statistical tests to try and

05:27 10 correct for the existence of serial correlation,
11 which is itself a violation of a random walk and
12 even weak form of efficient markets, so I would
13 say, yes, he does, by the literature that he
14 cites and the tests that he performs, and his
05:28 15 analysis of the nature of price movements in
16 cryptocurrency markets.

17 So yes, I would say he does acknowledge
18 the general finding, as far as I'm aware, in
19 every academic study that considers the question
05:28 20 that cryptocurrency markets, in general, and
21 XRP, in particular, do not exhibit the
22 characteristics of an efficient market.

23 BY MR. HANAUER:

24 Q. Does he -- does Dr. [REDACTED] say anywhere
05:28 25 in his report that XRP does not trade in an

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 efficient market?

2 A. Does he use those words? I'd have to
3 look but the characteristics of price movements
4 that he describes and the empirical tests that
05:29 5 he does and the literature that he cites all
6 demonstrate a recognition on his part that, from
7 his own analysis of price movements as well as
8 the academic literature that he relies on, that
9 cryptocurrency markets, in general, and XRP, in
05:29 10 particular, do not -- that neither of those --
11 or XRP as an example of cryptocurrency markets
12 trade in efficient market.

13 In fact, as I mentioned, the Joo
14 article, if I remember correctly concludes that
05:29 15 XRP is one of the least efficient cryptocurrency
16 markets.

17 BY MR. HANAUER:

18 Q. Does the Joo article say that the XRP
19 markets are insufficiently efficient such that
05:30 20 you can't accurately measure the impact of news
21 announcements on XRP prices?

22 MR. FIGEL: Objection.

23 THE WITNESS: Well, again, I don't recall
24 exactly what they say. But what the -- the
05:30 25 purpose of the article is to do a test of market

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 efficiency, to conclude one way or the other
2 whether cryptocurrency markets, and XRP in
3 particular, trades in an efficient market. And
4 the conclusion of the article is that they
05:30 5 don't. Crypto markets generally don't trade in
6 an efficient market, and crypto -- and XRP
7 specifically does not trade in an efficient
8 market.

9 In fact, it's farther away from an
05:30 10 efficient market than other cryptocurrencies.

11 BY MR. HANAUER:

12 Q. In an efficient market are stock price
13 increases associated with positive relevant news
14 announcements?

05:31 15 MR. FIGEL: Objection.

16 THE WITNESS: Not necessarily.

17 BY MR. HANAUER:

18 Q. When an -- when the market is
19 efficient, when are stock price increases
05:31 20 generally -- strike that.

21 In an efficient market, are stock price
22 increases generally associated with positive
23 relevant news announcements?

24 MR. FIGEL: Objection.

05:31 25 THE WITNESS: Well, statistically significant

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 price increases are, by definition, positive.
2 Whether they are associated with positive
3 announcements generally is too vague of a
4 question. You need a definition of what a
05:31 5 positive announcement is. Is it the language is
6 positive? That certainly is not the case.
7 There are many positive-sounding announcements
8 that have big negative stock price consequences.

9 So it just depends. You have to look
05:32 10 at the actual data. And as I said in my answers
11 a few minutes ago, you can't just rely on a "I
12 know it when I see it" test.

13 You have to actually look at what
14 happens with a particular announcement and what
05:32 15 the price reaction is in relation to that
16 announcement.

17 BY MR. HANAUER:

18 Q. In an efficient market, does the price
19 of a security react to news that is not
05:32 20 material?

21 MR. FIGEL: Objection.

22 THE WITNESS: The price reflects all publicly
23 available information. So in that sense, the
24 answer is yes.

05:33 25 Whether that reaction is statistically

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 significant, that's a different question, and
2 whether you can exclude the possibility that the
3 price reaction is attributable to chance alone,
4 that's also a different question.

05:33 5 But the definition of a semi-strong
6 efficient market is that prices react to all
7 publicly available information, whether material
8 or not, it's just you can't tell whether the
9 movement also is random and, therefore,
05:33 10 something that you can't reject the hypothesis
11 that the movement is attributable to chance
12 alone.

13 BY MR. HANAUER:

14 Q. When did securities markets become
05:33 15 sufficiently efficient for event studies to
16 accurately measure the impact of news
17 announcements on stock prices?

18 MR. FIGEL: Objection.

19 THE WITNESS: Well, that's a pretty broad
05:34 20 question. You know, I'm not sure there is a
21 clear answer to it in terms of a dividing line
22 chronologically.

23 You know, a lot of the famous articles
24 about market efficiency I think started
05:34 25 appearing in the '70s and then, you know,

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 continued since then.

2 BY MR. HANAUER:

3 Q. Were securities markets sufficiently
4 efficient for event studies to accurately
05:34 5 measure the impact of news announcements on
6 stock prices before the advent of the internet?

7 MR. FIGEL: Objection.

8 THE WITNESS: I think many of the main
9 studies of market efficiency on which event
05:35 10 studies relied occurred before the advent of the
11 internet.

12 BY MR. HANAUER:

13 Q. Same question but instead of internet,
14 what if I were to -- well, I'll just ask the
05:35 15 question.

16 Were securities markets sufficiently
17 efficient for event studies to measure the
18 impact of news announcements on stock prices
19 before CNBC or Bloomberg were widely available?

05:35 20 MR. FIGEL: Objection.

21 THE WITNESS: Well, part of my problem is I
22 don't know when CNBC and Bloomberg were widely
23 available. But in terms of the academic
24 literature on the efficiency of prices, I
05:35 25 don't -- I haven't reviewed them recently with

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 that -- or ever with that question in mind, you
2 know. So I -- I would think the answer to that
3 is yes, but I would have to investigate it a
4 little bit further to -- I don't know if
05:36 5 Bloomberg was available in -- well, I guess
6 Bloomberg is because of Bloomberg. I don't
7 know. He's -- I don't know how old he is, so I
8 don't know the answer to your question.

9 I would say probably, but I'd want to
05:36 10 investigate more, for sure.

11 BY MR. HANAUER:

12 Q. Are the cryptocurrency markets more or
13 less efficient over the past five years than the
14 stock market was in the 1980s?

05:37 15 MR. FIGEL: Objection.

16 THE WITNESS: You know, it's an odd
17 comparison.

18 MR. FLUMENBAUM: It's way beyond the scope,
19 too. I mean, I don't understand this line of
05:37 20 questioning. It has nothing to do with his
21 report.

22 MR. HANAUER: Anything else, Counsel?

23 MR. FLUMENBAUM: No.

24 THE WITNESS: I started to say, it's sort of
05:37 25 a very odd question of comparing one against the

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 other in different markets with different types
2 of claims. I don't know if that specific
3 question has ever been studied.

4 BY MR. HANAUER:

05:38 5 Q. Have you ever studied that question?

6 MR. FIGEL: Objection.

7 THE WITNESS: No. I would say the one thing
8 that I have done is used event studies using
9 data from the 1980s based on literature,
05:38 10 academic literature on the efficiency of markets
11 at that time. And I don't think there's a
12 similar academic literature about
13 cryptocurrencies in the last five years. So I
14 haven't studied that question. I don't want to
05:38 15 express an opinion about that question.

16 But to the extent I have a reaction to
17 the question, it's what I just said.

18 BY MR. HANAUER:

19 Q. Going back to the Cammer factors that
05:39 20 you referenced earlier today, what's the
21 methodology for determining whether a market is
22 efficient or not when certain of the Cammer
23 factors support efficiency but certain don't?

24 MR. FIGEL: Objection.

05:39 25 THE WITNESS: Well, that's partly a legal

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 question again, and I'm not expressing a legal
2 opinion. But I think there is a general
3 understanding that certain factors are more
4 important than others.

05:39 5 BY MR. HANAUER:

6 Q. And which are the most important
7 factors?

8 A. Well, again, it might, you know, depend
9 on the relevant facts and circumstances that are
05:39 10 at issue. But, generally, it's the extent that
11 one can say that the -- that price reactions to
12 particular events occur quickly and without
13 bias. I think that's generally regarded as
14 probably the most important factor; certainly
05:40 15 the most important economic factor. And I -- so
16 that's what I would say.

17 Q. So beyond the Cammer factors to
18 determine the efficiency of a market for a
19 digital -- or I'm sorry.

05:40 20 To determine the efficiency of a market
21 for a particular asset, can you also
22 appropriately consider a company's
23 capitalization?

24 MR. FIGEL: Objection.

05:40 25 THE WITNESS: Yes, I think you can

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 appropriately consider a company's
2 capitalization.

3 BY MR. HANAUER:

4 Q. What about bid/ask spread?

05:41 5 A. That's another factor that has
6 sometimes been considered certainly by courts.

7 Q. What about percentage --

8 A. And bid/ask spread is a measure of
9 liquidity, and liquidity can be correlated with
05:41 10 the speed of price adjustment to new
11 information.

12 Q. Are you offering any opinion as to the
13 liquidity of the XRP markets?

14 A. No, I'm not.

05:41 15 Q. Did you perform any work or analysis to
16 determine the period of time by which
17 information is fully incorporated into XRP
18 prices without bias?

19 A. Well, that's part of the problem; you
05:42 20 don't know that. That's, again, one of the
21 characteristics of the inefficient market. I'm
22 just going to repeat again what I just said.
23 That's the logic of using different event
24 windows because you don't know, so you increase
05:42 25 the event window hoping that the effect of a

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 particular or a -- that a particular event is
2 correlated with a price movement within a
3 certain period of time, so you have short event
4 windows and then longer event windows.

05:42 5 But, first of all, you don't even know
6 with the longer event window that that fully
7 captures the -- what the price reaction that's
8 correlated with a particular event.

9 But, again, even if you could solve
05:43 10 that problem, you introduce another problem,
11 which is you start introducing unrelated events.
12 And, again, that just creates another problem in
13 figuring out how much of a price reaction is
14 correlated with a particular disclosure or
05:43 15 event.

16 Q. Did you perform a Cammer analysis in
17 this case?

18 A. I think I answered that question a
19 number of hours ago. I suggested that it would
05:43 20 be interesting to do, in some sense knowing the
21 answer, but I'm not sure whether the people that
22 I was working with actually implemented the
23 analysis as opposed to just something we
24 discussed.

05:44 25 Q. Are you offering the opinion then on

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 the outcome of any Cammer analysis as it relates
2 to XRP?

3 A. I do not --

4 MR. FLUMENBAUM: Objection.

05:44 5 THE WITNESS: I wouldn't say I'm offering an
6 opinion about it. I haven't offered an opinion
7 about it. But I think the implication of the
8 conclusion and all of the academic studies as
9 well as in Dr. [REDACTED] report that XRP does not
05:44 10 trade in an inefficient market means that XRP
11 would not satisfy the Cammer factors.

12 BY MR. HANAUER:

13 Q. How does XRP's daily trading volume
14 compare to that of smaller stocks on the S&P 500
05:45 15 index?

16 MR. FIGEL: Objection.

17 MR. FLUMENBAUM: Objection.

18 THE WITNESS: I don't know. I would have to
19 look.

05:45 20 BY MR. HANAUER:

21 Q. Is XRP covered by investment
22 professionals?

23 MR. FIGEL: Objection.

24 MR. FLUMENBAUM: Objection.

05:45 25 THE WITNESS: I'm sure there are some

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 investment professionals who try and follow
2 price movements of XRP.

3 BY MR. HANAUER:

05:45 4 Q. Do you know the extent of coverage of
5 XRP by investment professionals?

6 MR. FIGEL: Objection.

7 THE WITNESS: I haven't specifically studied
8 that question.

9 BY MR. HANAUER:

05:45 10 Q. Are there market makers that make a
11 market in XRP?

12 MR. FLUMENBAUM: Objection.

13 THE WITNESS: I haven't specifically studied
14 that question either.

05:46 15 BY MR. HANAUER:

16 Q. Are you aware of the allegation in the
17 amended complaint that Ripple paid market makers
18 to make a market in XRP?

19 MR. FLUMENBAUM: Objection.

05:46 20 THE WITNESS: You'd have to show it to me.

21 BY MR. HANAUER:

22 Q. How does Ripple's capitalization
23 compare to smaller stocks on the -- smaller
24 companies included in the S&P 500 index?

05:47 25 MR. FIGEL: Objection.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 MR. FLUMENBAUM: Objection.

2 THE WITNESS: I haven't studied that
3 question.

4 BY MR. HANAUER:

05:47 5 Q. Have you studied the bid/ask spread in
6 the XRP markets?

7 MR. FIGEL: Objection.

8 THE WITNESS: No, I haven't.

9 BY MR. HANAUER:

05:47 10 Q. Have you studied the percentage of XRP
11 tokens held by the public?

12 MR. FIGEL: Objection.

13 THE WITNESS: No, I haven't.

14 BY MR. HANAUER:

05:48 15 Q. Are you able to provide specific
16 examples of Ripple news announcements that you
17 think were not fully incorporated into XRP's
18 price within three days?

19 MR. FIGEL: Objection.

05:48 20 MR. FLUMENBAUM: Objection.

21 THE WITNESS: You know, it's the same problem
22 because the stock -- not the stock, excuse me --
23 because XRP does not trade in an efficient
24 market. There is no way to know whether the
05:48 25 price effect is fully incorporated within three

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 days or any other time period.

2 And by the way, that is why the price
3 reaction test is generally considered to be the
4 most important test that determines whether a
05:49 5 stock trades in an efficient market and the
6 Cammer factors as well.

7 BY MR. HANAUER:

8 Q. Isn't that sort of circular, that
9 you're saying you need to establish in the
05:49 10 Cammer factors a cause-effect relationship
11 between news announcements and stock price
12 movement, but that you can't make that
13 determination until you establish the Cammer
14 factors?

05:49 15 MR. FIGEL: Objection.

16 THE WITNESS: It's not circular because one
17 of the things that the academic studies do is,
18 you know, for example, look for serial
19 correlation, look for arbitrage opportunities,
05:50 20 things that would not exist if prices fully
21 reflected the effects of particular
22 announcements or other types of publicly
23 available information. If that were true, then
24 there would be no arbitrage opportunities, there
05:50 25 wouldn't be serial correlation, you wouldn't

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 need to have these different studies looking at
2 different event windows, et cetera.

3 So, you know, that's why the Cammer
4 factors are a way to look at a series of
05:51 5 different factors to determine whether, in the
6 case of the Cammer factors, a stock or other
7 security trades in an efficient market.

8 But with respect to cryptocurrencies
9 and XRP, based on the academic literature, based
05:51 10 on Dr. ██████ own findings, you already know it
11 doesn't trade -- XRP doesn't trade in an
12 efficient market and, therefore, you know it
13 wouldn't satisfy the Cammer factors, which are
14 intended to be a test of whether a particular
05:51 15 security or financial asset trades in an
16 efficient market.

17 BY MR. HANAUER:

18 Q. Did Ripple have policies that
19 contemplated the public announcements about
05:52 20 Ripple or the XRP protocol could affect the
21 decision to buy or sell XRP?

22 MR. FIGEL: Objection.

23 THE WITNESS: I don't know.

24 BY MR. HANAUER:

05:52 25 Q. Did Ripple have policies that

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 contemplated that certain announcements by
2 Ripple could significantly affect the trading
3 price of XRP?

4 MR. FIGEL: Objection.

05:52 5 MR. FLUMENBAUM: Objection. He's not a fact
6 witness. He's not testifying --

7 MR. HANAUER: Speaking objection, Counsel.

8 MR. FLUMENBAUM: You're way beyond what
9 you're allowed to ask him --

05:52 10 MR. HANAUER: Speaking objection, Counsel.

11 MR. FLUMENBAUM: -- as an expert.

12 MR. HANAUER: Can you reread the question,
13 please?

14 (Whereupon, the record was read
02:04 15 as requested.)

16 MR. HANAUER: I'll restate it.

17 BY MR. HANAUER:

18 Q. Did Ripple have policies that
19 contemplated that certain announcements by
05:53 20 Ripple could significantly affect the trading
21 price of XRP?

22 MR. FIGEL: Objection.

23 MR. FLUMENBAUM: Objection.

24 THE WITNESS: I don't know.

25

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 BY MR. HANAUER:

2 Q. Did Ripple advise its employees that
3 Ripple's news announcements become generally
4 known two days following an announcement?

05:53 5 MR. FIGEL: Objection.

6 MR. FLUMENBAUM: Objection, improper
7 question.

8 THE WITNESS: I don't know.

9 BY MR. HANAUER:

05:53 10 Q. Have you reviewed any of Ripple's
11 internal codes of conduct?

12 A. No.

13 Q. Have you reviewed any of Ripple's
14 insider trading policies?

05:54 15 A. No.

16 Q. Are you aware whether or not Ripple has
17 insider trading policies or ever did?

18 MR. FLUMENBAUM: Objection.

05:54 19 THE WITNESS: I don't recall one way or the
20 other.

21 MR. HANAUER: One moment please while I
22 confirm with counsel.

23 MR. FIGEL: Could we also get a time check?

05:54 24 THE VIDEOGRAPHER: Yeah, we've been on the
25 record a little over six hours.

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 MR. FIGEL: So we have one hour left to get
2 to seven?

3 THE VIDEOGRAPHER: I believe so, yeah. A
4 little over six hours.

05:54 5 MR. HANAUER: Let's go off the record and
6 take a very short break, please.

7 THE VIDEOGRAPHER: We are going off the
8 record. The time is 5:55 p.m.

9 (Whereupon, a recess was had at
05:58 10 5:55 p.m., after which the
11 deposition was resumed at
12 5:58 p.m. as follows:)

13 THE VIDEOGRAPHER: We are back on the record.
14 The time is 5:58 p.m.

05:58 15 You may proceed.

16 MR. HANAUER: Thank you, Professor Fischel.
17 The SEC has no further questions at this time.

18 MR. FIGEL: No question from Ripple Labs.

19 THE COURT REPORTER: Anybody on the phone?

05:58 20 MR. FIGEL: Mr. Flumenbaum?

21 THE VIDEOGRAPHER: Are we on mute?

22 THE COURT REPORTER: No.

23 MR. FLUMENBAUM: No questions.

24 THE COURT REPORTER: I think we have standing
05:58 25 orders for you guys on this case?

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

1 MR. HANAUER: In terms of delivery and all
2 that?

3 THE COURT REPORTER: Yeah.

4 MR. HANAUER: We can go off the record.

05:58 5 THE VIDEOGRAPHER: This is end of media unit
6 three. This concludes the deposition of Daniel
7 Fischel. The video will be retained by
8 Gradillas Court Reporters.

9 We are going off the record. The time
05:59 10 is 5:59 p.m.

11 (Whereupon, the witness was
12 excused.)

13 (The proceedings concluded at
14 5:59 p.m.)

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CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER

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CERTIFICATE OF WITNESS

I, DANIEL R. FISCHER, do hereby declare under penalty of perjury that I have read the entire foregoing transcript of my deposition testimony, or the same has been read to me, and certify that it is a true, correct and complete transcript of my testimony given on February 28, 2022, save and except for changes and/or corrections, if any, as indicated by me on the attached Errata Sheet, with the understanding that I offer these changes and/or corrections as if still under oath.

_____ I have made corrections to my deposition.

_____ I have NOT made any changes to my deposition.

Signed: _____
DANIEL R. FISCHER

Dated this _____ day of _____ of 20____.

Sworn to and Subscribed before me,
this _____ day of _____, 20____.

Notary Public My commission expires:_____

1 STATE OF ILLINOIS

2 COUNTY OF COOK

3

4 I, CHERYL L. SANDECKI, a Certified
5 Shorthand Reporter within and for the State of
6 Illinois, do hereby certify that heretofore,
7 to-wit, on February 28, 2022, personally
8 appeared before me, at 110 North Wacker Drive,
9 Chicago, Illinois, DANIEL R. FISCHER, in a cause
10 now pending and undetermined in the United
11 States District Court, Southern District of New
12 York, wherein Securities and Exchange
13 Commission is the plaintiff and RIPPLE LABS,
14 INC., BRADLEY GARLINGHOUSE, and CHRISTIAN LARSEN
15 are the Defendants.

16 I further certify that the said
17 DANIEL R. FISCHER was first administered an oath
18 to testify the truth, the whole truth and
19 nothing but the truth in the cause aforesaid;
20 that the testimony then given by said witness
21 was reported stenographically by me in the
22 presence of the said witness, and afterwards
23 reduced to typewriting by Computer-Aided
24 Transcription, and the foregoing is a true and
25 correct transcript of the testimony so given by

1 said witness as aforesaid.

2 I further certify that the signature to
3 the foregoing deposition was reserved by counsel
4 for the respective parties and that there were
5 present at the deposition the attorneys
6 hereinbefore mentioned.

7 I further certify that I am not counsel
8 for nor in any way related to the parties to
9 this suit, nor am I in any way interested in the
10 outcome thereof.

11 IN TESTIMONY WHEREOF: I certify to the
12 above facts this 1st day of March, 2022.

13
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18 _____
19 CHERYL L. SANDECKI, RPR, CLR
20 CERTIFIED SHORTHAND REPORTER
21 IL CSR NO.: 084-03710
22 ID NO.: SRL-1145
23 NJ CCR NO.: 30XI00241500
24 TN NO.: 823
25 WA CCR NO.: 22001795

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ERRATA SHEET

Deposition of: DANIEL R. FISCHER
Date taken: FEBRUARY 28, 2022
Case: SEC v. RIPPLE LABS, INC., et al.

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