NORTH CAROLINA DEPARTMENT OF INSURANCE RALEIGH, NORTH CAROLINA

IN THE MATTER OF THE FILING) BEFORE THE DATED JANUARY 3, 2024, BY THE) COMMISSIONER OF NORTH CAROLINA RATE BUREAU) INSURANCE FOR REVISED HOMEOWNERS) INSURANCE RATES) DOCKET NO. 2157

COPY

BEFORE: AMY FUNDERBURK, HEARING OFFICER

TRANSCRI PT

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HEARI NG

VOLUME I - P. M. SESSION

Raleigh, North Carolina
Thursday, October 7, 2024
1:30 p.m.



APPEARANCES

On behalf of the North Carolina Rate Bureau:
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On behalf of the North Carolina Department of Insurance:

TERENCE FRIEDMAN, ESQ. SHANNON WHARRY, ESQ. North Carolina Department of Insurance 3200 Beechleaf Court Raleigh, North Carolina 27604

Hearing in the matter of the filing dated January 3, 2024, by the North Carolina Rate Bureau for revised homeowners' insurance rates, at North Carolina Department of Insurance, 3200 Beechleaf Court, Raleigh, North Carolina, on the 7th day of October, 2024, at 1:30 p.m., before Wendy Sawyer, Court Reporter and and Notary Public.

Page 83 INDEX OF EXAMINATIONS THE WITNESS: GEORGE ZANJANI EXAMINATION Continued Cross, by Mr. Friedman.....85 Redirect, by Mr. Spi vey......142 INDEX OF EXHIBITS (No exhibits offered.)

Page 84

Good

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PROCEEDINGS

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HEARING OFFICER FUNDERBURK: afternoon. And I will -- does that sound a little better for those of us in the back? Okay. As I said when we started off, I've Thank you. been accused several times of speaking too lowly, so hopefully that is a little better. I'll try to be more mindful of the microphone.

It is 1:30. We are back on the record, October 7th, 2024. When we recessed prior to Lunch, Dr. Zanjani was on the stand, undergoing cross examination. Before we return to his testimony, counsel, is there anything we need to address housekeeping wise?

MR. FRIEDMAN: Not that I have, Your Honor.

> MR. SPI VEY: Nothing here.

HEARING OFFICER FUNDERBURK: All right. Then Dr. Zanjani, I'll ask you to return to the witness stand, and I'll remind you that you continue to be under oath. Although, for purposes of -- well, Ms. Pearce, you swore in Dr. Zanjani.

Madam Court Reporter, do you have any concerns that he was sworn in prior to you coming

Page 85 1 in? 2 THE COURT REPORTER: No. 3 HEARING OFFICER FUNDERBURK: Great. 4 All right. 5 Mr. Friedman, I'll ask that you 6 proceed. 7 CONTINUED CROSS EXAMINATION 8 BY MR. FRIEDMAN: 9 Q. All right. Dr. Zanjani -- can everyone 10 hear me, by the way? Because I know I had problems. 11 Dr. Zanjani, if you could turn back to your resume, 12 which is at RB-23. 13 Α. I'm there. 14 Q. Okay. Between the University of Alabama 15 and your time teaching at Georgia State University, I 16 guess that's -- is that a combined about 10 years? 17 I started at Georgia State in 2008 and Α. 18 started at the University of Alabama in 2017. 19 0. Okay. So about 18 years. I'm not great 20 at math. 21 I'm not sure what you're trying to 22 measure. 23 0. How long you've been -- between the two of 24 those, how long you've been teaching at American 25 uni versi ti es?

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Α. About 16 years.

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Q. 16 years. Thank you. And over that time teaching at universities, have any of the college classes you've given concerned or addressed actuarial concepts?

- Α. Yes.
- 0. Okay. Such as what?
- Α. So I teach -- I've taught a course on risk modeling, and I've taught an actuarial prep course, for the Exam P, which is Probability and Statistics. And I teach some actuarial concepts in Intro to Risk Management and Insurance and a course on proper property liability insurance.
- Q. Are any of the students of those classes al ready actuaries?
- Α. No. I think some -- some of them may be taking exams.
- Q. Okay. And are some of them, to your knowledge, planning to become actuaries?
 - A. Yes.
- 0. On pages 1 through 3 of your resume, you cite a great number of publications you've been involved in or written yourself over the years. Do you see that?
 - Α. I see.

Page 87

Q. 1 Did some of those publications address 2 actuarial concepts? 3 I think some of those publications would Α. 4 be considered to be addressing actuarial concepts. 5 Yes.

- Okay. And I quess, particularly, on page Q. 2, you list -- you list a -- let's see. About a little bit over halfway down, insurance risk, risk measures, and capital allocation navigating a Copernican shift. Do you see that?
 - Α. I do.

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- 0. What's meant by capital allocation there?
- Capital allocation concerns the amount of Α. capital that is allocated to a risk within a -- an insurance portfolio or a financial institution portfolio generally.
- To your knowledge, have actuaries reviewed 0. your publications?
- I don't know for sure. You mean as -- as Α. referees or as general interest readers?
 - 0. General interest readers.
- I can't say for sure, but I wouldn't be Α. surpri sed.
 - 0. For example -- okay. Scratch that. Then if you could look at your professional

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associations, which are on page 7.

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Α. Yes.

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Does the American Risk and Insurance Association involve actuarial methods?

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I wouldn't call that an actuarial associ ati on. There are people in that association who are actuaries. There might be some actuarial research

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that has presented at those associations' meetings.

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0. And were there actuaries on the board of

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the ARIA when you were on the board?

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the board. I think I may have overlapped with Richard

Hard for me to recall the composition of

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Derrig, who was an actuary. I don't remember offhand

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if there were other actuaries on the board.

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- Q. Now, with regard to this filing in particular, and I'm not asking about the substance of any communications, but did you communicate with the three actuaries who filed pre-filed testimonies al ongsi de yours?
- A. So I think I said earlier that I communicated with Paul Anderson, and I believe that was The actuary, if he is an actuary, that I in error. communicated with was Ericksen, actually indirectly. Ericksen and Conover. I think Conover sent me data from Verisk, that was necessary for the work I was

Page 89 doing. And I think Ericksen was cc'd, but that's my 1 2 recollection. 3 0. And is Conover with ISO? I believe he's with Verisk. 4 Α. Yeah. 5 0. Verisk. Okay. And Verisk owns ISO, does 6 it not? 7 I believe so. Yeah. 8 0. Okay. And do you know that they do 9 business under the same name simply nowadays, Verisk? 10 Α. Yeah. It -- I'm not trying to draw a 11 distinct -- distinction between Verisk and ISO. The --12 the emails say Verisk on them. All right. So we have testified about --13 0. 14 you've testified about ASOP 30, and that is included at 15 Exhibit -- sir, do you have a copy of DOI's exhibit 16 book? The DOI's Exhibit Book 3. MS. WHARRY: Your Honor, may I approach 17 18 the witness? 19 HEARING OFFICER FUNDERBURK: Yes. 20 counsel, have you provided -- have you provided 21 that to opposing counsel as well as a copy for the 22 bench? 23 MR. FRIFDMAN: Book 3? Um-hum. 24 MS. WHARRY: Book 3 to the witness? 25 HEARING OFFICER FUNDERBURK:

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Pl ease approach. Thank you.

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BY MR. FRIEDMAN:

- Q. All right. Mr. Zanjani, I'm going to be refer -- first of all, if you go to page 50, which is in the lower right hand corner of that exhibit, you'll see Actuarial Standard Practice 30. The numbers are in the lower right hand.
 - A. I'm sorry. Are we in Book 3?
 - Q. Book 3 should be Exhibit No. 12.
 - A. Yes.
- Q. All right. So I'm going to be referring to both of that and to specific pages in your testimony, if you need to have the testimony also handy.

So you testified that you, as I understood it -- and please correct me if I'm wrong -- that you felt informed by certain provisions or tried to align your testimony with certain provisions of ASOP 30 and didn't try to align it with other provisions. Is that fair?

- A. I don't remember exactly what I said, but I prepared my testimony after reviewing the guidelines in ASOP 30. So I'm aware of what ASOP 30 says about certain aspects that -- that affect my testimony and analysis.
 - Q. Okay. So did you take into account all of

Page 91

1 ASOP 30 when you prepared your testimony or only certain subsections?

- A. I don't remember which subsection. So in in particular, I'm not sure if this is the same document I reviewed, but the section on the one I recall looking at ASOP 1. Okay. It should be right here, 30.
- Q. So wait a second. Now we're turning to ASOP 1?
 - A. No. I was on ASOP 1.
 - Q. Oh, okay.

- A. I -- I was confused. So I'm now on ASOP 30. So the -- I may not have, you know, reviewed the section on, say, disclosures very carefully.
- Q. Okay. Is that the only provision you didn't review very carefully? And if you need some time to go through the provisions --
- A. Well, again, this was not an actuarial report, and I did not feel bound by ASOP 30. However, as someone preparing provisions on profit and contingencies, the guidance about how those should be prepared and particularly the relationship to cost of capital, those are the guidelines in ASOP 30 that I especially was paying attention to.
 - Q. Okay. So other than the responsibility

 to, I believe you said, the provision that you didn't review in detail was -- could you tell me which subsection you didn't reveal in detail -- review in detail?

A. I don't -- if we're asking -- if you're asking me about which sections I reviewed before preparing my testimony, I don't remember which -- which sections I -- I reviewed particularly.

Q. Okay.

A. I have reviewed the standard before, and I'm familiar with the provisions that I mentioned.

O. All right. In your testimony at page 4, bleeding over into 5, that last -- the answer at the bottom of 4, you state that your understanding of North Carolina law is that insurance rates are set -- are to be set such that those rates are expected to provide a return to insurers that is equal to the returns of industries of comparable risk and that in calculating that expected return, the investment income on capital surplus is to be -- capital and surplus -- is to be excluded from consideration. Do you see that

A. I do.

Q. What's the extent of your understanding of North Carolina law on the particular exclusion of

Session Date: 10/7/2024

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capital and surplus?

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- Α. Well, as stated in the testimony, my understanding is that it is to be excluded from consideration in the rate. And so my -- but more specifically, the -- my understanding is from the statute, which -- and also from conversations with counsel explaining to me the --
- 0. Okay. So other than conversations with counsel and the statute, have you reviewed any North Carolina law, including prior Commissioners' orders or appeal decisions from the Courts of Appeals?
- So I have reviewed various decisions and various orders and do not consider myself a lawyer. many of them seem to conflict to me or at the time I reviewed them. So, mainly, my -- my understanding of -- of all of that legal history is guided by my read of the statute and the conversations with counsel.
- I understand that you're not a lawyer. But on pages 45 and then also at the bottom of page 3, you do specifically state your understanding of North Carolina law. Correct?
 - A. Right.
- 0. And going then to ASOP 30, 4.1. That's under section 4, page 54 of that collection of ASOPs. Are you there?

Did you review that section, specifically

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A. Yes.

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- A. I did not review or I do not recall reviewing that section.
- Q. Okay. Did you develop a rate in accordance with what you understood to be North Carolina Law?
 - A. I did.
 - Q. Okay.
- A. And also in my testimony, there is a calculation under the alternative that would have been done had North Carolina law not been in place.
- Q. And that particular calculation is one that does take into account the interest earned on capital and surplus?
 - A. That's correct.
- Q. All right. Is it your general understanding that when we refer to total profit for an insurance company, there are technically two parts of that? Namely, the first part would be total profit being what the company earns on insurance operations. And the second part instead, additionally, including underwriting profit and investment income from premiums? Is that fair?

Page 95

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Α. Could you repeat that, please?

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0. And I'm reading from a particular If you'd like me to hand up the -- the copy of case. the case to you, that might make it easier, but I'm not suggesting you had to have read the case. I don't know if you have. Would that make it easier?

Well, are you asking me what I understand the sources of insurance company income to be, or are you asking me what the case says the -- the -- the sources are?

- 0. The former.
- A. 0kay. So --
- 0. With regard to total profits. Excuse me.
- A. Okay. Could you repeat the question, pl ease?
- Q. Sure. Is one part of total profit what the insurance company earns on insurance operations?
- So I think you could do a lot of decompositions of the accounting profit of insurance And the accounting profit has various companies. components. It includes the underwriting profit, investment income earned on premiums and -- or premiums and lost reserves and so forth as well as investment income earned on capital and surplus.
 - Q. Okay. And so that would include what they

earn on insurance operations?

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A. The accounting profits of insurance companies include various components. The investment income on capital and surplus would not be included in insurance operations except indirectly through the determination of premiums if you were determining something like operating returns.

- Q. So I'm a little bit confused. Do you -- are you saying that insurance operations themselves necessarily contain some of -- some consideration of capital and surplus if they're addressing premiums?
- A. The premiums set by actuaries consider, you know, in -- in all states but North Carolina, I should -- should qualify -- the premiums set by actuaries generally in other jurisdictions include consideration of investment income on capital and surplus.

So if you were calculating an operating return, you would be using premiums that include consideration of capital and surplus.

- Q. Thank you for clarifying that. But in North Carolina, is it your understanding that in calculating a total return, you cannot include consideration of capital and surplus?
 - A. That is my understanding.

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Q. Outside of North Carolina, when you're calculating total profit, the -- another part of it, in addition to insurance operations, is profits earned by investing capital and surplus funds or investments from those?

- A. Well, those profits are also earned in North Carolina.
 - Q. Yes. But they're --
- A. They're -- they're -- the consideration of those profits -- not profits, investment income -- the consideration of that investment income in the calculation of the accounting return is, as I understand it, prohibited by North Carolina law.
- Q. So outside of North Carolina, when you are calculating total profit, you would be considering profits earned by capital and surplus funds, and inside North Carolina, you would not?
- A. My understanding of the statute relates, and the law in North Carolina relates to the calculation of rates. I believe the calculation of profit -- I'm not sure what -- how it's calculated or if there's some other statute relating to the calculation of profit in North Carolina. But generally, insurance companies would consider that in calculating their accounting profits.

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So if you picked up a statutory statement and derived a bottom line profit from that, it would include investment income on capital and surplus.

- I should clarify, then, that I am talking Q. about profits in the sense that they're used for calculating rates.
 - Α. So could you repeat the question, please?
- 0. That may prove a chore for me. But the -so outside -- let's use the term total return instead. Outside North Carolina, as part of calculating a total return for the purposes of rate making, you would consider the earnings on investments of capital and surpl us?
- Typically, a -- an approach outside of Α. North Carolina would consider the investment income on capital and surplus.
- So using the term "total return", as it's 0. calculated outside of North Carolina, would you agree that a total return simply can't be the basis for a North Carolina profit provision?
- Α. A total return, meaning an accounting profit, should exclude investment income on capital and So in my testimony, I distinguished between a statutory return that excludes investment income on capital and surplus and a total return that includes

Page 99

1 2 investment income on capital and surplus. But just to be clear, we're talking about accounting returns when

Whether accounting or statutory,

we talk about returns.

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Q.

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has it been your experience that outside North

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Carolina, a total return includes consideration of

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investment income from capital and surplus?

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A. So, again, I think a company calculating a

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total return, in general, would include investment income on capital and surplus, whether they were in North Carolina or not. In a rate making exercise, they would be

excluding investment income from the accounting return in North Carolina. And outside North Carolina, they would be including investment income on capital and surpl us.

- 0. Thank you. Would you agree that a cost of capital analysis includes consideration of investment income on capital and surplus?
 - Α. No.
 - 0. How not?
- A cost of capital analysis concerns the Α. return that investors require on the underlying investments in the insurance industry and industries of comparable risk.

Page 100

So the investor is not looking at the accounting returns and does not care about the composition of income. The investor ultimately is focused on capital appreciation of the investment, capital appreciation and -- and dividends. So it's -- it's the notion of the return in the case of a cost of capital analysis is the return to the investor on the investment.

- Q. Is that in keeping with your statement this morning that the source of the cost of capital calculation is irrelevant?
- A. To the investor in an insurance company security or -- yeah. Yes. That's -- that's correct.
- Q. What about to North Carolina law? Do you know if that's relevant to North Carolina law?
- A. My understanding of North Carolina law is that rates are to be set without consideration of investment income on capital and surplus in determining the accounting return and that insurance companies are entitled to a fair and reasonable return or a fair and reasonable margin for profit.

The fair and reasonable margin for profit, I interpret as corresponding to generating the accounting return that would deliver the cost of capital that investors demand.

Q. In the court cases that you reviewed, do

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you recall it mattering to the courts that, in fact, the sources of the cost of capital are relevant to the prohibition on consideration of capital and surplus?

- A. I couldn't possibly list to you all of the, yeah, references that I found in the court opinions and -- and orders and so forth. However, the -- the statement that you made, could -- could you repeat it, please?
 - 0. Sure.
 - A. The composition of?
- Q. You've stated that to an investor, the source of what you used to rely -- to arrive at a cost of capital isn't relevant from his perspective. Do you know if it's relevant to North Carolina courts, the source of what you use to calculate the cost of capital?
- A. Well, the cost of capital, again, is a market concept referring to the returns that investors demand on their investments, okay, and that consists of capital appreciation and dividends. Okay?

So the sources you're talking about are an accounting concept. And my understanding of the law is that the investment income of on capital and surplus is explicitly to be excluded from those accounting returns.

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So as -- but, again, my understanding is just based on reading the statute and the interpretation I gave you as well as discussions with counsel.

- Q. When you speak of sources, does that include the methods for calculating the cost of capital or just the data that's loaded into the method or considered in the method?
 - A. Could you repeat the question, please?
- Q. Okay. So I've been referring to sources for cost of capital mostly because that was a term you used this morning. But my question now is, when you refer to sources, does that include the method or various methods you may earn to -- you may utilize to try to estimate the cost of capital?
- A. Well, I don't understand the question in the sense that the sources that we discussed consist of underwriting profit, investment returns on policyholder supplied funds, investment returns on capital and surplus.

So those -- those are the sources we're -- we're talking about. And then there are methods to determine the cost of capital. So I'm -- I'm not sure what the connection you're drawing is.

Q. Okay. So the methods -- is it fair to say that the methods may consider the sources, but the

sources aren't necessarily the methods?

A. Well, the methods are aimed at determining the return that investors require, which consists of --well, it depends on the method. It may -- it might be easier if we talk about specific methods, but many of them are risk -- premium-based methods that look at the correlation between returns on stocks and the overall market. So those are entirely focused on capital appreciation and dividends.

- Q. Okay. And I will absolutely get to the particular methods that you mentioned in your report that you used to calculate the cost of capital. And would you agree cost of capital is a synonym for cost of equity?
 - A. No.
 - Q. Okay. What's the difference?
- A. Well, people -- sorry. I don't mean to be difficult.
- Q. No. Not at all. You're -- you're a Ph.D. You get to be.
- A. So those -- those terms are sometimes used interchangeably. But just to be clear, cost of capital can sometimes refer to a -- a weighted average cost of capital that also considers the cost of debt that's been issued, or it may just refer to a cost of equity.

But it -- it might be helped helpful to be precise.

- Q. You know whether the courts or the Rate Bureau itself has characterized the two as synonymous before?
- A. I think a previous witness may have used the cost of equity approach, and I don't know whether -- I don't know whether he characterized the -- the terms as being synonymous or not, or I don't remember. Though again, some -- some people do use that terminology. I just -- I just don't.
- Q. I understand that, and I appreciate there are nuances and that people certainly misuse legal terminology a lot, including lawyers.
- A. Well, I'm not -- I'm not saying that he was misusing it either, if -- if -- if he was. I'm -- I'm -- I'm just saying that, to me, cost of capital means a certain thing.
- Q. So at least Mr. Anderson relied on your report for his report. Do you recall that we went over his testimony?
- A. I recall both in Mr. -- I think it was Ericksen's and Mr. Anderson's aligned reference.
- Q. I think I found the specific word "relied" --
 - A. Oh, relied.

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-- in Mr. Anderson's testimony. Q.

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Α. Okay. I -- I -- I don't recall, but I --I recall reading some sentence from his testimony.

- Q. 0kay. Since he has to comply with the actuary -- the ASOPs for his report, in writing your report, did you feel any responsibility for better educating or fully educating yourself on the case law and past Commissioners' orders regarding what constitutes consideration of the cost of capital?
- A. In my report, I fully disclosed the nature of my understanding of -- of North Carolina law. And so I think I made that clear in my report to anyone who is using it.
- Q. Okay. But you've testified you don't recall details from the court opinions you've read.
- Α. I certainly do not recall all the details from the court opinions I've read. I found them very confusing, in general, and conflicting in -- in many cases. So my -- the reliance for my understanding is primarily from my reading of the statute and my discussions with counsel.
- In drafting your report, given that Mr. Q. Anderson relied on it for his actuarial opinion, did you feel any responsibility to discuss those specific attempts at calculating profit without regard to

capital and surplus that had been rejected by the courts? So --

A. I'm sorry. I don't understand your question.

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Q. For your report, did you, for the purposes of a person like Mr. Anderson, who reviewed your report and then relied on it, did you feel any responsibility to give examples of the sort of calculations that in North Carolina that the courts had rejected as not as act- -- being improper because they included the cost of capital?

A. Again, my understanding of North Carolina law, as disclosed in my testimony and I think we've covered, is such that is -- is as I laid out, and my understanding is that the calculations I did were in compliance with North Carolina law as on the basis of that understanding and my discussions with counsel. So I did not feel any responsibility that you mentioned.

- Q. Okay. Switching gears a bit. As I understand from your resume, you began working on North Carolina Rate Bureau filings in 2019? That would be, I believe -- let's see. So, I'm looking at pages 4 through 5.
 - A. I'm there.
 - Q. And I think the first time I see you

Page 107

1 mentioned as a witness for the Rate Bureau is in 2019?

- A. Yes. So I'm -- I'm not sure if that was if the work for that started in 2018, but I believe it was for a 2019 filing.
- Q. And have any of the cases in which you filed or in which you submitted pre-filed testimony gone to a hearing?
 - A. Not in North Carolina.
- Q. Okay. I should clarify that. In your resume, you state that you've also provided expert witness testimony in Massachusetts, Florida, and Virginia. Is that correct?
 - A. That's correct.

- Q. Okay. And was that oral or was that all in writing?
- A. Florida concerned oral testimony as well as written testimony, and Massachusetts concerned written testimony until this current year when -- when it also involved a hearing.
- Q. Now, is it your understanding that prior to you becoming an expert witness for the Rate Bureau, the Rate Bureau had employed another couple of economists, Doctors Appel and Dr. Vander Weide in calculating the profit provision for the Bureau?
 - A. My understanding is that the Bureau

employed Dr. Appel and Dr. Vander Weide.

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- Q. And I believe Dr. Appel is in the room.
- A. Dr. Appel is in the room. Yes.
- Q. Okay. Did you ever talk with them about the work that they had performed on the past North Carolina cases?
- A. I never talked with Dr. Vander Weide. I did talk with Dr. Appel.
- Q. Okay. Did you talk with Dr. Appel about his work on the 2014 homeowners' hearing?
- A. I don't recall specific conversations, but I think probably. Yes.
- Q. Did you talk with him about, whether in that hearing or prior hearings, attempts that he had made to arrive at a profit provision that were nonetheless rejected?
- A. So I don't recall the conversation with Dr. Appel about that particular topic. No.
- Q. Was it your understanding that some of his attempts at calculating the profit provision had been rejected by the courts?
- A. It is my understanding that the courts rejected certain aspects of the Bureau's filing in 2014. I don't know -- I don't recall exactly which one of those or what aspects were rejected by the court in

Page 109 2014. 1 2 Q. Are you familiar with the fact that the 3 courts also rejected the Rate Bureau's calculations in a personal auto filing in 2001? The filing was in 4 5 I think the decision was in 2003. 2001. 6 Okay. And this -- this is -- I'm having a Α. 7 hard time keeping the years straight. 0. 8 Sure. 9 Α. There -- I thought there was a Supreme 10 Court case around that time that -- that, in rough 11 terms, sided with the Bureau's position in the '96 12 filing. 13 0. That's right. 14 Α. 0kay. 15 0. And then there was --That's -- that's not what you're talking 16 Α. 17 about. 18 Q. No, sir. There was a --19 That's not the 2001 case? Α. 20 Q. No. 21 Α. 0kay. 22 Q. The 2001 case was a separate auto filing 23 from the 1996 case --24 Α. 0kay. -- and it went on appeal. I believe the 25 Q.

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appeal was decided in 2003.

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Α. Um-hum.

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Do you -- are you familiar with the fact that that -- the court in that rejected Dr. Appel's method of calculating the cost of capital or

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calculating the profit provision?

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So I'm not familiar with specific cases because for -- as I mentioned before, they are

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conflicting or give conflicting information, at -- at

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least as far as I can tell from what the -- the -- the

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courts determined or Commissioners ordered in the past.

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So were you familiar that his -- Dr. Appel's method had been rejected prior to the 2014

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homeowners' filing at least once before?

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that's what I'm having a hard time understanding.

So when you say the method was rejected,

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Q. The way that he --

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Α. -- entire -- was it the entirety of every

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single page in the pro forma, the way he calculated

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investment returns on the asset portfolio, the way he

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calculated leverage. I mean, there -- there are so

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accounting return associated with an underwriting

many things that go into determining what the

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profit provision is.

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So when -- when you say the -- the court rejected it, I don't know what part of the calculation you're referring to.

- Q. That the court rejected his entire method for calculating the profit provision.
- A. Okay. I was not aware that the court said that you can't use the method.
- Q. Were you aware that the court in 20- -- in the 2014 homeowners' case rejected the method that Mr. -- Dr. Appel used?
- A. So, again, my understanding of North Carolina law and the extent to which this complies, what I've done complies with North Carolina law, it's based on my reading of the statute and conversations of counsel who -- with counsel -- who digested the various opinions for me.
- So I -- I don't what the -- those particular decisions said, I couldn't begin to interpret particular decisions.
- Q. Did you review any prior written testimonies of Dr. Appel or Dr. Vander Weide?
 - A. Yes, I did.
- Q. Okay. Did you use any of the formulas they created in your current pre filed testimony for the homeowners' filing this year?

A. My -- so Dr. Vander Weide, let's start with him, I believe used a risk premium method, and he may have used a discounted cash flow method as well.

My own calculations were done using risk premium methods that were not exactly the same as Dr. Vander Weide's.

And then I consulted various third-party sources for methods, some of which are similar to what Dr. Vander Weide was using.

In the case of Dr. Appel, the approach is very similar in many respects to what -- what he did in previous filings but -- but different on certain counts. And the formulas and calculations, I did independently. In some cases, they are the same as the -- the formulas that he was using.

- Q. Okay. And in what respects are your calculations different? I believe you just said your calculations, in some respects, were different from Dr. Appel's. In what respects were they?
- A. So various respects. So in certain cases, I used different source material for returns on invested assets. So, we -- we may have had access to different data sources, so there -- there were some changes there.
 - I believe I expanded the -- or the expansion of

the categories of investments that were considered in -- in the rate making approach. I expanded that to include other long term invested assets.

I believe he was calculating leverage on the basis of a -- the weighted average of the top 30 writers, whereas I was using the -- I used the entire market.

I made various -- oh, I'm basing leverage based on direct premiums rather than net premiums is -- is another difference.

I make adjustments for reinsurance in the policyholders' supplied funds calculation as well as in the adjustment for returns on agents' balances. Like, I think those are the -- the major ones I can think of.

- Q. Quick question on agent balances since we're there, but what's your understanding, at least in North Carolina, of how long agents hold on to premiums before they're remitted to the insurance companies?
- A. I don't have an understanding. So that particular assumption is based on, I believe, overall data for the -- actually, I'd -- I'd have to check the testimony, but I've never done an independent review of how long agents hold -- hold balances. So I'm relying on the data for that that was supplied by Verisk.
 - Q. Okay. Is it your understanding, just

Page 114

generally, that insurance companies often sweep the --1 2 an agent's premium account on a monthly basis? 3 I don't have an understanding of what Α. typical practice is regarding to sweeping accounts. 4 So 5 my understanding, to the extent that there is an 6 understanding, is limited to what I see in statutory 7 data, which is basically what ISO has provided, so 8 agents' balances in the -- in the statutory statements. 9 Q. 0kay. But you are familiar that things like monthly sweeps of premium accounts happen? 10 11 Α. I don't know how prevalent that is. 12 0. But you've heard of it. 13 Α. Yes, I've heard of it. 14 HEARING OFFICER FUNDERBURK: And I'II -15 - I'll just briefly ask the witness. You've been 16 on the stand about an hour. Are you okay to keep 17 proceeding, or do you need a few minutes? 18 THE WITNESS: Pardon me? 19 HEARING OFFICER FUNDERBURK: Do you 20 need a few minutes' break, or are you okay to keep 21 proceeding? I'm just mindful. You've been 22 testifying about an hour. 23 THE WITNESS: I can go. 24 HEARING OFFICER FUNDERBURK: 0kay.

BY MR. FRIEDMAN:

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Q. Now, you've emphasized before that it was the subcommittee that adopted the recommended rate based on your work product. Is that correct? The recommended rate in the filing.

- The subcommittee, with respect to my Α. participation, the subcommittee made a selection of an underwriting profit factor. And I believe, as was mentioned in the opening statements maybe -- or maybe by Ms. Biliouris, the subcommittee made a number of other selections as well.
- Did you actually present that data in 0. person to the subcommittee?
- I -- what I presented to the subcommittee was presented in this particular case over Zoom, I believe.
- 0. Okay. And in your presentation, did you make a recommendation as to the acceptable ranges of underwriting profit or a range of acceptable underwriting profit percentages?
- Α. I presented, in general, two pieces of information. One was these costs of capital estimates for the needed market return and an array of showing the underwriting -- matching different levels of underwriting profit provisions to different accounting returns. I did not make a recommendation.

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Q. So turning back to your actual report, which is -- let's see. In the main -- in the filing binder at Exhibit RB-22?

A. I'm there.

- Q. Okay. At the bottom of page 3, you provide numbers for both the statutory return and a total return. Do you see that?
 - A. I do.
- Q. Okay. And that calculation of the total return would include consideration of investment in -- or let's better say, would include consideration of the cost of capital.
- A. No. The total return includes consideration of investment income on capital and surplus, while the statutory return does not and was, as discussed in the testimony, prevented -- or presented for informational purposes.
- Q. Turning to page 4. That last paragraph before Roman Numeral II, you did compare the cost of equity -- strike that. Strike that. I'm turning to a different page.

MR. FRIEDMAN: Can I have a second,
Your Honor, just to -BY MR. FRIEDMAN:

Q. On page 3 of your report, do you see where

Page 117

you discuss how you generated your estimates using a single factor risk premium approach?

A. I do.

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- Q. All right. And within your risk premium approach, you determined the cost of equity according to three different measures. Correct?
 - A. So --
- Q. I'm looking at the -- looks like the second full answer on page 3.
 - A. Um-hum.
- Q. Where you say -- you point out and the cost of equity was determined --
 - A. Right.
 - Q. -- by the historical -- okay.
 - A. Yeah.
 - Q. We're at the same place.
 - A. So -- so I didn't use three methods.
- 18 Those are three components.
 - 0. Sure.
 - A. To calculating the cost of equity.
 - Q. And the historical excess return of the overall stock market over bonds. The excess return of the overall stock market would include industry returns for companies that -- well, would include returns based on investment income from capital and surplus.

1 | Correct?

- A. The returns or the stock market concern returns on the equities, so price changes and dividends.
- Q. Okay. And then the equity includes capital and surplus. Is that fair?
- A. Well, no. The capital and surplus concerns accounting return. So investment income on capital and surplus can be used outside of North Carolina in rate making cases, at least in rate making cases to determine the accounting profit.

The returns we're talking about here aren't anything related to underlying sources of income.

They're returns based on how much the security price changed over time.

- Q. Is it fair to say that the historical excess return of the overall stock market did include the cost of equity?
- A. The cost of equity that I'm determining is based -- I'm -- I'm sorry. Could you repeat the question?
- Q. Sure. Is it fair to say that when you reviewed the return of the overall stock market, part of that review would have included a review of the cost of equity?

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- A. The purpose of reviewing the overall return on the stock market over whatever horizon we're considering is to determine the cost of equity.
- Q. Okay. And that overall stock market, the particular returns that you reviewed would include industry's income on capital and surplus investments?
 - A. Could you repeat the question, please?
 - Q. Sure. Tell you what, we'll move on.

Returning to Exhibit RB-24, where did you get this pro forma form in which you filled your own data -- into which you filled your own data and calculations?

- A. I created it.
- Q. Okay. Was it, in part, based on the form created by either Dr. Appel or Vander Weide?
- A. I'm not familiar with the form created by Dr. Vander Weide, but it is very closely related and follows Dr. Appel's analysis in terms of form.
- Q. So I'm looking I'm going to point you to an exhibit in Book 4.

MS. WHARRY: Your Honor, may I approach the bench to give the witness and yourself the Book 4?

HEARING OFFICER FUNDERBURK: Yes. You may approach to obtain the -- the books.

Page 120

1 MR. FRIEDMAN: All right. And -- Your 2 Honor, I almost -- I or perhaps my colleague may 3 have to point him to the specific item I'll be 4 referring to in that book. Could I approach or 5 could my colleague approach to point him to that 6 and also point it out to opposing counsel and Your 7 Honor because it's -- unfortunately, the book 8 itself doesn't have tabs, and this is about two-9 thirds of the way back. 10 HEARING OFFICER FUNDERBURK: You -- you 11 may approach your opposing counsel and the witness 12 to identify the passage you're referring to. 13 (Off record discussion) 14 HEARING OFFICER FUNDERBURK: Mr. 15 Friedman, could this be simplified using the 16 projector? 17 MR. FRIEDMAN: It could be. The 18 Clerk's more adept at using the projector than I Would -- would that be suffice for you to put 19 am. 20 it on the projector? 21 THE WITNESS: I guess so. 22 MR. FRIEDMAN: There on the screen. 23 THE WITNESS: Oh, I got my own. 24 Yeah. Would it not show MR. FRIEDMAN: 25 up on his screen?

Page 121 HEARING OFFICER FUNDERBURK: 1 We can --2 we can do that. We'll attempt to do that. Please 3 have -- go ahead and have a seat. 4 MR. FRIEDMAN: Okay. 5 HEARING OFFICER FUNDERBURK: Mr. Spivey, I presume you don't have any objections to 6 7 viewing it that way. But if you do, please let me 8 know, and we'll find it in the book. 9 THE WITNESS: So are -- are we looking 10 at Appel's testimony? 11 BY MR. FRIEDMAN: 12 0. Yes. It is Appel's testimony, and it's his Exhibit RB-14. 13 14 Α. Yeah. I -- I found it. 15 0. Okay. Great. Then I guess we -- yeah. 16 MR. FRIEDMAN: Your Honor, I didn't 17 show it to you. Would it be helpful for me to show 18 you it in the book or on the screen? 19 (Off record discussion) 20 HEARING OFFICER FUNDERBURK: Or if it's 21 easier, you can just find it in mine. Thank you. 22 MR. FRIEDMAN: Is that visible on 23 everybody's screen? 24 THE WITNESS: I can see it. 25 MR. FRIEDMAN: We're not seeing it.

	Page 122
1	HEARING OFFICER FUNDERBURK: You're not
2	seeing it? Okay.
3	MR. SPIVEY: Okay.
4	MR. FRIEDMAN: Your Honor, maybe it
5	would be easier
6	HEARING OFFICER FUNDERBURK: Got it?
7	You've got it on your screen now?
8	MR. SPIVEY: I do. I do. Can we get
9	it up here?
10	BY MR. FRIEDMAN:
11	Q. All right. So, Dr. Zanjani, do you see
12	both your pro forma statutory rate of return form and
13	the first and Dr. Appel's?
14	A. I do.
15	Q. Okay. So I am looking at the first page.
16	I see that under premiums you took out from Dr. Appel's
17	form a compensation for assessment risk. Is that
18	correct?
19	A. I believe the compensation for assessment
20	risk is in my form and not in Dr. Appel's form. Right?
21	Q. Yes. You added one, then, for
22	compensation for assessment risk. Was that
23	compensation for assessment risk based on Dr. Mao's
24	cal cul ati ons?
25	A. I'm not sure who calculated it, but it

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- was -- I took it as an input into my calculation.
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0. Who gave you the percentage?

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- Α. I think it came through the Bureau. Ιt may have been calculated by Dr. Mao or maybe Dr. Anderson.
- 0. So other -- I see also that in that first big block, you have made acronyms of certain things that Dr. Appel spelled out like loss. You've put loss and LAE while he spelled out loss and loss adjustment expense.

Other than the compensation for assessment risk that you added there and your -- both in that first big block and then at the bottom of the assumptions and parameters is adjusting terms, not the numbers, but the categories on that first page, is this identical to Dr. Appel's?

Α. So there in addition, there is an adjustment in the investment income on agent balances. Notice that there's an investment income on agent and reinsurance balances, which is different than -- than what you see in Dr. Appel's.

Now to be clear, when I constructed my own exhibits, I was following Dr. Appel's. So the first -first step in my construction, if it wasn't clear from my previous answer, was to reconstruct what he had done

Page 124 and then to, you know, make -- make modifications as I 1 2 saw to be necessary. 3 0. Okay. Turning to the second page. Well, 4 let me ask you this. If the Court were to go 5 through --6 HEARING OFFICER FUNDERBURK: Counsel, 7 is there a separate page you'd like to show? Keep 8 in mind, I don't -- you have my exhibit book --9 MS. WHARRY: Your Honor --10 HEARING OFFICER FUNDERBURK: -- so I do 11 need to get it back or see it on the screen. 12 MS. WHARRY: Your Honor, may I switch 13 to projecting from my computer instead of the 14 projector. And then that way I can --15 HEARING OFFICER FUNDERBURK: And 16 that -- that way you can you can share the 17 documents and counsel will be able to reference 18 those same documents in your -- in your book. 19 PLease do so. 20 MS. WHARRY: It's ready to -- and Your 21 Honor, I can bring it back to you. 22 HEARING OFFICER FUNDERBURK: Um-hum. 23 If you could leave it open to that page, that would 24 be great. Thank you. 25 BY MR. FRIEDMAN:

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	Page 1.
1	Q. Hopefully, the following question will not
2	require any further review of the specifics of certain
3	pages. Dr. Zanjani, is it fair to say that if the
4	court reviews your RB-24 and compares it with the RB-14
5	of Dr. Appel in 2014, you'll see the differences
6	between them or the Court would?
7	A. You're asking me if we were to review Dr.
8	Appel's pro forma and testimony and my testimony that
9	we would observe differences.
10	Q. And you'd observe all the differences at
11	least in that pro forma. I'm
12	A. Yes.
13	Q. Thank you. That's trying to shortcut
14	it. Thank you. That helps. All right. So moving on
15	from the pro forma.
16	HEARING OFFICER FUNDERBURK: Counsel, I
17	just want to clarify. I have the list of Rate
18	Bureau exhibits that includes an RB-14 reinsurance
19	program summary. The document that you've shown
20	also has Exhibit RB-14, page 1 at the top.
21	MR. FRIEDMAN: Yes. That was what I
22	was referring to.
23	HEARING OFFICER FUNDERBURK: Okay. So
24	it is the same document?
25	MR. SPIVEY: No, Your Honor.

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MR. FRIEDMAN: No. It's not. He's testified that he updated and changed, added some provisions and added some acronyms to the RB-14 from 2014. And I'm -- was trying to shortcut all of this and simply say, can we all determine the differences by comparing those two?

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HEARING OFFICER FUNDERBURK: 0kay. just wanted to clarify that they are, indeed,

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separate documents. You have your own RB-14. Thi s

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just happens to have an annotation RB-14 at the top

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of it, but it is not your RB-14 for the 2024 case.

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MR. SPIVEY: Correct, Your Honor.

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HEARING OFFICER FUNDERBURK: 0kay.

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Thank you for clarifying.

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BY MR. FRIFDMAN:

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Hopefully, that should take us out of the Q. 2014 rate filing, Your Honor. So I'm clearing that off

17

18 my desk.

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MR. FRIEDMAN: Oh, could you take 2014

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off of the screen, Madam Court Reporter? So all

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right. So that's been removed from the screen?

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Thank you.

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BY MR. FRIFDMAN:

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Does your cost of capital calculation include unrealized capital gains?

Page 127

- We're now not talking about RB-24 anymore? Α.
- 0. No. I'm talking very generally No. about --
 - Α. Cost of capital? Okay.
 - 0. Yes.

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A. So the cost of capital calculations, again, involve -- depends on the method -- but are aimed at understanding the return demanded by investors on an insurance company investment.

So unrealized capital gains, again, are an accounting concept and would concern how you calculate profit for an accounting profit for an insurance company, whether you include them or exclude them. Unrealized capital gains are not a -- a concept that's important for the cost of capital as I'm estimating it.

- Q. So my question is whether what, for accounting purposes, is characterized as capital gains, somewhere in your method of calculating cost of capital is that number considered?
- Well, to reiterate and maybe reformulate, Α. when I calculate a cost of equity using the risk premium methods, for example, I am calculating correlation with market returns, so correlation of security market returns.

When calculating well, I don't do a DCF

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calculation, but when Kroll calculates it, it's based on a discounted present value of dividends. is no unrealized gain that's entering into that calculation. I -- I don't understand.

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0. The present value of -- of dividends does not itself constitute unrealized capital gains?

So the -- the return that we're

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getting from these methods is what an investor is saying, what do I need from this investment over the next, you know, whatever horizon we're talking about? Say it's a one-year investment. So whether that return ends up in a realized -- being realized or unrealized

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isn't entering into the calculus. Q. I'm sorry. I -- I do have to ask this.

No.

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Let's just say that in an accounting statement, there

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is a number for what for accounting purposes is

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described as unrealized capital gains. Does that

18 19 number or is that number show up or is that number in some way subsumed within your calculation of the cost

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of equity?

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So unrealized capital gains, if we were Α. going to consider it -- and it is not considered in our

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accounting profit calculations -- would appear

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somewhere in these exhibits alongside -- so if you'll

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turn to Exhibit RB-24, page 13, there's a calculation

of realized capital gains.

So unrealized capital gains are not reflected in the calculation of the accounting return. The only thing that we're calculating or reflecting in the accounting return is the realized capital gains.

Neither of these is considered in the cost of equity calculation, which again is we're looking at in the case of the risk premium methods, the correlation of security returns with the overall market and in general attempting to determine the return that an investor demands for investing in an insurance company.

- Q. So I'm going to switch gears here and turn to the Department's -- the Book 3, and in particular Exhibit 1 in Book 3. Take your time, please.
 - A. Oh, no.
 - Q. Take your time, please.
- A. No, I -- I just demolished Book 3, I'm afraid.

MS. WHARRY: Your Honor, may I approach? I can give him Book 3 from the clerk temporarily while I put that back together?

HEARING OFFICER FUNDERBURK: I think

that might make it a little easier for you. Would you prefer to do that? We can -- we can get you a

different copy so you don't have to --

Page 130 THE WITNESS: Are we talking about 1 2 Schwartz? 3 MR. FRIEDMAN: Yes. 4 THE WITNESS: Okay. I think I have in 5 here, why don't we see how it goes? 6 MR. FRIEDMAN: Your Honor, would now be 7 a good time perhaps for a short break? 8 HEARING OFFICER FUNDERBURK: We can do 9 that, but we'll keep it as a very short break 10 because we do plan on recessing at 4 p.m. We'll 11 take a ten-minute recess. At ten minutes, I expect everyone at 10 after 3:00 to be in their seats 12 13 ready to proceed. We're in recess. Thank you. 14 (Recess taken from 3:00 p.m. to 3:11 p.m.) 15 HEARING OFFICER FUNDERBURK: Madam 16 Court Reporter, Madam Clerk, we are back on the 17 record. It is 3:11 p.m., and we are ready to 18 resume hearing. 19 And at the time we took recess, Mr. 20 Friedman, you were cross examining the witness. 21 Are you ready to resume? 22 MR. FRIEDMAN: I am, Your Honor. 23 HEARING OFFICER FUNDERBURK: Please go 24 ahead. 25 BY MR. FRIEDMAN:

Page 131 1 Q. Mr. Zanjani, I hate to be skipping around 2 so much with this, but if we could turn back to your 3 testimony, and in particular, page 10 of your 4 testi mony. 5 MR. SPIVEY: So Mr. Friedman, you're 6 now in RB-22? 7 Yes. I'm back in RB-22. MR. FRIEDMAN: 8 In this case, I have put aside the 2014 filing 9 enti rel y. 10 THE WITNESS: I'm there. 11 BY MR. FRIEDMAN: 12 Q. All right. Great. Where you refer under 13 the cost of capital that you considered for publicly 14 traded companies, you refer to the CAPM. Do you see 15 that? 16 Α. I do. 17 0. And what's that stand for? 18 Α. Capital Asset Pricing Model. 19 HEARING OFFICER FUNDERBURK: Just one 20 moment, please. We need to turn your microphone 21 back on. 22 I'm sorry, Mr. Friedman. If you could 23 begin again. 24 MR. FRIEDMAN: Sure. Begin again from

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HEARING OFFICER FUNDERBURK: For anything that the witness needs to have on the

4 BY MR. FRIEDMAN:

record.

- Q. Okay. So, as I understand it, you just testified, Dr. Zanjani, that your reference on page 10 to CAPM refers to the Capital Asset Pricing Model.
 - A. Correct.
- Q. And that's one of the models you used in determining your own cost of equity.
- A. So the entries that are listed as capital asset pricing model are those by Kroll. So those estimates, I didn't actually independently generate, but --
- Q. But you relied on those Kroll estimates of the CAPM for the purposes of determining your cost of equity.
- A. Well, my cost of equities were estimated using the risk premium methods.
 - Q. And part of that --
 - A. So what I'm doing --
 - Q. Excuse me.
- A. -- in this exhibit is gathering a variety of estimates of the cost of equity. So that's -- that's one of the cost of equities in that table.

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of

1		Q.	0kay.	And	S0	you	consi	der	thi	s a	S	one
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A. Well, again, my calculation of the cost of equity was done independently. It -- the purpose of this table is to list a whole bunch of different estimates of the cost of equity for the reason that I believe it's a hard thing to pin down, and different methods produce different estimates. And if we're using a single estimate, we might get a very misleading picture.

So I like to appeal to something like the wisdom of crowds, not very literally. I'm not calculating an -- an average or something like that, but I'm trying to get a sense of where all the numbers are.

- Q. Okay. Is it fair to say, then, you reviewed or compared the Kroll CAPM in the course of arriving at your cost of equity?
- A. Again, my numbers were generated independently of Kroll --
 - Q. Understood.
 - A. -- so I did not --
 - Q. But you reviewed --
- A. -- I did not consider it. I'm -- I'm

 listing it as an alternative estimate of the cost of

1 equity.

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- Q. Does the cop -- does a Capital 0kay. Asset Pricing Model contemplate consideration of income on invested capital?
 - Can you repeat the question, please? Α.
- 0. Does a Capital Asset Pricing Model Sure. contemplate the consideration of income on invested capi tal?
- Α. The Capital Asset Pricing Model is a model that predicts the expected return demanded by investors in a security on the basis of the correlation of that security with the overall security market and a riskfree rate as well.

So the -- to elaborate, the expected return for a security is equal to the risk-free rate plus a beta, which measures that security's correlation with the overall stock market times a market risk premium.

- And part of that measure is the return on income from invested capital.
- Α. The measure, again, is a measure of expected return on a security, so the expected return that an investor in that security would demand to invest in that security.
- You used a DCF formula to determine your total return. Is that correct?

Page 135

A. So the total return we're referring to is the total return on page 1-A -- 1-A of Exhibit RB-24?

- Q. Or also referred to at page 3 of your narrative.
- A. So, no. The -- the total return referred to on page 3 in the narrative is -- is the same one that is on page 1-A of RB-24.
 - Q. 0kay.
- A. So that's an accounting return that has nothing to do with the DCF.
- Q. Okay. So you didn't use the DCF formula to determine what you've characterized here as the total return?
 - A. Absolutely not.
- Q. I'm not asking whether you used them as a method in your calculation of the cost of equity, but just for other economists or perhaps for other actuaries, is the CAPM used as a method to calculate the cost of equity?
- A. The CAPM is probably the dominant method used in the financial community to calculate the cost of equity. There are other methods, so the DCF being one of them, and there are some others that are used, as well, such as the -- the Fama-French and some others.

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Q. Okay. So the build-up method, is that another method of estimating the cost of equity, albeit not one that you say you used in your report?

- A. Yes. It's a method that some use. I think that's less accepted than the others in the community, but it is one that is appears and is produced by Kroll.
- Q. And you just mentioned the Fama-French or Fama-French 5 factor. Is that another method that, other than yourself, others use to calculate the cost of equity?
 - A. Yes.
 - Q. And the implied premium method as well?
- A. So I don't think that is -- the implied premium method would be widely recognized. That terminology would be widely recognized to refer to a particular method.

That is -- the implied premium method that I'm listing on my exhibit is referring to a method being used by Aswath Damodaran, where he's basing the market risk premium not on a historical average, which is more typical in implementations of the CAPM, but on -- he's taking into account the current level of stock valuations and determining what he thinks is a forward-looking market risk premium.

but the

Page 137

1	So it's similar to a CAPM,
2	implementation is different.

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- But is it a method used by others to 0. calculate the cost of equity, whether it's similar to CAPM or not?
- A. Yes. It's used by, at least, by Aswath Damodaran, and he's a respected expert in that area.
- 0. And you refer to the Damodaran method in your report; do you not?
 - Α. I'd have to read it.
 - 0. Let's see.
- So I -- I do have a section on that Α. method. Yes.
- Thank you. And does the risk premium over Q. treasury bill method, is that also used by others, not you, to arrive at an estimate of the cost of equity?
- So we're referring to the -- it was used Α. by me, I believe, right?
 - 0. 0kay.
 - Α. It's --
- 0. But you've explained that, as I understand it, your cost of equity calculation is a different concept than actually looking at the returns from investment on capital surplus. Is that a fair summary?
 - Α. Well, investment returns on capital

surplus, that's an accounting concept. The risk premium method is one of the methods used to determine the cost of equity. The risk premium method, one of the main reasons that I'm implementing those methods is that there is some question about whether a risk-free asset can be used in calculating the cost of equity in North Carolina.

So, I'm, again, I'm not a lawyer and don't claim to be able to parse the various legal decisions and orders over the years. But the -- for example, the risk premium over the AAA bond and the risk premium over the BAA bond is to be providing a method that is not -- that is not using a risk-free asset as a reference asset and is thus -- thus not subject to the criticism that it's based on a risk-free asset.

- Q. Outside of North Carolina, do other economists or actuaries use a risk premium over treasury bill method to determine their cost of equity?
 - A. So that's a common method. Yes.
- Q. So in determining what funds a North Carolina homeowner's carrier would have available to invest -- invest, first of all, you did determine that, did you not? I think we're mentioning particularly that you added prepaid expenses and agent balances in determining that.

Page 139 I subtracted those if we're talking about, 1 Α. 2 page 7. 3 0. Um-hum. 4 Α. Is that what we're on, RB-24? 5 0. Yes. You subtracted them because they 6 were unavailable to invest? 7 So the idea is that premium dollars Α. Yeah. 8 are received. And one of the advantages or one of the 9 sources of income that insurance companies receive 10 concern investing those premium dollars, and that has 11 to be accounted for in the -- in a profit calculation. However, some of those, some components of the 12 13 premium dollar are not available to invest. So, this 14 calculation deducts those quantities that are not 15 avai LabLe. That's the intention. 16 Q. Besides prepaid expenses and agent 17 balances, what other portions of the premium dollar do 18 you consider unavailable to invest? 19 Α. So are we talking about the -- under

Q. I'm asking -- I mean, so --

A. Well --

- Q. -- is that another one that you consider unavailable to invest?
 - A. So the premium dollar comes in, and it --

premium reserve?

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various portions of it might be used for expenses.

Portions of it are used for -- for underwriting

expenses. Portions of it are used for purchasing

reinsurance, and there are also balances that are held

by agents, so -- so those aren't received. And there

are also reinsurance recoverables that are not

available to invest as well.

- O. So what you've just discussed, those are for your, in your opinion, the parts of the premium dollar that are unavailable for an insurance company to invest.
- A. Well, it's not -- not necessarily an exhaustive list, but those are the major components. Yes.

MR. FRIEDMAN: Your Honor, if I could have about five minutes to just go back over my questions, and then I may be at the end.

HEARING OFFICER FUNDERBURK: Okay.

MR. FRIEDMAN: I'll just turn this off.

(Discussion off the record)

MR. FRIEDMAN: Your Honor, back on the record, and those are all (inaudible) questions I have -- is my microphone active now? Did you catch that last bit? No? Okay.

I'm ready. Back on the record, Your

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Page 141 1 Honor, and that concludes my cross examination of 2 Dr. Zanjani. 3 HEARING OFFICER FUNDERBURK: Mr. 4 Spivey, redirect? 5 MR. SPIVEY: Your Honor, may I ask that we take about, let's say, ten minutes. So we break 6 7 out and I'll determine whether I have anything or 8 not. I'm thinking I have a very, very few 9 questions. So I'm thinking we could do that and 10 not endanger 4 o'clock at all. 11 HEARING OFFICER FUNDERBURK: Okay. So 12 you're asking for a true recess of about ten 13 minutes so you can go in the breakout room and have 14 some discussion? 15 MR. SPIVEY: Yes, please. 16 HEARING OFFICER FUNDERBURK: Okay. We 17 are in recess at 3:32 p.m. We'll go back on the 18 record at 4:42. 19 MR. SPI VEY: Thank you. 20 HEARING OFFICER FUNDERBURK: Thank you. 21 (Recess taken from 3:32 p.m. to 3:42 p.m.) 22 HEARING OFFICER FUNDERBURK: Madam 23 Court Reporter, Madam Clerk, we're back on the 24 record. I'll remind the witness, you are still 25

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under oath from being sworn in earlier.

Mr. Spivey, do you have redirect?

MR. SPIVEY: Your Honor, I do have just a few questions, and thank you for the -- the short break.

HEARING OFFICER FUNDERBURK: Oh, you're welcome. Please proceed.

MR. SPIVEY: All right. Are we ready?

REDIRECT EXAMINATION

BY MR. SPIVEY:

Q. Dr. Zanjani, on cross examination,
Department counsel asked you a number of questions. As
I recall, it pertained to it's what I would call the
topic of agents' balances, and he asked you questions
pertaining to whether you understood that companies
often sweep from agents on a regular periodic basis,
maybe you said monthly. Do you recall that set of
questions generally?

A. I do.

HEARING OFFICER FUNDERBURK: Mr.

Spivey, I believe they may be having a little difficulty hearing you in the microphone. You want to move that closer? And I -- I empathize. I get fussed out for this on a regular basis.

MR. SPI VEY: Okay.

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HEARING OFFICER FUNDERBURK: So if you

could just have it a little closer. Thank you.

MR. SPIVEY: Do I -- would you like me

4 to repeat --

HEARING OFFICER FUNDERBURK: Just have a little closer to the microphone. Is that better?

MR. SPIVEY: Do I need to repeat my question?

BY MR. SPIVEY:

- Q. Dr. Zanjani, if we assume that companies, in fact, conduct sweeps on some kind of periodic basis, will the results of that practice be reflected in the annual statement data that I believe you testified you looked at?
 - A. It is my understanding that they would.
- Q. All right. There were also several questions from Department counsel regarding your table on page 10 in Exhibit RB-22, your pre-filed testimony, and a number of questions there pertaining to, specifically the Kroll CAPM method? You recall, generally, those questions?
 - A. I do.
- Q. Dr. Zanjani, if you had not included those particular examples of the cost of equity from third parties or, for that matter, any of the others on that

page, what would the effect have been on your conclusions in this matter as you presented them in your testimony?

A. So the ultimate conclusion of my analysis was to compare the accounting return, derived from the selected underwriting provision without including investment income on capital and surplus. And I found that that return was 7.43 percent to 7.7 percent depending on what -- or 7.72 percent, I believe it was, depending on what assumptions were used.

That figure was below every estimate I had, ultimately, for the both the cost of equity and for the weighted average cost of capital. So removing any individual estimate, or any set of estimates even, would not have an effect on my conclusions.

- Q. Dr. Zanjani, in providing your analysis to the Rate Bureau for use by the Rate Bureau in this rate review and then, obviously, the rate filing that resulted from that rate review, have you done anything or presented anything that you believe or understand to be illegal?
 - A. Not to my knowledge. No.
- Q. In providing that analysis to the Rate Bureau, for its use in the rate review and this -- and this rate filing, have you done anything that violates

Page 145 1 any professional obligation you may have as an 2 economi st? 3 Α. No. 4 MR. BEVERLY: May we have a moment, 5 Your Honor? 6 HEARING OFFICER FUNDERBURK: Yes. 7 MR. SPIVEY: Your Honor, that concludes 8 my examination on redirect. 9 HEARING OFFICER FUNDERBURK: Thank you. 10 Is there any recross? 11 MR. FRIEDMAN: No, ma'am. 12 HEARING OFFICER FUNDERBURK: Thank you. 13 You're excused. Thank you for your testimony 14 today. You may step down. 15 THE WITNESS: Thank you, Your Honor. 16 HEARING OFFICER FUNDERBURK: All right. 17 Counsel, in reviewing our -- sorry, let me get the 18 microphone a little closer to me -- pre-hearing 19 order, it appears that we had still reserved time 20 for Dr. Zanjani's testimony tomorrow morning. Will 21 counsel -- will you be prepared to proceed with Dr. 22 Anderson -- I'm sorry, Mr. Anderson and Ms. Mao 23 tomorrow? 24 MR. SPIVEY: Your Honor, that is our 25 expectation.

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HEARING OFFICER FUNDERBURK: That's your expectation.

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That we will proceed MR. SPI VEY: tomorrow with -- with Mr. Anderson first, to be followed by Ms. Mao.

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HEARING OFFICER FUNDERBURK: Okay. 0ne thing I will note, we don't need to address it now, but we will, at some point, need to address the various exhibits.

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Mr. Friedman, you referenced several of the Rate Bureau's exhibits, and you referenced two of DOI's exhibits. The only exhibit that we've had admitted at hearing thus far was Rate Bureau Exhibit 4. So we don't need to address those now, but at some point, we will need to make sure that the record is clear and clean as to what exhibits

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have been introduced in. MR. FRIEDMAN: And we can discuss among

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counsel whether we can agree to most of them. we can certainly discuss among counsel whether we

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can agree to present to you, Your Honor, everything

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HEARING OFFICER FUNDERBURK: | | | | | | | | | I'll let counsel discuss that and propose the

options to me. Is -- are there any housekeeping

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in one omnibus.

	Page 147
1	matters we need to address before we recess for the
2	day?
3	MR. SPIVEY: None from the Rate Bureau.
4	HEARING OFFICER FUNDERBURK: Any from
5	DOI, Mr. Friedman?
6	MR. FRIEDMAN: None, Your Honor.
7	HEARING OFFICER FUNDERBURK: All right.
8	Then I will recess us until 9:00 a.m. tomorrow
9	morning. We will begin promptly at 9:00 a.m., so
10	I'll ask counsel to be seated and prepared to go at
11	9:00 a.m. And if there are any housekeeping
12	matters we need to address, which I don't expect,
13	we'll address those first, and then we'll move into
14	witness testimony.
15	Thank you for your time today. I'll
16	see you tomorrow morning. And
17	MR. SPI VEY: Thank you.
18	HEARING OFFICER FUNDERBURK: we're
19	off the record. Thank you.
20	* * * *
21	(Hearing adjourned at 3:50 p.m.)
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1	CERTIFICATE OF REPORTER
2	STATE OF NORTH CAROLINA
3	COUNTY OF WAKE
4	T. Manda Carrent and the state of
5	I, Wendy Sawyer, court reporter, do
6	hereby certify that the witnesses whose testimony
7	appears in the foregoing hearing were duly sworn;
8	that the testimony of said witnesses was taken by
9	me to the best of my ability and thereafter reduced
10	to typewriting under my direction; that I am
11	neither counsel for, related to, nor employed by
12	any of the parties to the action in which this
13	hearing was taken, and further that I am not a
14	relative or employee of any attorney or counsel
	employed by the parties thereto, nor financially or
15	otherwise interested in the outcome of the action.
16	
17	This, the 7th day of October, 2024.
18	1 , , ,
19	Jens/C
20	7 0
21	
22	WENDY SAWYER, Court Reporter
23	Notary Public #202411500157
24	Commission Expires April 23, 2029