



“When You Talk - We Listen!”



MANITOBA PUBLIC UTILITIES BOARD

Re :

PUBLIC HEARING

RE: MANITOBA PUBLIC INSURANCE

GENERAL RATE APPLICATION

FOR THE 2013/14 INSURANCE YEAR

Before Board Panel:

Regis Gosselin - Board Chairman

Karen Botting - Board Member

Anita Neville - Board Member

HELD AT:

Public Utilities Board

400, 330 Portage Avenue

Winnipeg, Manitoba

October 18, 2012

Pages 1353 to 1541

1	APPEARANCES	
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3		
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1	LIST OF EXHIBITS		
2	NO.	DESCRIPTION	PAGE NO.
3	MPI-31	Peer Review	1358
4	CAC (MANITOBA)-10	Long-form curriculum vitae	
5		of Professor Simpson	1398
6	CAC (MANITOBA)-11	Slides from PowerPoint	
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1		LIST OF UNDERTAKINGS	
2	NO.	DESCRIPTION	PAGE NO.
3	20	CAC (MANITOBA) to review a) whether	
4		Ms. Sherry reviewed Professor	
5		Simpson's slide show, and	
6		b) whether she commented upon it,	
7		in terms of the estimate of the 100	
8		million associated with the minus 20	
9		percent decline in equities over a	
10		cumulative four (4) year period	1472
11	21	CAC (MANITOBA) to review the RA/VaR	
12		outputs to respond, in terms of	
13		whether they were consistent in	
14		the core estimates being 25	
15		percent equity and also two point	
16		five (2.5) year horizon	1486
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25			

1 --- Upon commencing at 9:55 a.m.

2

3 THE CHAIRPERSON: I believe that  
4 everybody's in position. I have an inkling of what a  
5 groom at the alter must feel like. So without further  
6 adieu, we'll proceed with today's deliberations. I  
7 believe we have some documents to table?

8

9 MPI PANEL RESUMED:

10 MARILYNN MCLAREN, Resumed

11 HEATHER REICHERT, Resumed

12 LUKE JOHNSTON, Resumed

13

14 MS. KATHY KALINOWSKY: Sure, I can  
15 speak to that. We have a peer review that was filed  
16 electronically yesterday. And I circulated it in  
17 advance on Tuesday to board counsel and also to CAC's  
18 counsel right away, as soon as it was signed. And  
19 would like to have that marked as exhibit 31 for MPI.

20

21 --- EXHIBIT NO. MPI-31: Peer Review

22

23 MS. KATHY KALINOWSKY: And Mr. Johnston  
24 will be speaking to that, but prior to speaking to  
25 that, Mr. Johnston did want to respond to a question

1 that you asked Mr. Chair. And it's in respect of ORVs.  
2 And it wasn't an undertaking, but he said he would look  
3 into it. So if that's acceptable to everybody -- and I  
4 see some nods here -- he can speak to that first, and  
5 then he will talk about the peer review.

6 MR. LUKE JOHNSTON: Thank you. So on  
7 page 883 of the October 1st transcripts, we were asked,  
8 basically, for information on collisions involving ORVs  
9 operated by minors. And so, two (2) -- two (2) items  
10 here.

11 I can confirm that we do know the age of  
12 the driver in the majority of these claims, about 89  
13 percent of them.

14 And anticipating a possible next  
15 question, for Basic ORV claims in the past five (5)  
16 years, there were six (6) claims for drivers under age  
17 fourteen (14), compared to a total of two hundred and  
18 thirty-six (236) claims with age data, just to give you  
19 an idea of the proportion.

20 MS. KATHY KALINOWSKY: Thank you. And  
21 unless there's any questions on that, Mr. Johnston  
22 would like to address the issue of the peer review that  
23 was just filed and marked as Exhibit number 31.

24 MR. LUKE JOHNSTON: Okay. In regards  
25 to the -- the peer review done by Joe Cheng, I'll start

1 by saying that I thought, first of all, that the -- Joe  
2 Cheng & Partners did a very excellent job on the peer  
3 review. They asked me a lot of questions, which is a  
4 lot of work, but I thought they did a very thorough  
5 review of our report.

6                   Turning to page 3, you'll see that the -  
7 - the purpose of the engagement is to conduct an  
8 external actuary -- actuarial review of the DCAT report  
9 prepared by -- by myself in accordance with standards  
10 published by the Actuarial Standards Board in Canada.

11                   And on the bottom of page 3, Mr. Cheng's  
12 contact information is there for your information. On  
13 page 4, the scope is outlined, and I'll read those in  
14 briefly. The:

15                   "1. To ascertain that the work of  
16 the chief actuary was in -- within  
17 the range of accepted actuarial  
18 practice in Canada.

19                   "2. To review the appropriate --  
20 appropriateness of the assumptions  
21 and the methods employed.

22                   "3. Determine whether the DCAT  
23 report accurately describes the  
24 assumptions and methodology employed  
25 by the chief actuary."



1 And:

2 "4. To review the adequacy of  
3 procedures, systems, and the work of  
4 others relied on by the chief  
5 actuary. This includes checks on  
6 data integrity and checks on  
7 procedures and methodologies used to  
8 validate the calculations and  
9 results."

10 The -- the key section in the report is  
11 obviously the findings and recommendations, and I'll --  
12 I'll just go through those at a high level. And I'll  
13 start with that.

14 The -- number 1 states that the dec --  
15 decline in equity market scenario that the -- that the  
16 selection I made in the report was based on four (4)  
17 year data using the TSX from 1919 to present. Mr.  
18 Cheng notes that we should also review the financial  
19 condition annually.

20 And I can say that we do look at that.  
21 But as we discussed in the hearings, the four (4) year  
22 was selected, as it was believed to be both plausible  
23 and the most adverse. So in light of this  
24 recommendation, we will seek to pro -- provide mul --  
25 multiple year impacts -- one (1) year, two (2) year,

1 three (3) year -- in future reports for the Board's  
2 information. Number 2, it says:

3 "The decline in equity market  
4 scenario, the 40 percent decline, is  
5 based on the approximate 95th  
6 percentile of cumulative four (4)  
7 year returns on the TSX."

8 As we've discussed. Mr. Cheng notes  
9 that normally actuaries would select the 95th to 99th  
10 percentile range and that I did not. We have discussed  
11 in -- in these hearings why I did not select either the  
12 5th -- the 95th or -- or higher percentile. I -- I  
13 also provided a -- Professor Simpson's evidence in  
14 regards to equities to Mr. Cheng so he -- he could have  
15 that perspective as well.

16 In addition to that, we discussed  
17 briefly the increased volatility of the current stock  
18 market. It was also a concern to Mr. Cheng. And it is  
19 my understanding that Mr. Cheng would normally use a  
20 decline in equity scenario of at least this magnitude,  
21 in combination with other asset impacts.

22 Number 3, following that same topic, Mr.  
23 Cheng notes that investment risk comes, obviously, from  
24 a variety of sources, not just equities. He would like  
25 to see a combined scenario that includes all asset

1 types in the DCAT. The -- the main reason that we did  
2 not do that in the MPI DCAT is, first of all, we have  
3 an asset liability management strategy that we believe  
4 is very reliable.

5                   We believe that the -- the com -- by  
6 combining real estate with our equity portfolio that we  
7 don't assu -- recognizing the correlations between the  
8 two (2) asset categories, that we don't have a  
9 significant increase in risk relative to what the  
10 equity scenario presents. And it's also a -- a  
11 combined asset model is very difficult to -- to model,  
12 as well. But, a -- a good recommendation and we'll  
13 look at that for next year's report.

14                   Number 4, suggests that -- I'll read it  
15 in:

16                   "Most scenarios with major changes in  
17 expected claims should include a  
18 review of deferred policy acquisition  
19 expenses. Such a review often  
20 results in a write-down of deferred  
21 policy acquisition expenses, or even  
22 a premium deficiency."

23                   Mr. Cheng is definitely correct in this  
24 regard. We did -- if our unearned premiums are not  
25 enough to cover our losses and expenses in a particular

1 scenario, we -- we could have a premium deficiency. So  
2 that would height -- that would increase the impact of  
3 a -- the loss ratio scenario, but not to a -- a sig --  
4 like, a very significant extent. I would estimate the  
5 -- the impacts would be less than \$10 million. But  
6 definitely a valid consideration, which we'll include  
7 in future reports.

8                   Number 5, many items on the statement of  
9 operations that affect the net income are calculated  
10 using -- using figures found in the statement of  
11 financial position. Mr. Cheng notes that he requested  
12 various figures from us to -- to understand our  
13 forecast and in terms of his review. But he would like  
14 to see proj -- forecasts of our financial position,  
15 projected balance sheets, et cetera. And I can tell  
16 you we are definitely working on that functionality,  
17 hopefully, for next year's DCAT.

18                   Number 6, it states:

19                   "As Basic auto has long-term  
20                   liabilities, it is always prudent to  
21                   stress-test a scenario in which its  
22                   claims revision is understated."

23                   So in the -- in the DCAT, I -- I have a  
24 fairly -- fairly lengthy section explaining why it was  
25 my opinion that the claim liabilities were not a top

1 three (3) risk. And a few of the reasons are the  
2 relative stability of our reserving patterns, our asset  
3 liability management strategy, and the expectation that  
4 any changes will be gradually recognized.

5           That said, Mr. Cheng believes that this  
6 risk, even if it seems fairly arbitrary in terms of 10  
7 percent, 20 percent, he believes it's important to at  
8 least include a -- a minimum, a 10 percent potential  
9 deviation in the DCAT report. That would not be the  
10 top scenario in the DCAT as the DCAT is currently  
11 prepared. It would be about 140 million, but we'll  
12 note that point for next year's review.

13           Finally, the -- the issue of AOCI. Mr.  
14 Cheng states the definition of a satisfactory future  
15 financial condition used in my report. He states that:

16           "I believe the threshold for failing  
17 this test should include monies  
18 available under accumulated other  
19 comprehensive income section of total  
20 equity, not just the RSR."

21           So we talked a little bit yesterday  
22 about AOCI. Clearly, in -- in my report, my focus has  
23 been on the rate stabilization reserve. Mr. Chair  
24 spoke of AOCI being "soft" in some cases. We --  
25 definitely when we're looking at surcharge or rebate

1 decisions I -- I think you definitely want to look at  
2 the AOCI.

3                   However, I think in terms of the RSR,  
4 what we do in the DCAT with the actual recognition of  
5 losses, and which allows for some recovery from a stock  
6 market crash for example, in my opinion that's the most  
7 appropriate way to -- to quantify the -- the RSR  
8 requirements.

9                   If we had a very significant single year  
10 impact, we would have substantial unrealized losses in  
11 a given year. I wouldn't -- it's my opinion that I  
12 wouldn't expect the -- the Board to immediately issue a  
13 surcharge without seeing the recovery or realization of  
14 losses.

15                   The -- at the bottom of the page, Mr. --  
16 Mr. Cheng notes that -- that:

17                   "MPI and the regulators should  
18                   consider AOCI when determining  
19                   satisfactory financial condition, and  
20                   when dec -- when deciding whether to  
21                   issue rebates and/or surcharges, and  
22                   MPI should includes these forecasts  
23                   in their DCAT."

24                   So that's basically what -- what we've  
25 discussed. Just above that, Mr. Cheng notes -- states:

1 "Based on my modelling that the --  
2 the total equity remains greater than  
3 zero in all adverse scenarios  
4 tested."

5 And as we've previously discussed, as --  
6 as of year end we were holding two hundred (200) --  
7 well, \$210 million in Basic retained earnings which, of  
8 course, is higher than the -- the DCAT recommendations.  
9 So that -- that is definitely true, assuming no rebate.

10 Turning to page 7, the signed opinion  
11 from Joe Cheng is included on this page and the opinion  
12 states that the -- 1:

13 "The -- the work of the chief actuary  
14 is within the range of accepted  
15 actuary practice in Canada."

16 2. He believes that:

17 "The assumptions and methods employed  
18 are appropriate."

19 3. Mr. Cheng's opinion is that:

20 "The -- the DCAT accurately describes  
21 the assumptions and methodology  
22 employed by the chief actuary."

23 And finally that:

24 "The procedure and systems relied on  
25 by the chief actuary are adequate and

1 sufficient to ensure an appropriate  
2 level of data integrity, and the  
3 accuracy of calculations and  
4 results."

5 That is the most important sections of  
6 the report, in my opinion. The -- the remaining pages  
7 are there for your information and questions.

8 THE CHAIRPERSON: I have a few  
9 questions. In relation to the -- item number 6 on page  
10 6. It talks about scenarios which involve an  
11 understatement of claims provisions by a reasonably  
12 high percent.

13 Now am I wrong to assume here that the  
14 kind of thing we're talking about would be, for  
15 example, a change in PIPP coverage instituted by  
16 legislature that suddenly dramatically increases your  
17 liability exposure? Is that the kind of thing that...?

18 MR. LUKE JOHNSTON: I -- I do have --  
19 in the DCAT there's a separate risk section that  
20 describes government and political action. And my  
21 opinion in the report was that the -- our expectation  
22 is that the government wouldn't impose such a change on  
23 us that would put us into, you know, a negative or a  
24 very difficult RSR position.

25 THE CHAIRPERSON: Would that encompass



1 as well a court decision that has repercussions on  
2 other claims? In other words a court decision that  
3 says, You're ex -- you're liable for this particular  
4 exposure, and has the implication that other claimants  
5 would be able to seek redress from MPIC under the same  
6 precedent?

7

8

(BRIEF PAUSE)

9

10 MR. LUKE JOHNSTON: In -- in my opinion  
11 again there's nothing of that nature that I would  
12 expect to apply -- be applicable to the Basic program  
13 or produce such a significant impact to -- to make this  
14 a -- like a top three (3) or four (4) risk factor.

15 MS. KATHY KALINOWSKY: If I could just  
16 add to that, perhaps for your clarification, you asked  
17 if there would be any court decision. Under, I think  
18 it's Section 72 of the MPIC Act says that there's tort  
19 action to be pursued in any court.

20 So that's a complete no-fault system now  
21 for bodily injury. So if there are any appeals with  
22 respect to decisions on benefits that MPI makes, those  
23 go externally to the tribunal, which is the Automobile  
24 Injury Compensation Appeals Commission. So it's just a  
25 slight clarification there.

1 (BRIEF PAUSE)

2

3 THE CHAIRPERSON: That's it for  
4 questions from the panel. So I guess we turn it back  
5 to you, Ms. Grammond.

6

7 RE-CROSS-EXAMINATION BY MS. CANDACE GRAMMOND:

8 MS. CANDACE GRAMMOND: Thank you, Mr.  
9 Chairman. I do have a few questions for Mr. Johnston  
10 with respect to the peer review. So firstly, if we  
11 look at page...

12

13 (BRIEF PAUSE)

14

15 MS. CANDACE GRAMMOND: Does that sound  
16 better? Okay. I feel like I sound really loud, but  
17 I'll just keep going. So, Mr. Johnston, page 4 of the  
18 report, this is the section entitled, "Scope," "Scope  
19 of the Report." And I appreciate that you read in what  
20 appears there in your earlier evidence.

21 Would you agree that the description  
22 seen here of the scope of review is described  
23 accurately?

24 MR. LUKE JOHNSTON: Yes, I would.

25 MS. CANDACE GRAMMOND: And can you tell

1 us whether there were any instructions or limitations  
2 communicated to Mr. Cheng, which might have constrained  
3 the intensity of his review in any way?

4 MR. LUKE JOHNSTON: Not at all, just  
5 that the -- the peer review would be done as per  
6 actuarial standards of practice.

7 MS. CANDACE GRAMMOND: So is it your  
8 understanding then that actuarial standards of practice  
9 would have determined the intensity of the review that  
10 Mr. Cheng would have deemed appropriate?

11 MR. LUKE JOHNSTON: Yes. The signed  
12 opinion would have followed the standards around  
13 reviewing other actuaries work.

14 MS. CANDACE GRAMMOND: And can you tell  
15 us who made the decision to engage Mr. Cheng to  
16 undertake a review of the DCAT?

17

18 (BRIEF PAUSE)

19

20 MR. LUKE JOHNSTON: The -- a peer  
21 review was also done of the DCAT, when Ernst & Young  
22 was our appointed actuary. When we brought the DCAT  
23 in-house, we made the decision that a peer review was a  
24 good idea given that this would be the first in-house  
25 DCAT we've ever done. So that external act --

1 actuarial opinion was important, both for this process  
2 and for my education.

3 MS. CANDACE GRAMMOND: So should the  
4 Board expect to see this type of external review done  
5 for future DCATs as well?

6 MR. LUKE JOHNSTON: Yes.

7 MS. CANDACE GRAMMOND: Okay. I'll ask  
8 you then to turn over the page to page 5 of the report  
9 where we have the findings and recommendation section.  
10 My first question relates to the preamble under that  
11 heading where there's reference to correspondence to  
12 you, Mr. Johnston, dated October 11th, 2012.

13 Can you tell us whether there were any  
14 matters raised in that correspondence that are not  
15 fully discussed in this report?

16 MR. LUKE JOHNSTON: The -- the --  
17 really, the only discussion that we had -- clearly we  
18 had many discussions while the review was being done.  
19 We had some discussions around AOCI and his  
20 understanding of -- from his perspective why that was  
21 so important in terms of the RSR target.

22 And I just basically explained my view  
23 as to why I don't believe that that should be used in  
24 just establishing our RSR target. But again, he  
25 believes that that's an appropriate consideration and

1 wanted to leave that recommendation in the report.

2

3

(BRIEF PAUSE)

4

5 MS. CANDACE GRAMMOND: So would it be  
6 fair to say with respect to that piece that you and Mr.  
7 Cheng agreed to disagree?

8

9 MR. LUKE JOHNSTON: Yeah, I -- I think  
10 it's fair to say that we didn't fully align on several  
11 of these recommendations. As I went through this, you  
12 could see that I didn't necessarily do exactly what he  
13 would have done. But in explaining my methodology, he  
14 does believe it's within accepted actuarial practice,  
15 but he -- he has some recommendations to how to  
16 possibly improve that.

17 MS. CANDACE GRAMMOND: Okay, looking  
18 then to recommendation number 1 on page 5. This is  
19 where Mr. Cheng has recommended consideration of one  
20 (1) year returns in the equity decline adverse  
21 scenario.

22 Can you tell us about your understanding  
23 for his rationale with respect to that recommendation?

24 MR. LUKE JOHNSTON: I don't want to  
25 speak completely for Mr. Cheng, but my understanding of  
our discussions is that he would like to see the -- the

1 full range of outcomes under one (1) to four (4) year  
2 type of scenarios. Again, I explained to him why I  
3 selected the four (4) year.

4 But his point, and again recognizing his  
5 belief of inclusion -- including AOCI, one (1) year  
6 scenarios have been more extreme than the four (4) year  
7 type of scenario that I've -- I've used. And, again,  
8 that four (4) year scenario was intended to, again,  
9 allow the recognition of losses and -- and recovery of  
10 the stock market. If -- if I used single-year events,  
11 I'd definitely get bigger impacts, but we'd probably be  
12 arguing here that those impacts are not as relevant if  
13 we immediately recover from them.

14

15 (BRIEF PAUSE)

16

17 THE CHAIRPERSON: Can I ask a question,  
18 a follow-up question? I guess I -- I think I  
19 understand the -- the arguments here from both sides.

20 In the scenario where you're con --  
21 you're -- you're entrusting the management of a stock  
22 portfolio to outside contractors through the  
23 department, are they able to say, We're going to close  
24 out the position, without consulting you?

25 MS. MARILYN MCLAREN: Yes, the

1 investment managers make independent decisions in their  
2 best judgment about the portfolio that -- that they are  
3 managing. They do not consult with the Department of  
4 Finance or MPI on any individual trading decisions at  
5 all.

6 MS. CANDACE GRAMMOND: Mr. Johnston,  
7 just with respect to this issue that we've been  
8 discussing in Mr. Cheng's report, can you confirm that  
9 -- your understanding that it's his view that the  
10 assumed 40 percent decline in equities is reasonable  
11 and that he would combine a decline of at least 40  
12 percent with declines in other assets as well?

13 MR. LUKE JOHNSTON: Yes, that's my  
14 understanding, that he would typically look at a -- a  
15 large equity decline similar to the 40 percent, but  
16 also include declines in real estate and changes to  
17 interest rates.

18 MS. CANDACE GRAMMOND: I just want to  
19 clarify, Mr. Johnston, in -- in the answer that you  
20 just gave, you used the word "similar". Previously, I  
21 think you said the phrase "at least".

22 Can you just clarify for us those two  
23 (2) different words?

24 MR. LUKE JOHNSTON: Yeah, I -- I just  
25 want to be careful not to speak too much for Mr. Cheng.

1 I'm -- I'm discussing conversations we had, in terms of  
2 his review of this scenario. So, again, my  
3 understanding of the scenario that he would typically  
4 run includes equity decline; a real estate decline, not  
5 necessarily of the same magnitude, but also  
6 significant; and changes in interest rates.

7 MS. CANDACE GRAMMOND: Thank you. Now,  
8 Mr. Johnston, with respect to recommendation 3 that we  
9 see on page 5, Mr. Cheng has recommended the testing of  
10 an integrated adverse scenario modelling with declines  
11 in all major asset categories, including consideration  
12 of correlations.

13 Given your familiarity with the  
14 Corporation's investment portfolio and risk profile,  
15 how would you expect the significance of this  
16 recommended adverse scenario to compare to the equity  
17 decline scenario that we have in the DCAT before us?

18 MR. LUKE JOHNSTON: So, first off, we  
19 have discussed this particular type of model in -- in  
20 great detail internally, and it does present many  
21 difficulties especially when you're talking about  
22 correlations between different asset categories, some  
23 of which don't necessarily have a great -- a great deal  
24 of data.

25 We're also having this debate at the



1 hearings right now in terms of, you know, what period  
2 is appropriate to use. And these are all -- all things  
3 that we'd have to go back and really digest and  
4 understand.

5                   As I've stated al -- already, my  
6 rationale for leaving out interest rates was that I  
7 expect those -- any interest rate type impacts to be  
8 largely offset. And also our review of real estate  
9 data of -- that I had didn't indicate a very strong  
10 positive correlation with equities. But I do agree  
11 that there could be some correlation and -- and  
12 possibly more -- a stronger correlation in terms of  
13 extreme volatility, for example.

14                   So we'll -- we'll look at this in more  
15 detail. Also in light of all the discussions we've had  
16 here about equities.

17                   MS. CANDACE GRAMMOND: So is it fair to  
18 say then, Mr. Johnston, that pending that review, we  
19 don't really know what the -- what a comparison would  
20 be, in terms -- terms of the current DCAT?

21

22                   (BRIEF PAUSE)

23

24                   MR. LUKE JOHNSTON: If -- if I added a  
25 real estate impact decline to the existing scenario, it

1 would clearly make the -- make it increase. If I also  
2 included a interest rate impact that was largely offset  
3 but net unfavourable to the Corporation, that would  
4 also increase the impact.

5                   Again -- but again, just to be fair, I -  
6 - I haven't reviewed that in detail. My expectation  
7 would be larger but -- but I'll leave it at that.

8

9                   (BRIEF PAUSE)

10

11                   MS. CANDACE GRAMMOND: Now, Mr.  
12 Johnston, if -- if the additional asset categories are  
13 being added into the mix would there not be a  
14 corresponding offset with respect to the equity  
15 category, given that the likelihood of both events  
16 happening at the same time would be less?

17

18                   (BRIEF PAUSE)

19

20                   MR. LUKE JOHNSTON: Yeah. It -- it's  
21 hard for me to say again without looking at -- at all  
22 the data. I'd have to look at some of these extreme  
23 scenarios and perhaps in -- in significant declines  
24 there's also been examples where real estate also  
25 declined but I -- I'm not prepared to -- to say for

1 sure what would happen there.

2 In -- when -- when we presented the  
3 combined scenario, for example, with hail and claims  
4 and equities the -- assuming independence the --  
5 clearly sometimes a bad equity year is going to be  
6 combined with a good claims year, and -- and the equity  
7 decline wasn't as big in that -- in that scenario.

8 So that -- that would make sense.

9 How these particular items behave  
10 together -- I know hail claims and equity loses are  
11 independent; I don't have to review that. This  
12 requires extensive review, especially when your looking  
13 at extreme events.

14

15 (BRIEF PAUSE)

16

17 MS. CANDACE GRAMMOND: Would you agree  
18 though, Mr. Johnston, that in principle, the  
19 plausibility level for this scenario would stay the  
20 same? You're just making some adjustments within.

21 MR. LUKE JOHNSTON: Yeah, like if we  
22 called it, say, the asset deterioration scenario, the  
23 desired probability for DCAT again would be within  
24 that 95th to 99th percentile.

25 And if we created such a model based on

1 discussions we've had at this hearing, it would be my  
2 expectation that I'd show the full range of outcomes in  
3 that tail so everybody understands what kind of range  
4 we're looking at.

5 MS. CANDACE GRAMMOND: Thank you. Mr.  
6 Johnston, moving then to recommendation number 4, which  
7 is at the bottom of page 5, we see Mr. Cheng  
8 recommending the modelling of the ripple affect of  
9 changes in expected claims on deferred policy  
10 acquisition expenses and the possible requirement for a  
11 premium deficiency reverse. You indicated early, I  
12 believe, that your estimated impact with respect to  
13 this recommendation would be less than 10 million.

14 Is that fair to say, in terms of the  
15 expected significance of this suggestion?

16 MR. LUKE JOHNSTON: This -- this one is  
17 a little bit difficult to quantify, because we don't  
18 have this built into our financial modelling. But we  
19 do have a consistent method for calculating potential  
20 premium deficiency in the actuarial review. And that  
21 method uses three (3) years of data, takes averages.

22 And -- so the -- looking at those  
23 calculations, even if we had, say, a 10 to 15 percent  
24 increase in the loss ratio, that would be averaged over  
25 several years. And just ball-parking it, I wouldn't

1 expect a -- a very significant impact; relevant but not  
2 -- I wouldn't expect it to be more than 10 million.

3 MS. CANDACE GRAMMOND: Thank you. With  
4 respect to recommendation number 6, which we find on  
5 page 6, we see Mr. Cheng recommending stress-testing of  
6 an adverse scenario involving unfavourable runoff of  
7 the claims provision.

8 Can you tell us how that recommendation  
9 compares to the testing done in the current DCAT with  
10 respect to underestimation of policy liability risk?

11 MR. LUKE JOHNSTON: This -- this one is  
12 difficult for the reasons which we've spoke of here.  
13 Long-term PIPP liabilities, we don't know with any  
14 certainty how they're going to turn out forty (40)  
15 years down the road.

16 We are confident in our reserving  
17 practices and how -- how they've been performing. The  
18 -- that said, Mr. Cheng here is -- Mr. Cheng is stating  
19 here that just because you can't necessarily quantify a  
20 risk doesn't -- doesn't mean it's not a risk still. So  
21 he is suggestion stress-testing. And it would be  
22 difficult for me to prove to this Board that 10 percent  
23 is the one (1) and forty (40) year event.

24 But in Mr. Cheng's view, it's my  
25 understanding that looking at the nature of the

1 liabilities and the -- and in our in case, very long  
2 term, he would expect that at minimum he would stress-  
3 test 10 percent. And apparently he often goes higher,  
4 but that depends on the companies, which of course I'm  
5 -- I'm not aware of.

6 MS. CANDACE GRAMMOND: Now, has the  
7 Corporation investigated the use of reserve variability  
8 modelling tools as a means of selecting assumptions for  
9 an adverse scenario testing policy liabilities risk?

10 MR. LUKE JOHNSTON: We've -- we've done  
11 res - - res -- or, attempted to do reserve modelling.  
12 Our long-term liabilities rely almost completely on our  
13 life expectancy, our mor -- mortality assumptions. And  
14 it's very difficult to know if your model -- how to --  
15 how to simulate that model with such a different,  
16 nonhomogeneous group of claimants, anything from  
17 chronic pain to quadriplegic claimants.

18 What we do know, and I've -- I mentioned  
19 this in the DCAT, is that our claims appear to be  
20 closing slightly faster than our mortality table. So  
21 we're -- and we've -- we've talked about this in the  
22 liability reviews. We're getting slightly favourable  
23 development. So that tells me that I can be  
24 comfortable with the -- with the results. And what  
25 we're doing in this -- this unknown tail period is

1 gradually recognizing that -- that experience.

2                   So we've tried, but getting something  
3 meaningful from that, I haven't been able to come up  
4 with anything yet that I -- I think would be suitable  
5 to present to the Board to really give them a lot of  
6 confidence that this is like a one (1) in forty (40)  
7 year event.

8                   MS. CANDACE GRAMMOND: Thank you.

9 Moving then to recommendation number 7, which we've  
10 talked about a little bit. This is where we see Mr.  
11 Cheng recommending the inclusion of AOCI with the Basic  
12 RSR when assessing satisfactory financial condition and  
13 when deciding on the need for rebates or surcharges.

14                   What is your understanding of Mr.  
15 Cheng's rationale for this recommendation?

16                   MR. LUKE JOHNSTON: I -- I think it's -  
17 - it's reasonable for Mr. Cheng to say, for example,  
18 say the -- the Corporation has 50 million and the RSR  
19 is already in a difficult position, but we have -- also  
20 have a large amount of unrealized losses in AOCI.  
21 Clearly, we're not in a very good financial position.

22                   On -- on the other spectrum, which we've  
23 talked about as well, we also have positive AOCI at  
24 times. So maybe we're a little bit below the RSR  
25 target, but we have substantial positive AOCI. So my

1 understanding is that while he understands that I am  
2 doing this DCAT in rel -- in relation to the rules in  
3 this province, our RSR target, all of that, he just  
4 wants to be clear that there is this other AOCI item  
5 that's very important and should be considered when  
6 you're assessing the overall financial condition of MPI.

7

8

(BRIEF PAUSE)

9

10 MS. CANDACE GRAMMOND: Mr. Johnston,  
11 did you discuss with Mr. Cheng that the Corporation had  
12 positive AOCI of about 58 million as of year-end 2012?

13 MR. LUKE JOHNSTON: Yes. Mr. Cheng is  
14 aware -- is aware of that and he discussed that when --  
15 when he -- he has his own internal model that he runs  
16 all of our numbers through as well. And he did mention  
17 that we had a positive AOCI and -- projected under the  
18 base scenario, would have positive AOCI, and why we  
19 wouldn't consider that in the -- in satisfactory  
20 financial condition.

21 And again, he's noted that there -- and  
22 the -- of course the flip side is the -- the negative  
23 position and whether either should generate rebates or  
24 surcharges in light of this province's RSR target and  
25 the reason for having it.



1 MS. CANDACE GRAMMOND: Okay. Now in  
2 recommendation 7 in the first paragraph, last sentence  
3 -- and you referred to this earlier, Mr. Johnston --  
4 Mr. Cheng states that, based on his modelling:

5 "The total equity remains greater  
6 than zero in all adverse scenarios  
7 tested."

8 Can you tell us, what are the  
9 implications of this recommendation for the conclusions  
10 in the current DCAT, all other things being equal?

11 MR. LUKE JOHNSTON: If -- if the  
12 Corporation was able -- or -- or if the -- if there's  
13 no rebate ordered, the Corporation would not expect its  
14 RSR to fall below zero in any of the adverse scenarios  
15 tested. And, again, that's because we're starting at a  
16 retained earnings level greater than what we're saying  
17 is required by the DCAT.

18

19 (BRIEF PAUSE)

20

21 MS. CANDACE GRAMMOND: Okay. Mr.  
22 Johnston, I'm going to leave, then, Mr. Cheng's  
23 recommendation and -- recommendations, and I just have  
24 a couple of questions about page 12 of the report.  
25 This is one of the attachments that you -- you had

1 spoken about a little bit that are here for  
2 information.

3                   So page 12, we see two (2) headings.  
4 I'm talking about the second section called "Adverse  
5 Scenarios." During the course of Mr. Cheng's external  
6 review of the DCAT investigation and report starting in  
7 September of 2012, was he made aware of the issues  
8 raised through the IR process with respect to the GRA,  
9 and including Professor Simpson's evidence with respect  
10 to the basis of modelling the equity decline scenario?

11                   MR. LUKE JOHNSTON: Yes, ab --  
12 absolutely, he was. And I clearly explained Professor  
13 Simpson's opinion in terms of the post-1956 data.

14                   MS. CANDACE GRAMMOND: And did Mr.  
15 Cheng make any comments with respect to this external  
16 review regarding possible alternate approaches to the  
17 basis of modelling in the equity decline scenario?

18                   MR. LUKE JOHNSTON: Not really. I  
19 tried to really stress to Mr. Cheng that the -- the  
20 evidence required at -- at the hearings is -- is great,  
21 and that, of course, I -- I would be expected to prove  
22 the plausibility of -- of the scenarios to the Board.  
23 I presented Simpson's evidence and other relevant  
24 evidence to him.

25                   In this particular case, basically, he -

1 - he chose to stick with the -- the massive  
2 deterioration type scenario that -- that he considers  
3 appropriate. In terms of all his thinking behind that  
4 and what -- what his opinion was on Professor Simpson's  
5 evidence, that I -- I can't -- I can't say.

6 MS. CANDACE GRAMMOND: One (1) more  
7 question on that; and if you can't answer this, tell  
8 me. Mr. Cheng concludes in -- in the peer review that  
9 the equity decline scenario in the DCAT was reasonable.  
10 Do you know if he would also consider it reasonable to  
11 base that scenario on the -- only the modern market  
12 history, like from 1956 and forward, as some have said  
13 should be done?

14 MR. LUKE JOHNSTON: I don't know that.  
15 My expectation would be that he wouldn't, but I can't  
16 speak for Mr. Cheng.

17 MS. CANDACE GRAMMOND: And you didn't  
18 specifically discuss that question with him?

19 MR. LUKE JOHNSTON: No, I did not ask  
20 him if -- if, for example, if I put in Professor  
21 Simpson's assumptions if that would be acceptable to  
22 him. But we did talk about, as I mentioned here, some  
23 of the recent stock market volatility over shorter  
24 periods and -- and longer periods, like -- like I've  
25 used.

1

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(BRIEF PAUSE)

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MS. CANDACE GRAMMOND: Thank you, Mr.  
Chairman. Those are my questions for Mr. Johnston with  
respect to the peer review.

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THE CHAIRPERSON: Thank you very much,

Mr. Johnston. I believe that we're now ready to -- to  
turn the mic over to Mr. Williams.

MR. BYRON WILLIAMS: Yeah, Mr.

Chairman, I do have perhaps three (3) or four (4)  
questions for Mr. Johnston in terms of the -- his oral  
evidence this morning.

RE-CROSS-EXAMINATION BY MR. BYRON WILLIAMS:

MR. BYRON WILLIAMS: Mr. Johnston, do  
you recall using words in terms of describing Mr. Cheng  
in -- in terms of what he "normally does" or "typically  
does"?

Do you recall using words to that  
effect?

MR. LUKE JOHNSTON: Yes, I do.

MR. BYRON WILLIAMS: And would it be --  
and you also described a model Mr. Cheng uses in his  
normal or typical practice -- or -- or mentioned it.

1 "Described" is inaccurate, but you mentioned the model  
2 he normally uses?

3 MR. LUKE JOHNSTON: You're correct. I  
4 -- I can only mention what -- the discussions we had.  
5 Any detail about his model, I -- I don't have.

6 MR. BYRON WILLIAMS: And that's fair  
7 enough. Mr. Johnston, would it be your understanding  
8 that in -- in Mr. Cheng's normal and typical practice  
9 that a great deal of it involves private insurers in a  
10 competitive market where the DI -- DCAT is primarily  
11 used as a solvency examination?

12 MR. LUKE JOHNSTON: I would agree that  
13 -- or at least my expectation would be that most of Mr.  
14 Cheng's clients would be private companies. However,  
15 the plausibility of a -- a given scenario is not  
16 dependent on whether the company is public or private.

17

18 (BRIEF PAUSE)

19

20 MR. BYRON WILLIAMS: The consequences  
21 may differ materially?

22 MR. LUKE JOHNSTON: For sure. The --  
23 each company has a particular regulatory environment,  
24 but if the actuary is modelling a scenario and it --  
25 with equity returns, for example, the expectation is

1 that -- that scenario will be in that 95th -- or one  
2 (1) in twenty (20) to one (1) in one hundred (100) year  
3 range. And how that impacts that particular company  
4 relative to their regulatory requirements is what's  
5 relevant in that -- in the DCAT report.

6 MR. BYRON WILLIAMS: And we wouldn't  
7 disagree without -- without being critical of the DCAT  
8 that it -- the -- the roots of it really relate to this  
9 examination of private sector companies in a  
10 competitive marketplace?

11 MR. LUKE JOHNSTON: Maybe just for  
12 clarification, are you asking if the DCAT is -- the  
13 purpose of the DCAT is to measure the -- like the  
14 solvency considerations in private companies?

15 MR. BYRON WILLIAMS: No, sir, my -- my  
16 question is more subtle than that. It's not what the  
17 purpose is, but when we look at the roots of the DCAT  
18 and as they inform the insight of Mr. Cheng or other  
19 actuaries, it's -- the roots of it come from that ex --  
20 exploration of the -- and the utilization of that tool  
21 primarily from private sector companies in a  
22 competitive marketplace?

23 MR. LUKE JOHNSTON: Well, that's the --  
24 definitely the majority of his clients. The...

25

1 (BRIEF PAUSE)

2

3 MR. LUKE JOHNSTON: The -- yeah, I -- I  
4 think where you're going is -- I'm just tying in the  
5 DCAT to solvency-based measure. We're not in any way  
6 suggesting that this DCAT is a solvency-based test.

7 Like all the other methods we -- we talk  
8 about here, take the risk analysis method, for example,  
9 we're looking to capture adverse events that board --  
10 largely in Board-endorsed one (1) in forty (40) year  
11 level.

12 The DCAT is doing that. The DCAT isn't  
13 pretending that we're going to go insolvent. It's just  
14 doing a better job than the other methods.

15 MR. BYRON WILLIAMS: Okay. We'll leave  
16 that, Mr. Chairman. I don't know if any other  
17 Intervenors have questions of Mr. Johnston in term of  
18 Mr. Cheng, but at the appropriate moment, certainly  
19 we're ready to proceed with our direct evidence.

20 THE CHAIRPERSON: I would like to ask a  
21 few more questions, Mr. Johnston, with your  
22 forbearance. Say the -- this panel agrees to -- to  
23 jump over the -- the divide and accept the DCAT  
24 mechanism as the -- as the mechanism for establishing  
25 the adequate level of reserves.

1                   You know, the Kop -- Judge Kopstein's  
2 method has been in place for practically twenty (20)  
3 years now, so we may be stuck with DCAT for quite a  
4 while if we go this way. "Stuck" is probably not the  
5 right word but we -- we will -- we will probably be  
6 married to the new -- the new methodology for some  
7 time.

8                   And I'm -- what worries me is how that  
9 formula or that mechanism will behave going forward.  
10 In other words, what can we expect that reserve level  
11 to be under a moder -- moderately risky set of  
12 scenarios? In other words, we go forward as we have  
13 been. Relative stability in your liability claims as -  
14 - as going forward just because you're getting better  
15 at it.

16                   But we -- say for example we increase  
17 the -- the stock portfolio to reflect the high returns  
18 and so on, what can we expect with respect to the  
19 behaviour of the DCAT formula going forward in that  
20 kind of a scenario?

21                   MR. LUKE JOHNSTON: Well, what -- what  
22 we can always expect out of the DCAT is that we are  
23 going to be measuring the Corporation's key risks in  
24 the greatest detail that we can. Some of the other  
25 methods they spoke of don't do that. So it -- it



1 doesn't provide the Board with the information to know  
2 what are the key risks of MPI, and what the potential  
3 impacts of -- of those risks are.

4           The DCAT is not going to stay at the  
5 same level if the Corporation's risk level changes  
6 drastically. If we, say, maintain our same asset  
7 allocations and continue to have the type of  
8 consistency in claims that we've -- we've always had I  
9 wouldn't expect the DCAT to change very much.

10           If -- if there is change in MPI  
11 practices, like, say, we decided to have less or more  
12 equities for example, then the DCAT should change the  
13 target. If it doesn't, it's not -- it's not an  
14 adequate -- adequate measure of -- of the risk of MPI.  
15 And I think that's what the Board really needs --  
16 that's the information the Board needs to have.

17           The DCAT has been very stable since it  
18 came in-house. I believe the minimum was about 180  
19 million and the maximum was 210 million. The -- it's  
20 not clear to me if this will move slower or -- or  
21 faster than premium growth. Basically with the  
22 percentage of premium method you're locked into premium  
23 growth as the RSR methodology.

24           When this plan stabilizes there might be  
25 no reason for that target to grow. If liabilities are

1 staying the same, and assets are roughly the same, we  
2 might be sitting at a fairly stable level even though  
3 premiums are --are increasing, for example.

4 But again I -- I wouldn't -- as long as  
5 the Corporation's risk level stays relatively  
6 consistent you shouldn't see big changes in the DCAT  
7 number.

8 MS. KATHY KALINOWSKY: Sorry -- sorry,  
9 if we could I would like to consult with the witness,  
10 and just see about the possibility of a redirect  
11 question. Just one (1) moment please. I do have that  
12 right under the normal outline of procedures.

13

14 (BRIEF PAUSE)

15

16 MS. CANDACE GRAMMOND: Mr. Chairman,  
17 just while MPI's consulting, I can't see the clock and  
18 I'm not wearing a watch but I -- I'm thinking it might  
19 be time for the mid-morning break.

20 THE CHAIRPERSON: Let's do that. Let's  
21 take fifteen (15) minutes. So back in this room at say  
22 ten (10) after 11:00. Thank you.

23

24 --- Upon recessing at 10:51 a.m.

25 --- Upon resuming at 11:07 a.m.

1 THE CHAIRPERSON: I believe we're ready  
2 to proceed. Back to you --

3 MS. KATHY KALINOWSKY: Sorry --

4 THE CHAIRPERSON: -- sorry, go ahead.

5

6 RE-DIRECT EXAMINATION BY MS. KATHY KALINOWSKY:

7 MS. KATHY KALINOWSKY: Sorry, if I  
8 could actually -- when we stopped the proceedings, I  
9 asked if I could consult about doing a quick re-direct  
10 just to clarify something. And we didn't know Mr.  
11 Johnston can at times be rather soft spoken, so we  
12 didn't know whether he answered "did" or "did not" to a  
13 particular question.

14 So I just want to follow up on that  
15 question, but I think it was the penultimate question  
16 that the Board counsel asked. And it was something to  
17 the effect -- and unfortunately, I can't get a quick  
18 readout from the court reporter, but it was whether Mr  
19 -- whether Mr. Johnston, you asked Mr. Cheng if it was  
20 appropriate to use only post-1956 data.

21 What did you respond to that question?

22 MR. LUKE JOHNSTON: Yes, I provided  
23 that data and asked Mr. Cheng about that.

24 MS. KATHY KALINOWSKY: And you  
25 mentioned previously on in the hearing that the

1 standard of materiality in the DCAT is \$10 million  
2 dollars. Is that correct?

3 MR. LUKE JOHNSTON: Correct.

4 MS. KATHY KALINOWSKY: So given the  
5 standards of actuarial practice and the peer review and  
6 the information that was provided to Mr. Cheng,  
7 including Professor Simpson's evidence, which advocates  
8 for only post-1956 TSX data, could Mr. Cheng have  
9 issued his same opinion if he believed only post-1956  
10 TSX data was a reasonable assumption to use?

11 MR. LUKE JOHNSTON: No, I don't see how  
12 Mr. Cheng could have arrived at that conclusion. Using  
13 only 19 -- post-1956 data would have produced a very  
14 significant difference in the DCAT output, which would  
15 clearly be much larger than my standard materiality.

16 If he had determined that this was the  
17 -- in fact the reasonable assumption, I would have  
18 expected him to clearly state in here that the equity  
19 decline scenario was unreasonable.

20 MS. KATHY KALINOWSKY: Thank you, I  
21 have no further questions.

22

23 (PANEL STANDS DOWN)

24

25 THE CHAIRPERSON: Mr. Williams...?

1 MR. BYRON WILLIAMS: Yes, good morning  
2 Mr. Chairman and members of the panel. Before we start  
3 with Professor Simpson -- and we'll have him sworn in,  
4 in just one (1) second. Just -- we had a bit of a late  
5 start this -- this morning due to some discussions  
6 between counsel. And for the panel's information --  
7 and I'll ask my colleagues, My Learned Friends, if they  
8 disagree, to make sure that I've accurately  
9 characterized this.

10 Prof -- Professor Simpson will be doing  
11 a PowerPoint presentation this morning. And the --  
12 most of the PowerPoint is recapitulation -- a re -- wrong  
13 word -- a restatement of his written evidence. There  
14 is one (1) new calculation that appears. It's -- I'll  
15 flag it for the panel, but it's -- it's on the ninth  
16 page of his Power -- PowerPoint slide.

17 And my understanding is that Manitoba  
18 Public Insurance, quite appropriately, would be seeking  
19 the opportunity to present rebuttal evidence on -- on  
20 that -- that one (1) particular item. And we've agreed  
21 between counsel, subject to the instructions of the  
22 Board, that that rebuttal evidence would be on Tuesday  
23 morning, prior to the commencement of closing argument.  
24 My understanding is, and certainly our undertaking is,  
25 that CAC (MANITOBA) would be prepared to give their

1 closing argument that same day.

2 So that's essentially my understanding  
3 of the arrangement that we've made between counsel,  
4 subject to the Board's approval.

5 THE CHAIRPERSON: Yes, it is. The  
6 Board has considered that, and we agree with that plan.

7 MR. BYRON WILLIAMS: For the -- for the  
8 panel -- and certainly I would ask that Professor  
9 Simpson be sworn, and -- and then we'll have a few  
10 documents that we'll -- we'll want the panel, if they -  
11 - if they choose, to have near at hand as we go through  
12 the material.

13

14 CAC (MANITOBA) PANEL:

15 WAYNE SIMPSON, Sworn

16

17 MR. BYRON WILLIAMS: And, I would ask  
18 the panel to be -- have before it CAC (Manitoba)  
19 Exhibit 3, which is the September 14th evidence of  
20 Professor Simpson.

21 CAC Exhibit 7, which is the addendum to  
22 the evidence of Professor Simpson. It's CAC Exhibit 7,  
23 and it's marked "Addendum" at the top. And there are  
24 also two (2) other documents. One (1) is the long form  
25 of the curriculum vitae of Professor Simpson, which --

1 which we sent out by email. The shorter version was  
2 sent previously, but we would suggest that that be  
3 marked as CAC Exhibit 10.

4

5 --- EXHIBIT NO. CAC (MANITOBA)-10:

6 Long-form curriculum vitae of Professor  
7 Simpson

8

9 MR. BYRON WILLIAMS: And -- and  
10 finally, the PowerPoint, or the slides from the  
11 PowerPoint presentation of Professor Simpson, which we  
12 would suggest be marked as CAC Exhibit number 11.

13

14 --- EXHIBIT NO. CAC (MANITOBA)-11:

15 Slides from PowerPoint presentation of  
16 Professor Simpson

17

18 THE CHAIRPERSON: Just hold on for a  
19 second and I'll just check.

20

21 MR. BYRON WILLIAMS: Yes, and I  
22 neglected to note that our -- the Executive Director of  
23 CAC (Manitoba), Ms. Desorcy, is here in the -- the back  
24 row, back from her adventures in Niverville over --  
25 from last night.

25

And just for the -- the panel's

1 information,, we will certainly get to Professor  
2 Simpson's PowerPoint right away. By virtue of our  
3 rules, especially Rule 17.1 and 17.5 of the Rules of  
4 Procedure, there's a few questions I need to ask in  
5 advance. So we'll -- we'll get to the fun stuff in a  
6 few moments, but there is some lawyerly stuff that I --  
7 I have to do in advance.

8                   And if the panel -- in terms of just the  
9 first few questions that I do pose to Professor  
10 Simpson, if they wanted to look at his evidence of  
11 September 14th, 2012, at page 3, that's CAC-3. That  
12 would just help them as they -- as they follow it  
13 along.

14                   THE CHAIRPERSON: I'm sorry, which  
15 page?

16                   MR. BYRON WILLIAMS: Page -- page 3.  
17 That's the -- really, that starts with, "Terms of  
18 Retainer," on the first page.

19

20 EXAMINATION-IN-CHIEF BY MR. BYRON WILLIAMS (QUAL):

21                   MR. BYRON WILLIAMS: Professor Simpson,  
22 good morning.

23                   DR. WAYNE SIMPSON: Good morning.

24                   MR. BYRON WILLIAMS: Before turning to  
25 your credentials, I wonder if you could set out your



1 understanding of your retainer?

2 DR. WAYNE SIMPSON: I was retained by  
3 CAC (MANITOBA) through the Public Interest Law Centre,  
4 to provide expert advice on economic matters, in  
5 particular matters related to risk analysis and its  
6 application to the rate stabilization reserve.

7 MR. BYRON WILLIAMS: Thank you,  
8 Professor Simpson. In terms of your qualifications to  
9 address those issues, I wonder if you could briefly  
10 outline the elements of your education, academic  
11 expertise and publishing, as they may generally relate  
12 to your analysis.

13 DR. WAYNE SIMPSON: I have a PhD from  
14 the London School of Economics in 1977. My  
15 undergraduate work was at Saskatchewan. I have taught  
16 at the University of Manitoba since 1979. I'm a full  
17 professor in the Department of Economics. I have -- my  
18 areas of expertise I would describe as applied  
19 microeconomics and applied econometrics, with  
20 particular -- some particular specialties in labour  
21 economics, and economic and social policy.

22 I have a number of publications, three  
23 (3) -- three (3) books authored or co-authored, plus  
24 I'd estimate about fifty (50) peer-reviewed journal  
25 articles. I've done, in particular, some research on

1 the impact of risk on the behaviour of the firm. And  
2 I'm currently on the editorial board of the Canadian  
3 Public Policy.

4 MR. BYRON WILLIAMS: Professor Simpson,  
5 thank you for that. Staying with your qualifications  
6 for a moment -- and I don't want to get yet to evidence  
7 you've offered in the past before the Public Utilities  
8 Board, but I wonder if I could ask you to outline,  
9 apart from your academic experience, other aspects of  
10 your work or consulting experience that may relate to  
11 your opinion.

12 DR. WAYNE SIMPSON: I have some early  
13 experience, while I was completing my PhD, working in  
14 the federal government with the Department of Labour  
15 and the Economic Council of Canada.

16 Subsequent to taking up my appointment  
17 at the University of Manitoba, I was a -- I've been a  
18 consultant to a variety of agencies. Most recently,  
19 I've done some work with Prairie Research Associates  
20 and with human resources in Skill Development Canada.  
21 And I've also done some work for the Public Interest  
22 Law Centre. Some of it related to the PUB hearings.

23 MR. BYRON WILLIAMS: What a clever  
24 segue, Professor Seg -- Simpson. I wonder if you can  
25 outline any appearances you've had before the Public

1 Utilities Board in which you have been qualified as an  
2 expert witness.

3 DR. WAYNE SIMPSON: I've appeared  
4 before the Board on two (2) occasions regarding risk  
5 analysis as it applies to the Rate Stabilization  
6 Reserve in 2007 and 2010, with my former colleague,  
7 Professor Derek Hum, who is now retired and living in  
8 Vancouver.

9 I've also appeared with him at a -- on  
10 the -- before the Public Utilities Board on the MPI  
11 rate applications regarding the investment mix in 2008.  
12 And I've apple -- appeared before the Board on the  
13 matter of payday lending, I guess, rates and  
14 regulations in 2007.

15 I think that's it, in terms of  
16 appearances before the -- the Board itself.

17 MR. BYRON WILLIAMS: Thank you. And --  
18 and leaving aside MPI and -- have you served as an  
19 expert analyst on any other proceedings before the  
20 Public Utilities Board relating to risk as it may  
21 affect the Crown corporations?

22 DR. WAYNE SIMPSON: Last year I  
23 appeared -- I -- I provided evidence -- or, I provided  
24 advice, I guess I should say, to the Public Interest  
25 Law Centre regarding the risk analysis issues

1 associated with the Manitoba Hydro general rate  
2 application.

3                   There were a number of outstanding  
4 issues that they explored through some expert evidence  
5 as provided by Professors Kabursi and Magee. And I was  
6 particularly asked to comment on their evidence and on  
7 the ways they were going about analysing the risk of  
8 Manitoba Hydro and how Manitoba Hydro might be  
9 responding to that risk.

10                   MR. BYRON WILLIAMS: And just to be  
11 clear, Professor Simpson, the advice in that particular  
12 proceeding was not via expert evidence to the Board; it  
13 was -- it was to the Public Interest Law Centre?

14                   DR. WAYNE SIMPSON: No, I provided  
15 advice and -- and, I think, a memo to the Public  
16 Interest Law Centre, but I did not appear before the  
17 Board.

18                   MR. BYRON WILLIAMS: Now, you used some  
19 fancy words, Professor Simpson, a while ago in -- in  
20 discussing your expertise. What I've got written down  
21 is, "Expertise in applied econometrics."

22                   And I wonder if you could tell me what  
23 you mean by "applied econometrics"?

24                   DR. WAYNE SIMPSON: Econometrics  
25 applies particular aspects of statistics to the

1 understanding of -- of the economy and the behaviour of  
2 individuals and firms in an economy and -- and  
3 governments.

4                   And the applied econometrics notion is  
5 that you're doing more than simply working through the  
6 theorems; you're actually using the evidence to -- to  
7 inform people about how the economy behaves.

8                   MR. BYRON WILLIAMS:    And that's the  
9 word I struggle with most, but the other word that you  
10 used was "applied microeconomics."

11                   And I wonder if you can elaborate on  
12 what you mean by that, sir?

13                   DR. WAYNE SIMPSON:    The study of firms  
14 and individuals in an economy and, in particular, one  
15 of the aspects of that that's relevant here is the  
16 study of the behaviour of individuals and firms under  
17 risk or uncertainty, where we try to characterize that  
18 risk and see how in fact it affects the way in which  
19 firms or individuals respond to particular situations.

20                   And in terms of "applied", it would be  
21 the actual use of data or other information to -- to  
22 understand real-world outcomes.

23                   MR. BYRON WILLIAMS:    Mr. Chairman, and  
24 members of the panel, we could certainly go through a  
25 lengthy qualification of Professor Simpson. But at

1 this point in time, subject to the comments of my  
2 colleagues, I'm asking that Professor Simpson be  
3 qualified as an expert witness before this panel in  
4 applied microeconomics and applied econometrics.

5

6 RULING (QUAL):

7 THE CHAIRPERSON: I have to tell a  
8 story at this point. I -- I know -- I have had  
9 extensive dealings with graduates from the London  
10 School of Economics, one of which is the Premier and  
11 another one who end up in jail. So I don't think -- I  
12 consider Dr. Simpson to be on the better end of that  
13 scale, and I think you're eminently qualified to be a  
14 witness in my opinion and the opinion of the other  
15 members of this Board.

16 So welcome, Dr. Simpson. I'm looking  
17 forward to this. One of the advantages of being  
18 members of this Board, you get to hear eminent speakers  
19 discussing topics of interest to us. So -- so welcome.  
20 I'm -- I'm doubly pleased that you're going to give us  
21 a presentation.

22 DR. WAYNE SIMPSON: Thank you for  
23 having me.

24 MS. CANDACE GRAMMOND: Mr. Chairman,  
25 I'm just going to interject for a moment. I just

1 wonder if Ms. Kalinowsky has any comment?

2 MS. KATHY KALINOWSKY: Sure. Usually  
3 the other parties are given a opportunity to address  
4 whether they had any concerns with respect to the  
5 request that Professor Simpson be entered in as an  
6 expert. But I do have to say that I'll be interested  
7 to hear where I fall on that spectrum, because I too am  
8 a graduate of the London School of Economics.

9 Having said that though, I will be  
10 handing over the microphone to my colleague, Mr.  
11 Triggs, and he might have some comments with respect to  
12 Professor Simpson. And Mr. Triggs will also be doing  
13 the cross-examination of Professor Simpson.

14 THE CHAIRPERSON: I'm sorry, I was  
15 showing my -- my newness as a Chair, and I didn't give  
16 you the opportunity to comment before we made a  
17 decision. I apologize.

18 MR. MICHAEL TRIGGS: Thank you, Chair -  
19 - Mr. Chair. MPI has no objections to Mr. Simpson's  
20 qualification as an expert in microeconomics and  
21 economic -- having fun saying that word -- and  
22 econometrics economics. He's an expert; I'm not.  
23 Thank you.

24 THE CHAIRPERSON: Dr. Simpson and Mr.  
25 Williams...?

1

2 EXAMINATION-IN-CHIEF BY MR. BYRON WILLIAMS:

3 MR. BYRON WILLIAMS: And just a few  
4 more questions, and then we'll get to the star of the  
5 show. Professor Simpson, I'm directing your attention  
6 to your September 14th evidence, which is marked as  
7 Exhibit 3.

8 Can you indicate whether this report was  
9 prepared under your direction and control, sir?

10 DR. WAYNE SIMPSON: Yes.

11 MR. BYRON WILLIAMS: And is it  
12 accurate, to the best of your knowledge and belief?

13 DR. WAYNE SIMPSON: Yes.

14 MR. BYRON WILLIAMS: And directing your  
15 attention to the addendum, CAC -- marked as CAC Exhibit  
16 7, can you indicate whether that document, the  
17 addendum, was prepared under your direction and  
18 control?

19 DR. WAYNE SIMPSON: Yes, right down to  
20 the data entry.

21 MR. BYRON WILLIAMS: And is it  
22 accurate, to the best of your knowledge and belief,  
23 sir?

24 DR. WAYNE SIMPSON: Yes.

25 MR. BYRON WILLIAMS: Just a few more



1 questions before we get to your PowerPoint  
2 presentation, Professor Simpson.

3 Now, while the report, both the main  
4 report and the addendum, were prepared under your  
5 direction and control, can you indicate what, if any,  
6 input you sought from others in preparing your report?

7 DR. WAYNE SIMPSON: I had support from  
8 Andrea Sherry, who is an actuary, and Peter Dyck, who  
9 is the, I guess, former controller with MPI.

10 MR. BYRON WILLIAMS: And what, if any,  
11 skill sets or -- were you looking for from Ms. Sherry  
12 and -- and Mr. Dyck, in -- in terms of offering input  
13 into your review of risk-management issues?

14 DR. WAYNE SIMPSON: Well, Ms. Sherry  
15 was very valuable because she is a DCAT practitioner  
16 and therefore somewhat of an expert in a way that I am  
17 not. I -- I have never done a DCAT analysis, and my  
18 analysis -- my analysis in my report does not suggest  
19 that I am.

20 And Peter Dyck also provided perspective  
21 as someone who, in fact, was in the room during the  
22 deliberations leading to the Kopstein recommendation.  
23 And so he was very valuable just on general issues  
24 around the question of risk analysis from an MPI  
25 perspective.

1 (BRIEF PAUSE)

2

3 MR. BYRON WILLIAMS: It appears that  
4 MPI has generously bought pizza for all of us. Prof --  
5 Professor Simpson, would you like a slice?

6 DR. WAYNE SIMPSON: And a glass of red  
7 wine, please.

8 MR. BYRON WILLIAMS: Professor Simpson,  
9 in terms of profess -- excuse me, Ms. Sherry or Mr.  
10 Dyck, from your perspective what, if anything, was the  
11 value of seeking in -- input from this  
12 interdisciplinary team?

13 DR. WAYNE SIMPSON: Well, as I'm going  
14 to suggest in my PowerPoint presentation, I think  
15 there's -- there's value from looking at the questions  
16 arising from the risk analysis of MPI and the rate  
17 stabilization reserve from a number of perspectives.

18 And Ms. Sherry, of course, is the expert  
19 -- our expert on the DCAT and its -- its use, the way  
20 the modelling is done, the kinds of assumptions that  
21 are made and so on. And they are useful checks, both  
22 of them, on the kinds of ideas that I was putting  
23 forward about the scenarios and what would be plausible  
24 and what wouldn't in terms, in particular, of the  
25 decline in equity scenario, which I -- I think they --

1 in which I think they agree with me.

2 MR. BYRON WILLIAMS: Now, Professor  
3 Simpson, just in terms of the -- at a high level, I  
4 wonder if you could briefly -- provide a brief overview  
5 of the materials that you reviewed in preparing your  
6 report?

7 DR. WAYNE SIMPSON: Yes, I reviewed --  
8 well, in -- in my report are the prior reports from --  
9 with -- I -- that I did with Dr. Hum, and were provided  
10 for the -- in 2006 and 2009. I also reviewed the  
11 original and amended DCAT reports, the Information  
12 Requests, as best I could. They were coming at us  
13 pretty thick and fast and I have a -- have a day job as  
14 -- as I keep reminding myself.

15 And the expert excerpts from the record,  
16 provided by counsel. I had to rely to some extent on  
17 their judgments about what was useful for the risk  
18 analysis portion that I was concerned with. MPI  
19 Exhibits 13 and 14, and Undertakings 16 and 17. And  
20 then, just yesterday, looking at the external actuary  
21 report from Mr. Cheng.

22 MR. BYRON WILLIAMS: Thank you,  
23 Professor Simpson, and I am going to turn it over to  
24 you. In terms of your PowerPoint, asking you to do a  
25 brief overview of your opinion as presented in your

1 written evidence and as it may have evolved during the  
2 case.

3                   And I would just certainly invite the  
4 panel, if you're like learned counsel for the CAC  
5 (MANITOBA), when you see a probability distribution  
6 your eyes may roll to the back of your head. So  
7 certainly if there are questions that the panel, of  
8 clarification, would like to ask during the course of  
9 Professor Simpson's presentation, he likes to have  
10 interaction with whoever he's presenting to. So please  
11 feel welcome.

12                   And, Professor Simpson, just a warning.  
13 I may go off script from time to time and -- or not,  
14 but ask you a couple of questions and stop you as well.  
15 But please proceed to present your PowerPoint.

16                   DR. WAYNE SIMPSON: Okay. Thank you.  
17 I -- I'm trying to manipulate so that I can both see  
18 the screen and point to it and talk into this mic. We  
19 had tried to set up a mobile mic, but that technology  
20 didn't work. So we'll try it this way. If -- if this  
21 isn't working, please let me know.

22                   So thank you again for having me talk to  
23 you. I'd like to start off by applauding what I  
24 observed to be the progress in developing what I would  
25 characterize as a modern approach to risk analysis in

1 the establishment of the rate stabilization reserve. I  
2 think there's a lot of good things in what MPI has done  
3 since, for example, Dr. Hum and I first made a  
4 presentation before this Board in 2006.

5                   And that said, I'm going to talk a  
6 little bit about the things that are good about what  
7 MPI has done; the things that are lacking, in my view,  
8 and still need to be done; and, in particular,  
9 emphasize the need for a process that everyone can buy  
10 into, if you will, that is a consensual process that  
11 will leave everyone comfortable that they have been  
12 heard and that the kinds of considerations they want to  
13 bring to bear are -- have been heard and -- and are  
14 considered in -- in reaching this decision; and, in  
15 particular, illustrate that by looking at the decline  
16 in equities scenario, which I think is the best example  
17 right now of where there may be some disagreements that  
18 the MPI and the Board and the Intervenors may want to  
19 look in -- discuss.

20                   So, first of all, just the general idea  
21 of -- of a modern risk analysis founded in the notion  
22 of a probability distribution. And I've put up here a  
23 very simple, normally distributed probability  
24 distribution which could, for example -- although it  
25 will not exactly when applied to actual data, but

1 could, for example, characterize, say, the claims  
2 outcomes of MPI or, on the investments side, the equity  
3 returns from MPI.

4                   The important point here is that while  
5 we don't know what particular outcome will come in a  
6 specific year, we do know that there is a range of  
7 outcomes and that that range of outcomes has a  
8 probabilities attached. And we can conceive of this  
9 in terms of the risk analysis, for example, in terms of  
10 upside and downside risk, which I'll get to in a  
11 moment.

12                   So we have probability up here. We have  
13 the actual outcomes in this general normalized  
14 distribution. They're -- they're normalized  
15 essentially to minus three (3) to plus three (3). And  
16 we'll see more -- I'll present actual data later.

17                   But essentially what we have is a -- is  
18 a distribution that has a mean point, which is taken to  
19 be zero here, and a distribution of values around that  
20 mean. And we usually think of risk in terms of the --  
21 the events that are extremely good or extremely bad,  
22 which I would characterize as the upside risk and the  
23 downside right.

24                   Although other measures are possible, we  
25 could simply characterize it in terms of the spread or

1 the variance, or the standard deviation of outcomes  
2 around the -- around the mean, which is a common  
3 statistical way of characterizing what -- what we talk  
4 about as risk.

5                   For example, an investor who was  
6 thinking about a risky investment would probably look  
7 at the standard deviation of returns and compare that  
8 to the mean return. And what they would expect, if  
9 they enter into more risk -- that is to say, there is a  
10 higher variability of returns -- is they'd expect a  
11 higher mean return in compensation.

12                   And so from that perspective, we can --  
13 we can then start thinking about some of the questions  
14 associated with -- with risk. And in particular, the  
15 focus, of course, in terms of the Rate Stabilization  
16 Reserve, is on this question of the downside risk.  
17 There are offsetting risks over here, but the downside  
18 risk is the one that is -- is of most -- most concern.

19                   And within that, if we look, for  
20 example, roughly here, the area under this curve from  
21 here to the end would be about the 5 percent, the 95th  
22 percentile. The 99th percentile would be roughly here.  
23 That is to say, there would be 1 percent of the values  
24 to the left of that.

25                   And there would -- in a normal

1 distribution, one can perceive or imagine almost any  
2 risk at all, because of course there is no limit. This  
3 goes to minus infinity and plus infinity.

4           What makes those terms less interesting  
5 is that the probability of an outcome at way down here,  
6 or way up here, is very, very small. So we talk about  
7 -- and I was pleased to hear some of the comments this  
8 morning about quantifying risk as being an important  
9 criterion. We quantify these kinds of risks -- if we  
10 can't quantify these kinds of risk because they've  
11 never occurred, we can imagine them happening. We can  
12 think about stress-tests. But they're not very useful  
13 because we don't think that they're very probable.

14           MR. BYRON WILLIAMS: Professor Simpson,  
15 could I stop you and ask you to go back to that slide  
16 for a second? And just for the benefit of the court  
17 reporter, you talked about the -- the 95th percentile  
18 in terms of a negative event and you said around here.  
19 And if I was visually looking at the statistical risk  
20 analysis concepts table, you started where the -- on  
21 the X-axis, it's marked as minus two (2)?

22           Is that right?

23           DR. WAYNE SIMPSON: No, the -- the 5th  
24 percentile would actually be minus one point six-four-  
25 five (1.645).



1 MR. BYRON WILLIAMS: Got you --

2 DR. WAYNE SIMPSON: To three (3)

3 decimal places -

4 MR. BYRON WILLIAMS: Okay. And when

5 you talked of the minus -- or, the 99th percentile

6 Professor Simpson, can you just describe where appears

7 on the X-axis?

8 DR. WAYNE SIMPSON: That I'm not as

9 familiar with, but it's approximately minus three (3).

10 And -- and that -- this is -- indicates 98 percent,

11 because it includes 1 percent to left of minus three

12 (3) and 1 percent to the right of plus three (3). And

13 so if you're looking at the 1st percentile in the way

14 we've talked about it, then it would be the area to the

15 left of minus three (3), which is indicated by this

16 range.

17 MR. BYRON WILLIAMS: Okay, thank you

18 for that. Please proceed.

19 DR. WAYNE SIMPSON: Okay. So from

20 that, we look at the question of the Rate Stabilization

21 Reserve and the question of -- of how we might deal

22 with downside risk in the event of unexpected

23 nonrecurring events leading essentially to the question

24 of a rate shock.

25 I'm not sure, in the modern inflationary

1 context, what we've agreed on what a rate shock would  
2 be. But we -- we want to have some sort of -- we're  
3 talking about some sort of reserve that would stabilize  
4 rates, going forward.

5                   And I think here -- I think an important  
6 point is to balance the questions of the costs and  
7 benefits of establishing the Rate Stabilization  
8 Reserve, in terms of thinking about what kind of a risk  
9 tolerance we would want, because of course we can think  
10 about risk tolerances that are extremely high, like one  
11 (1) in seven hundred (700), which has been used for the  
12 floodway. Or we can think of other risk tolerances  
13 that are much lower, the 95 to 99 percent range that  
14 have been discussed in the -- in the DCAT report.

15                   And I think there we have to balance, on  
16 the one hand, the benefits of the Rate Stabilization  
17 Reserve, which are that ratepayers will not get  
18 surprises, or not as many surprises, in -- in  
19 establishing rates when un -- un --- adverse events  
20 occur.

21                   On the other hand -- and that's -- to  
22 me, that's not a huge catastrophe of any sort, of the  
23 sort, for example, that you'd get if you talked about  
24 the floodway. If you get the catastrophe of the  
25 floodway you get flooded basements, destroyed homes,

1 and a city in paralysis. I think that's far different  
2 from what we've characterized as a rate shock.

3                   On the other side there's opportunity  
4 costs to having the Rate Stabilization Reserve. And  
5 those -- those opportunity costs are the money that is  
6 in the Rate Stabilization Reserve that is not paid back  
7 to ratepayers or is never paid in the first place; is  
8 money that would be disposable income to them, which  
9 can be spent on things that they value and/or saved to  
10 pay down debt and so on and things that they value.

11                   And I think the general economic  
12 presumption is that people do a pretty good job in  
13 satisfying their own pre -- wants and preferences. And  
14 so I think that's an important consideration, that  
15 there are opportunity costs to Manitobans of excess  
16 premiums.

17                   And that's why I tend to think we don't  
18 need to go too far down the line in insuring against  
19 very unlikely calamities that might occur to MPI. And  
20 I think the 95th percentile, to me, is a reasonable  
21 benchmark. And that, in fact, has been used in the  
22 DCAT analysis for the decline in equity scenario, which  
23 is the one (1) that I will talk about.

24                   The methodologies, briefly, which we're  
25 all familiar with, I think, the percentage of premium

1 Kopstein approach is a very simple approach that is  
2 related to risk only in the sense that risk and RSR are  
3 indexed, if you will, to use the economic term, I  
4 guess, to premiums. That is to say, as premiums go up,  
5 the -- the pre -- the percentage of premiums, RSR  
6 target range, will go up.

7                   There's also the risk analysis VaR  
8 approach, which has been used in the past. And I think  
9 it is fair to say is still a useful tool to look at,  
10 but probably doesn't as directly address the risks that  
11 MPI faces. Although, as I pointed out in my report, it  
12 does pick up some -- certainly, some of the new  
13 investment risks and -- if you look at it at the target  
14 range. It's based on pretty limited annual data. The  
15 statistics handle that. There's no thirty (30) rule of  
16 thumb. The statistics handle that, but it does create,  
17 I think, some -- some volatility that probably is un --  
18 unhelpful.

19                   The DCAT is the least transparent and  
20 replicable of the -- of the approaches, but on the  
21 other hand, it does specifically address the risks  
22 faced by the Corporation and, I think, is probably, in  
23 -- under certain circumstances at least, which should  
24 be -- receive serious consideration as the main  
25 indicator for setting a target RSR.

1                   So in terms of comparing our earlier  
2 reports with Professor Hum -- and I -- I don't know if  
3 he would agree with my views, but I think we've come  
4 some way towards accepting that this is a useful  
5 approach in thinking about the risks of the  
6 Corporation.

7                   So given that, what are the good and bad  
8 things that -- that have happened? Well, the  
9 improvements to date are, first of all, that the DCAT  
10 has been brought in-house. And this allows them to  
11 tailor it to the particular circumstance of the  
12 Corporation, to discuss it within the Corporation, and  
13 indeed to improve it and to make it clearer to the  
14 Intervenors and the PUB just what they are doing over  
15 time.

16                   Also an improvement is the focus now on  
17 evidence-based justification for the adverse scenarios,  
18 versus some sort of notion of imagined risks that have  
19 to be stress-tested, which I don't think is a very  
20 productive way to proceed.

21                   Then, secondly, what are the needed  
22 improvements? Where -- where -- what needs to be done  
23 still? And I think this revolves around this question  
24 of what I characterize as process, that there needs to  
25 be more transparency in the modelling and the

1 assumptions. Now that the -- the DCAT is in-house, I  
2 think it is important that -- that there be a  
3 comfortability factor between the -- the Board and the  
4 Intervenors and MPI that would arise from explaining  
5 how the model works and, indeed, how improvements are  
6 made over time.

7                   Secondly, scrutiny -- more scrutiny of  
8 the evidence-based scenarios. An example I'll give is  
9 the decline in equities scenario. And I think this is  
10 the kind of conversation that's useful in thinking  
11 about what an appropriate Rate Stabilization Reserve  
12 should be.

13                   And then I think there should be more  
14 stability RSR targets, which will probably come from an  
15 understanding of -- of risk tolerance and what is the  
16 basis for the evidence-based scenarios going forward.  
17 If there are dramatic changes in the risks faced by the  
18 Corporation, of course, that -- that will change the --  
19 the situation.

20                   So what I did with the decline in  
21 equities scenario was initially look at some data on my  
22 own in my own report. But subsequently became aware of  
23 PUB-1-60, which provides me with the four (4) year  
24 equity terms from the TSX that were use by MPI in  
25 justifying its minus 40 percent decline in equities

1 scenario.

2                   And when I looked at this, and perhaps  
3 it's something economists do, but I -- I sniffed the  
4 wind, if you will. And I said, I don't think that  
5 minus 40 percent over four (4) years is the kind of  
6 return that I would expect in the modern era from a --  
7 from a modern stock market.

8                   And so what I somewhat arbitrarily did,  
9 was I said, Well, let's look at this before and after  
10 1956. '56 is not entirely arbitrary, because it takes  
11 away the period of the Roaring '20s, the stock market  
12 crash of '29, the Depression of the 1930s, and the  
13 second World War.

14                   And it clears us enough of that period  
15 that we -- we can have some understanding of what  
16 happened in that period and how it affected the  
17 economy. And, I would argue, that economists have  
18 helped in -- in -- policy makers in understanding how  
19 to deal with the kinds of situations that led to the --  
20 to the Great Depression of the 1930s.

21                   So what I've done, then, is divided it  
22 into two (2) groups. And here, I've just provided a  
23 simple picture of what the probability distributions  
24 looked like with actual data. Now, this is smooth.  
25 But, essentially, the idea is to construct a histogram

1 for the data.

2                   First of all, the solid line is the data  
3 up to 1956. And then the dashed red line is the data  
4 from '56 to 2012. So those are roughly what the  
5 histograms would look like, characterized in the  
6 distributions of the four (4) year returns for those  
7 two (2) episodes of the data. And, of course, the MPI  
8 analysis looks at both of those episodes combined.

9                   And what you can see from this, in fact,  
10 is that -- and I'll talk a little bit about the mean  
11 return. But the mean returns look similar to the two  
12 (2) episodes, before and after '56, the four (4) year  
13 returns to the TSX. But the spread of the data is much  
14 greater prior to 1956.

15                   And, in fact, there's a lot of very big  
16 adverse events, if you will, negative four (4) year  
17 returns that occur over here. And my first reaction  
18 when I saw their decline in equities scenario is, I'd  
19 like to see some dates on that. And when we see dates  
20 on that, what we find is those large adverse returns  
21 are, of course, characterized by the 1930s. So this is  
22 the -- largely, the 1930s. This is largely the Roaring  
23 '20s.

24                   We get some similar returns in the  
25 modern era, but we don't get anything like those kinds



1 of losses. And the spread in the returns is much  
2 smaller today, since '56, than it was pre-'56. Now  
3 this is very good news for investors. If they get a  
4 comparable return, they're taking less risk.

5 And this is just the statistics on that,  
6 so looking at the --

7 MR. BYRON WILLIAMS: Professor --

8 DR. WAYNE SIMPSON: Sorry, yes?

9 MR. BYRON WILLIAMS: Sorry to  
10 interrupt. Could you go back to that slide just for  
11 one second, please?

12 DR. WAYNE SIMPSON: Okay.

13 MR. BYRON WILLIAMS: You used the word  
14 -- words something to the effect of "mean return."

15 DR. WAYNE SIMPSON: M-hm.

16 MR. BYRON WILLIAMS: Just for -- for  
17 the benefit of -- for at least this lawyer, could you  
18 just remind us what -- when you use that word, what you  
19 mean by it?

20 DR. WAYNE SIMPSON: It is the average  
21 return or, in this case, it is the probability weighted  
22 re -- returns averaged out. And so it will be  
23 somewhere in here, probably for both distributions.  
24 And I'm going to present the actual data on that in a -  
25 - in a minute. So it's the average.

1 MR. BYRON WILLIAMS: And with reference  
2 to the minus 40 percent decline in cumulative returns  
3 over a four (4) year period, in terms of the -- the  
4 modern era, could you show us where if at all that  
5 would appear on that histogram?

6 DR. WAYNE SIMPSON: The minus 40  
7 percent return would be a return of about minus point  
8 four (.4). I'm just estimating. This is minus point  
9 five (.5), minus point four (.4), and if you look up  
10 none of those returns would occur under the dashed line  
11 which is the modern era since '56. All of that would  
12 occur in the -- in the solid line which is the 1923 to  
13 '55 data. Or -- yeah, that's good. That's all I  
14 wanted to say.

15 MR. BYRON WILLIAMS: Thank you,  
16 Professor Simpson.

17 DR. WAYNE SIMPSON: Okay. So the  
18 actual numbers, you can see that in fact -- and this  
19 worked out extremely nicely. I didn't really  
20 anticipate this when I just chose '56 as the date, but  
21 in fact the mean return from '23 to '55 is 25 percent  
22 over four (4) years. The mean return from '56 to 2012  
23 is 25 percent. So they actually have the same mean  
24 outcome almost exactly.

25 The test of means is -- is trivial

1 because they're so close, you know that it's going to  
2 accept the hypothesis that the -- or, cannot reject the  
3 hypothesis that the means are the same. And in fact it  
4 doesn't.

5                   But there's much greater variability in  
6 the older data. You can see that from the -- the  
7 probability distributions. Here's the numbers. The  
8 standard deviation from '23 to '55 is about point five-  
9 six (.56). The standard deviation '56 to 2012 is  
10 almost half that at point three-one (.31).

11                   And when you test for those two (2)  
12 standard deviations you cannot reject the hypothesis at  
13 any reasonable level, this is under 1 percent, that the  
14 standard deviation prior to '56 is greater than the  
15 standard deviation since '56. So what you see in the  
16 data is simply supported by the -- the statistical  
17 analysis.

18                   And therefore that is implications for  
19 the adverse scenarios. So what we have here is the --  
20 first of all the entire time period from '23 to 2012  
21 used by MPI, a thousand sixty-four (1,064)  
22 observations, the fifty-third would be approximately  
23 the 5th percentile. In other words, there would be 5  
24 percent of the observations with returns below that  
25 number.

1                   And this is the min -- I get minus 43.9  
2 percent. I think there's -- some differences may  
3 relate to interpolation. I don't know. I -- I really  
4 haven't compared figures, but I think everyone agrees  
5 it's roughly minus 43 percent.

6                   If you break that up in the way -- way  
7 I've done to '23 to '55, pre '56, and '56 on, and the  
8 observa -- still a considerable number of observations  
9 in each group to -- so we get the nineteenth  
10 observation as marking the 5th percentile for the pre  
11 '56 era, and that's a whopping minus 64 percent adverse  
12 scenario.

13                   If you look at the data since '56, the  
14 thirty-fourth observation -- lowest observation gives  
15 you the 5th percentile, and that's minus 16.4 percent.  
16 So my view is that this is a much more useful number  
17 because it reflects the modern era.

18                   And I don't throw that out simply to say  
19 without any other thinking that the modern era must be  
20 better because it's more recent data. I think it is  
21 fair to say that policy makers and economists have  
22 learned a great deal about what went wrong prior to  
23 '56, in particular in the stock market crash of '29,  
24 government response to it, and the -- and what  
25 subsequently happened in the 1930s.

1                   You don't allow the monetary system to  
2 collapse. You make sure interest rates stay low, and  
3 you use "quantitative easing," is the new term, to make  
4 sure that money is readily available to stimulate the  
5 economy on the money side. And thanks to Professor  
6 Keynes we also think that fiscal policy is important.  
7 And we've seen in fact substantial stimulus packages  
8 coming out of all countries to respond to the recession  
9 of the -- of the -- of 2008/'09.

10                   So I think that's a good example of how  
11 governments have responded in the modern era. We  
12 didn't get anything like the adverse effects of the  
13 stock market crash of '29, and the Great Depression.

14

15                   (BRIEF PAUSE)

16

17                   DR. WAYNE SIMPSON: There we go. I  
18 pointed it the wrong way. So what I've done since that  
19 raises the question of, Well how much difference does  
20 it make when you look only at the post-'56 data, in  
21 terms of the DCAT scenario. I don't -- I can't run the  
22 DCAT. I don't have the model, and it would take me a  
23 long time to get up to speed anyway.

24                   But what I do have is I have the amended  
25 DCAT report, the base scenario, and the minus 40

1 percent scenario. And I have from PUB-2-32 -- I have  
2 the base scenario adjusted, which I used to adjust the  
3 base scenario for the amended report in exactly the  
4 same fashion to get these numbers here.

5 MR. BYRON WILLIAMS: Pro -- Professor  
6 Simpson, can I -- I stop you --

7 DR. WAYNE SIMPSON: Yes.

8 MR. BYRON WILLIAMS: -- just here for a  
9 second? Let's back up for -- to PUB-2-32.

10 DR. WAYNE SIMPSON: Yes.

11 MR. BYRON WILLIAMS: What -- what was  
12 that Information Request, to -- to your understanding,  
13 attempting to do?

14 DR. WAYNE SIMPSON: It was attempting  
15 to provide a -- an estimate of the RSR under a revised  
16 scenario, where the decline in equity is minus 35  
17 percent instead of minus 40 percent.

18 MR. BYRON WILLIAMS: And apart from the  
19 adverse scenario estimate, what, if any, other changes  
20 might appear between PUB-2-32 and the original DCAT  
21 amended report, sir?

22 DR. WAYNE SIMPSON: Right. Thank you  
23 for prompting me. That -- what happened here, the  
24 difference in the two (2) bases, as I understand it,  
25 was that the investment allocation was updated to

1 February 29th, 2012, here, whereas here it had been the  
2 investment allocation at an earlier date. And that  
3 leads to fairly small changes. You can see that the --  
4 the minus 40 percent scenario and -- and the adjusted  
5 scenario are similar, but results in small differences.

6 MR. BYRON WILLIAMS: And, Professor  
7 Simpson, not that it's a critical point, but just to  
8 make that point clear, in the DCAT amended report we --  
9 versus PUB-2-32, do we -- where do we see these minor  
10 adjustments appearing? Is it in the '13/'14 year?

11 DR. WAYNE SIMPSON: No, the adjustments  
12 -- well, there's no adjustment in the first year. But  
13 in the sec -- sorry, this and this. In the second  
14 year, the base is revised downward by 2 million.

15 And the effect of that is to adj --  
16 adjust this figure from seventy-six (76) to seventy-  
17 four (74). Similarly, this is -- this is down by six  
18 (6). Adjust this from eight (8) to two (2) and so on.  
19 So we take column 2 and we add the difference between  
20 columns 4 and 1 to that. Is that okay?

21 And so then we have the minus 35 percent  
22 scenario. And I'm just trying to get these on a  
23 comparable basis, so that I can compare the minus 35  
24 percent scenario with the new base, based on the new  
25 investment allocation, to the amended DCAT report in a

1 -- in a rough way.

2                   And this gives us the new baseline and  
3 the new outcome from the DCAT for minus 35 percent. So  
4 that's a 5 percent adjustment, or increase if you will,  
5 in the decline in equities scenario. And what I'm  
6 going to do is project that to minus 20 percent.

7                   MR. BYRON WILLIAMS: Before you go  
8 there, sir, in terms of the consequence of PUB-2-32, in  
9 terms of a -- a minus 40 percent scenario versus a  
10 minus 35 percent scenario.

11                   What, if anything, was the mathematical  
12 consequence in terms of retained earnings or for the  
13 RSR?

14                   DR. WAYNE SIMPSON: Well, that involves  
15 a comparison which I've done in column 6, which is the  
16 difference between the 35 percent scenario and the  
17 adjusted 40 percent scenario. And that gives me, in  
18 the first year, nothing. In the second year a  
19 reduction or an improvement, if you will, in retained  
20 earnings of fourteen (14), twenty-five (25), thirty  
21 (30) and thirty-two (32). And that's from a 5 percent  
22 adjustment in the difference in equities scenario. So  
23 then what -- yes.

24                   MR. BYRON WILLIAMS: And just sorry, I  
25 see at the bottom RSR 200, RSR 175. Maybe if you can



1 just explain that --

2 DR. WAYNE SIMPSON: Yeah, okay. I'm  
3 going to -- I was going to come back to that, but this  
4 is a good point for the punch line, if you will. The  
5 RSR comes from looking at the '14/'15 data. This is  
6 the amended DCAT report methodology, and calculating  
7 the -- the difference between the base and the minus 40  
8 percent scenario. That's the -- that's the two hundred  
9 (200) here.

10 If we do that for the '13/'14 year for  
11 the base of one ninety-eight (198) -- I'm sorry,  
12 '14/'15 year. I'm lost myself. This -- this is our  
13 difference two hundred (200). If you look at the  
14 '14/'15 year, we have a base of two-hundred and two  
15 (202), and in the minus 35 percent scenario, a  
16 resulting retained earnings of twenty-seven (27). And  
17 the difference is one-seventy five (175).

18 So this is the RSR target recalculated  
19 for the thirty-five (35) -- minus 35 percent scenario  
20 on the same basis as the amended DCAT report.

21 MR. BYRON WILLIAMS: Thank you, and I  
22 apologise for interrupting.

23 DR. WAYNE SIMPSON: So what I've done  
24 then, is I've taken the difference between the minus 35  
25 percent scenario and the minus 40 per -- percent

1 scenario adjusted for the change in the investment  
2 allocation in the way I've described, and I get this  
3 difference.

4 I multiple that times four (4), because  
5 I don't want to go to minus 35 percent; I want to go to  
6 minus 20 percent. And I've chosen that as a convenient  
7 number. And at minus 20 percent then, I add this --  
8 these differences then to -- to my minus 35 percent...

9 I'm confusing myself, where am I here?  
10 I'm sorry, I've lost myself, because I keep turning  
11 back and forth, and my neck is getting very sore.

12 I'm looking at no change in -- in two  
13 thou -- '12/'13, so I get a figure of two thousand and  
14 five (2,005) as -- as I have over here. When I look at  
15 the adjusted base to get eighty-eight (88) from  
16 seventy-four (74), the difference is fourteen (14).  
17 But now the difference is fifty-six (56), so the  
18 retained earnings figure is now one-thirty (130).  
19 Similarly, it was twenty-five (25) from two (2) to get  
20 twenty-seven (27); now it's a hundred (100) to get a  
21 hundred and two (102), and so on down the line.

22 So I get -- I essentially take column 7,  
23 and I add it to column 3 to get my minus 20 percent  
24 differences, because this is the -- this is the  
25 adjusted 40 percent scenario. And I want to work down

1 to a 20 percent scenario by adjusting it by this much  
2 instead of this much.

3                   Okay and then just to finish from the  
4 previous question you asked: How do I then get the  
5 estimated RSR? Well, I look again at the '14/'15  
6 category. I got two hundred (200) here, I got one-  
7 seventy-five (175) here. And here, I'm going to get  
8 two-zero-two (202) minus one-zero-two (102), which is  
9 one hundred (100).

10                   Okay. So I'm going to look at -- at the  
11 -- at the base, and I'm going to subtract where I'm at  
12 now at a hundred and two (102), and I'm going to get a  
13 hundred as my RSR using the amended DCAT methodology.

14                   So essentially I've moved from minus 40  
15 percent with RSR of two hundred (200) to minus 20  
16 percent with an RSR of a hundred. This ratio, half to  
17 half, is -- is strictly coincidental. I want to  
18 emphasis that what I've really done is I've compared  
19 the 40 percent to the 35 percent scenario. I've looked  
20 at this 5 percent difference, which is twenty-five  
21 (25), and I've extrapolated that to twenty (20), which  
22 is a hundred. Okay?

23                   So you can see from these three (3)  
24 numbers exactly where that extrapolation goes. If you  
25 want to go lower, the rough conversion figure is about

1 five (5) per -- per 1 percent.

2 MR. BYRON WILLIAMS: Professor --

3 DR. WAYNE SIMPSON: In the absence of a  
4 -- of a actual DCAT run, this is -- this is my best  
5 guess as to where this would -- the RSR would end up  
6 under a minus 20 percent decline in equity scenario.

7 MR. BYRON WILLIAMS: Professor Simpson,  
8 thank you for that. And just so I understand, you use  
9 the word estimate...

10

11 (BRIEF PAUSE)

12

13 MR. BYRON WILLIAMS: Yes, thank you.  
14 My apologies to the court report. Professor Simpson,  
15 in terms of this figure, you're not saying with moral  
16 certitude that this would be the outcome of the DCAT.

17 How would you characterize this?

18 DR. WAYNE SIMPSON: This is my -- what  
19 I would characterize as rougher, back of envelope  
20 calculation, based on the information I have from the  
21 amended DCAT report and from PUB-2-32. A proper DCAT  
22 run of minus 20 percent would of course give us a  
23 different number and quite possibly a better number,  
24 recognizing the deficiencies in the DCAT as it stands.

25 MR. BYRON WILLIAMS: And just if I can

1 make sure for -- for the benefit of the -- the record  
2 that I understand that the calculations in column 8, If  
3 I could get you to point for the '13/'14 year at the  
4 figure in column 8 of the 130 million?

5 DR. WAYNE SIMPSON: M-hm, yeah.

6 MR. BYRON WILLIAMS: Am I correct in  
7 suggesting to you that the -- the calculation of that  
8 would be taking the 74 million from column 3 and the 56  
9 million from column 7. Is that how that calculation is  
10 done, sir?

11 DR. WAYNE SIMPSON: That's right, yeah.  
12 And that's actually what I have up here, is my --

13 MR. BYRON WILLIAMS: Okay.

14 DR. WAYNE SIMPSON: -- indicator of --  
15 of how I went about it, yes.

16 MR. BYRON WILLIAMS: Okay. Thank you.

17 DR. WAYNE SIMPSON: So I -- I get to  
18 recommendations, and I have two (2) sets of  
19 recommendations. One (1) set regarding the DCAT which,  
20 as I said, there's some good things here, in terms of  
21 the improved DCAT. The fact that it's been brought in-  
22 house. And there's a focus now, an - an evidence-based  
23 justification of the scenarios.

24 And I think it's fair to say that as  
25 this progresses, it -- it could move -- become a very

1 useful tool to assess risk in the RSR. The analysis  
2 needs to be more transparent, in terms of the model and  
3 its assumptions, and also in terms of the types of  
4 scenario considered.

5           It -- and I think there's a need for a  
6 more consensual basis for -- in terms of -- of what the  
7 model does, and in particular in terms of the scenario  
8 choice. And -- and when I say, "a consensual basis," I  
9 think it's something that has to involve the  
10 participation of the PUB and the Intervenors, and a  
11 process has to be developed that would -- would  
12 facilitate that.

13           And I used the current decline in equity  
14 scenario in a sense as the -- as the example that I  
15 give, because I think there are serious questions about  
16 the appropriateness of looking at -- at very old data  
17 to formulate the notion of what an adverse stock market  
18 event might be today.

19           Then I have a second set of  
20 recommendations. The first one on the DCAT, which I  
21 say is not ready for prime time, in the sense of being  
22 the sole determinant or even the major determinate of  
23 the RSR target. I think it's still a useful analysis  
24 and check. And until the process is clarified, I think  
25 it -- it remains simply that.

1 I think the decline in equity scenario  
2 needs adjustment to reflect modern stock market  
3 outcomes. And I've explained, I think, why we think  
4 that we've learned something from -- about how to  
5 manage economies that limits the -- the negative  
6 impacts on stock markets.

7 The Kopstein approach remains the  
8 incumbent process, and I think the Chair of the Board  
9 referred to the fact that we've been with this for a  
10 long time. I think there is a power of incumbency that  
11 is that other methods have to be developed and really  
12 proven before they supplant it. And I don't see that  
13 as happening so far with the DCAT.

14 And I still see the RA/VaR as a useful  
15 third indicator that helps to understand the risks  
16 facing the Corporation as another provisional check.  
17 And I've used the word, "provisional," both with the  
18 RA/VaR and the -- the Kopstein method, if the DCAT is  
19 developed in a fashion that would -- would satisfy all  
20 concerned.

21 MR. BYRON WILLIAMS: Thank you,  
22 Professor Simpson. Just before making the witness  
23 available to cross-examination, I have just a few  
24 follow-up questions for him.

25 Professor Simpson, quite some time ago

1 you used the word "modern risk analysis". And I wonder  
2 if I could ask you to elaborate a little bit on -- on  
3 what you mean by "modern risk analysis".

4 DR. WAYNE SIMPSON: I think modern --  
5 modern risk analysis was founded in the statistical  
6 notion of the probability distribution and in the  
7 methods with which we try to estimate what that  
8 distribution looks like.

9 Here, we've looked really at this  
10 question of what we mean by an "adverse event". In  
11 other cases we look at other eth -- methods of risk  
12 analysis, such as Monte Carlo methods, bootstrapping  
13 methods, and so on, which also require us essentially  
14 either to make heroic assumptions about the  
15 distribution or gather data that allows us to actually  
16 say something that's founded in fact.

17 MR. BYRON WILLIAMS: And you've talked  
18 a fair bit about -- in terms of the DCAT issues about  
19 transparency. And -- and I wonder if you -- I could  
20 ask you just to articulate a bit more why you consider  
21 those matters so important, in terms of your evidence?

22 DR. WAYNE SIMPSON: This has to be a  
23 pro -- to me, this has to be a process that's driven by  
24 a core set of principles. And I think that core set of  
25 principles involves some judgment, but it also involves



1 some foundation in modern risk analysis.

2

3 And I think those principles have to  
4 involve questions like what we mean by a level of risk  
5 tolerance and -- and I've argued for nin -- the 5th  
6 percentile as a reasonable number given the -- the size  
7 of the benefits and the opportunity cost to Manitobans.

8 I think it also involves some  
9 understanding of the -- of the nature of the risks that  
10 MPI faces and focussing on the evidence that we have  
11 and using that evidence in the best way that we can in  
12 the context of what I would characterize as modern risk  
13 analysis.

14 So I think that transparency requires  
15 discussion. And the example I've given is the decline  
16 in equity scenario where, for example, to me it is not  
17 at all clear that we should be relying, it looks like,  
18 in the very long term, because those numbers aren't  
19 going to change on -- on a set of evidence that  
20 exclusively, I think, comes out of the 1930s.

21 MR. BYRON WILLIAMS: Just now you used  
22 the word "core set of principles" --

23 DR. WAYNE SIMPSON: Right.

24 MR. BYRON WILLIAMS: -- and -- and made  
25 reference to risk tolerance and evidence based. When

1 we're looking at the core -- the Simpson core set of  
2 principles or the modern risk analysis core set of  
3 principles, what -- what's the list?

4 DR. WAYNE SIMPSON: Focus on -- on  
5 probability distributions that we can learn something  
6 about through data, use -- decide on a -- a level of  
7 risk tolerance, gather appropriate data and assess and  
8 discuss it, and produce a -- a set of adverse scenarios  
9 that reflect what we can know of the risks that MPI  
10 faces given the information that we have and the way in  
11 which we organize it using probability distributions  
12 and risk analysis.

13 MR. BYRON WILLIAMS: In terms of risk  
14 tolerance, I think your prior evidence didn't seem to  
15 suggest you were leaning toward one (1) in seven  
16 hundred (700) risk tolerance, suggesting you were  
17 leaning towards one (1) in twenty (20).

18 Do you care to comment on other  
19 percentiles that are out there, such as the 97.5, the  
20 one (1) in forty (40) event, or the -- the 99th  
21 percentile, the one (1) in one hundred (100)?

22 DR. WAYNE SIMPSON: A lot of  
23 conventional statistics uses the 5 percent level of  
24 significance. I don't know that it has a great deal to  
25 do with this question of risk tolerance in the RSR, but

1 I -- I think it is a useful number.

2 Now, if you look at the -- the 5 percent  
3 question from both sides you get 2 1/2 percent on the  
4 downside risk and 2 1/2 percent on the upside risk.  
5 And that kind of leads you to the 97.5 percent  
6 confidence level, if you will, in the -- the 2.5  
7 percent percentile.

8 More stringent standards are typically  
9 not applied in the statistical literature, but, you  
10 know, there's no limit to how far down you can go. I  
11 think it's really just a balance of the -- the benefits  
12 and the costs of doing that. And I -- I -- as I said  
13 before, I think the benefits are there, but not  
14 substantial and not catastrophic. And the costs are  
15 the loss of retained ear -- of the earnings of -- of  
16 Manitobans.

17 MR. BYRON WILLIAMS: Just to finish up  
18 with a few questions about the decline in equity  
19 scenario, what is your view on -- on whether one should  
20 place significant reliance on data prior to the end of  
21 the second World War?

22 DR. WAYNE SIMPSON: I'm sorry, could  
23 you repeat that?

24 MR. BYRON WILLIAMS: I'll try. I might  
25 frame it better, Professor Simpson. In terms of data,

1 focussing on the decline in equity scenario, what is  
2 your view of the reliability of employing data prior to  
3 the end of the second World War, in terms of performing  
4 the decline in equities analysis?

5 DR. WAYNE SIMPSON: Well, as I've said,  
6 I -- I think that macroeconomics stabilization policy  
7 has improved substantially, both monetary policy and  
8 physical policy, and we've seen very good evidence of  
9 that in the response to the great recession that struck  
10 the world in 2008/2009.

11 It was a severe financial crash,  
12 arguably as severe as the stock market crash of '29,  
13 maybe even more severe, because there were some things  
14 that happened that were -- that would not have happened  
15 in '29 for largely technological reasons.

16 But having said that, I think the  
17 response, which is, I've said, was to not let the money  
18 supply collapse; not let the banking system collapse;  
19 keep interest rates low; put money into the economy  
20 essentially by buying bonds, which is quantitative  
21 easing; and to introduce a stimulative fiscal policy to  
22 put money in -- in people's hands to essentially  
23 replace the loss of private demand with public demand  
24 are all things that we've learned from that episode and  
25 make that episode less -- far, far less, and in fact, I

1 would -- I would give it virtually no -- I would give  
2 it no weight at all.

3 MR. BYRON WILLIAMS: Professor Simpson,  
4 is there any magic in using 1956 as the -- the starting  
5 date for the modern era, or do you have any commentary  
6 on -- on what's an appropriate starting date for the  
7 modern era?

8 DR. WAYNE SIMPSON: This may age me a  
9 bit, but we always thought of the modern era as being  
10 after the second World War. As the second World War  
11 recedes that may be less and less appropriate.

12 And there arguably are all sorts of  
13 things that go on in the stock market. I do not  
14 believe that they will materially affect the results  
15 that I've presented whether you choose, say '56 or '66.  
16 In fact, the adverse events that are captured in that  
17 5th percentile for the post-'56 data are data from the  
18 '70s and the '90s. And so how far back you go, whether  
19 you -- you say 1956, 1960, 1965, and even 1970 isn't  
20 going to matter very much.

21 I think the key factor is that you avoid  
22 the stock market crash of the '20s, the Great  
23 Depression of the '30s, and the second World War of the  
24 '40s.

25 MR. BYRON WILLIAMS: Professor Simpson,

1 I thank you for your -- your time. Unless you have  
2 anything you want to add we would concl~~o~~ -- conclude  
3 our direct-examination and make Professor Simpson  
4 available for cross-examination.

5 THE CHAIRPERSON: Thank you, Mr.  
6 Williams, and I -- given that it's approximately 12:15,  
7 I would suggest that we break for an hour and resume  
8 the proceedings at a quarter after 1:00 if that's  
9 enough time for the parties to -- to respond. So  
10 resume at 1:15. Thank you very much.

11

12 --- Upon recessing at 12:15 p.m.

13 --- Upon resuming at 1:16 p.m.

14

15 THE CHAIRPERSON: I believe we're ready  
16 to resume proceedings. And now I'd like to turn it  
17 over to -- the microphone over to another eminent  
18 alumni of the London School of Economics.

19 MS. KATHY KALINOWSKY: And actually  
20 I'll be turning it over to my colleague on the right,  
21 Mr. Michael Triggs. And he'll be conducting the cross-  
22 examination of Professor Simpson. I didn't want to get  
23 into this rivalry between the schools here, so.

24

25 CROSS-EXAMINATION BY MR. MICHAEL TRIGGS:

1 MR. MICHAEL TRIGGS: And I never  
2 attended London School of Economics, and as we know  
3 this morning, I had problems saying econometrics, so.  
4 Dr. Simpson, my role today will be to seek  
5 clarification and a better understanding of your  
6 testimony, both what you've written and what you spoke  
7 today.

8 As I said, my background is -- is not  
9 natural science or economics. So at times my questions  
10 may seem a little simplistic, so please have a bit of  
11 patience with me, as I'm kind of new to this area.

12 But as someone who's new to actuarial  
13 science and economics it appears to me that your report  
14 makes a number of very favourable comments about MPI's  
15 made-in-Manitoba DCAT.

16 Is that a fair assessment?

17 DR. WAYNE SIMPSON: Yes.

18 MR. MICHAEL TRIGGS: Okay. Would you  
19 agree with me that the DCAT is an analysis of data and  
20 statistics?

21 DR. WAYNE SIMPSON: Yes.

22 MR. MICHAEL TRIGGS: Okay. And as -- I  
23 understand what you're saying about the DCAT -- this is  
24 my understanding of what you're saying about the DCAT,  
25 that it's beneficial for -- to trim the size of the RSR

1 because it involves a consideration and analysis of  
2 statistics and information. It's more advanced than  
3 simply plugging numbers into a formula.

4 And is that one of the qualities that  
5 you like about the DCAT?

6 DR. WAYNE SIMPSON: I think it is.  
7 There are limitations to that process, in terms of --  
8 of understanding what is actually happening. And  
9 that's a distinct difference between, say, that and the  
10 Kopstein approach and what I referred to as  
11 transparency.

12 MR. MICHAEL TRIGGS: Now, go to -- this  
13 is Exhibit 3, CAC Exhibit 3. It's your report, the  
14 report you prepared on September 14th. If you go to  
15 page 14 of that report, just at the very top of the  
16 page there, the first paragraph, it says -- oh, sorry.  
17 Okay.

18 Are you there, Dr. Simpson?

19

20 (BRIEF PAUSE)

21

22 DR. WAYNE SIMPSON: Yes, I am.

23 MR. BYRON WILLIAMS: And, Mr. Triggs,  
24 keep -- carry on. I just want to -- if you'll just  
25 make sure that the pagination is consistent. That's my



1 -- my only worry. So carry on. You're doing -- doing  
2 lovely. Just...

3 MR. MICHAEL TRIGGS: Thank you, Mr.  
4 Williams.

5

6 CONTINUED BY MR. MICHAEL TRIGGS:

7 MR. MICHAEL TRIGGS: I'll read the page  
8 numbers that's on the bottom of my document, so  
9 hopefully it's the same. Page 14. At the top of the  
10 page, the first paragraph it -- the first full sentence  
11 begins with, "We would note."

12 Do you see that?

13 DR. WAYNE SIMPSON: Yes.

14 MR. MICHAEL TRIGGS: Okay. And -- and  
15 you wrote this, and you state:

16 "We would note, however, that the  
17 DCAT analysis now uses MPI's internal  
18 financial model and generates a base  
19 scenario from the combined efforts of  
20 seven (7) departments and  
21 committees."

22 Is that a good factor?

23 DR. WAYNE SIMPSON: That's what I  
24 wrote, yes.

25 MR. MICHAEL TRIGGS: And is that a good

1 factor?

2 DR. WAYNE SIMPSON: I think the fact  
3 that it -- yes, in the sense that it captures probably  
4 the -- a range of financial considerations that  
5 wouldn't be possible if it were out-house.

6 MR. MICHAEL TRIGGS: Thank you. Then  
7 you go on to say:

8 "This in-house feature of the current  
9 DCAT analysis should ensure that the  
10 unique organizational structure of  
11 MPI is properly captured and should  
12 enhance the credibility of the  
13 results obtained."

14 Is that your view?

15 DR. WAYNE SIMPSON: Yes.

16 MR. MICHAEL TRIGGS: So I take it what  
17 you're stating is that by MPI weighing the evidence and  
18 analyzing its unique situation, MPI is enhancing the  
19 credibility of its results.

20 Is that correct?

21 DR. WAYNE SIMPSON: In the context of a  
22 DCAT, yes.

23 MR. MICHAEL TRIGGS: At page 16 of the  
24 -- the reports, the second full paragraph begins, "The  
25 DCAT analysis." It says:

1 "The DCAT analysis from MPI has  
2 clearly evolved in a number of  
3 positive ways."

4 MR. MICHAEL TRIGGS: Do you still agree  
5 with that statement?

6 DR. WAYNE SIMPSON: Yes.

7 MR. MICHAEL TRIGGS:

8 "The scenarios are chosen more  
9 carefully and justified by appeal to  
10 extort patterns of adverse events  
11 that conform to standard notions of  
12 risk tolerance."

13 You obviously still agree with that?

14 DR. WAYNE SIMPSON: Yes.

15 MR. MICHAEL TRIGGS:

16 "The analysis is based on MPI's  
17 internal financial model that  
18 reflects the combined efforts of many  
19 departments and committee at MPI.  
20 This approach allows for more careful  
21 assessment of the results of the DCAT  
22 analysis and the implications for the  
23 target RSR as a rate setting."

24 Is that correct?

25 DR. WAYNE SIMPSON: Yes.

1 MR. MICHAEL TRIGGS: Would -- would you  
2 agree with me that DCAT assists management and the PUB  
3 in the identification, measurement, and mitigation of  
4 key risks faced by the Corporation?

5 DR. WAYNE SIMPSON: Properly used, yes.

6 MR. MICHAEL TRIGGS: Would you agree  
7 with me that the DCAT is looking -- is looking forward  
8 to consider risks in the future, to measure those risks  
9 that might be on the horizon?

10 DR. WAYNE SIMPSON: Well, I've had a de  
11 -- debate about the semantics of "forward looking", in  
12 the sense that it looks forward on the basis of the  
13 information which it has, which is inherently backward  
14 looking or historical.

15 MR. MICHAEL TRIGGS: Yes, but it is  
16 trying to predict those events that are going to happen  
17 in the future?

18 DR. WAYNE SIMPSON: Based on past  
19 evidence.

20 MR. MICHAEL TRIGGS: Would you agree  
21 with me that as a -- as a made-in-Manitoba DCAT --  
22 would you agree with me, that a made-in-Mani -- the  
23 made-in-Manitoba DCAT uses MPI specific assumptions for  
24 adverse scenarios, ripple effects, and management  
25 action as opposed to prescribed rules that are the same

1 for every company?

2 DR. WAYNE SIMPSON: Yes.

3 MR. MICHAEL TRIGGS: Would you agree  
4 with me that it produces a opinion as based upon the  
5 RSR targets set by the PUB?

6 DR. WAYNE SIMPSON: Yes.

7 MR. MICHAEL TRIGGS: Would you agree  
8 with me that the DCAT creates a clear linkage between  
9 the required RSR and the amount of risk faced by the  
10 Corporation?

11 DR. WAYNE SIMPSON: Yes.

12 MR. MICHAEL TRIGGS: Would you agree  
13 with me that the DCAT is a recognized method of the  
14 Canadian Institute of Actuaries and the Office of the  
15 Superintendent of Financial Institutions?

16 DR. WAYNE SIMPSON: I understand that  
17 to be the case, yes.

18 MR. MICHAEL TRIGGS: Would you agree  
19 with me that the DCAT is a living model, where adverse  
20 scenarios and associated assumptions can be discussed  
21 and debated at the general rate hearings and that, if  
22 warranted, modified for the next DCAT report?

23 DR. WAYNE SIMPSON: Yes, and I've adven  
24 -- emphasized that that is what I would hope to see.

25 MR. MICHAEL TRIGGS: Would you agree

1 with me that since the Manitoba -- this made-in-  
2 Manitoba DCAT is done in-house, the Corporation can  
3 provide the impacts of alternative adverse scenarios at  
4 the request of the PUB?

5 DR. WAYNE SIMPSON: Yes, it can, and it  
6 can also communicate those more effectively than if it  
7 were an external DCAT.

8 MR. MICHAEL TRIGGS: Thank you. Can  
9 you please go to page 17 of your report? And the third  
10 paragraph down there, begins with, "Another aspect."

11 Just for the record, can you read that -  
12 - in to the -- for the panel?

13 DR. WAYNE SIMPSON: The entire  
14 paragraph?

15 Mr. MICHAEL TRIGGS: Yes, please.

16 DR. WAYNE SIMPSON: What did I write?

17 Let's see:

18 "Another important aspect of the DCAT  
19 analysis will be the choice of  
20 adverse scenarios that are evidence  
21 based. MPI has improved its approach  
22 and responded to earlier criticism by  
23 using evidence from the TSX to  
24 justify the decline in equities and  
25 combined scenarios. Evidence on

1 claims experience to justify the  
2 combined and high-loss scenarios and  
3 evidence on hail storm claims to  
4 justify its large hail storm  
5 scenario.  
6 "Using the evidence for collision and  
7 hail storm claims, statistical models  
8 were developed to an -- assess the  
9 distribution of outcomes using  
10 standard simulation techniques that  
11 would appear to conform to modern  
12 statistical risk assessment practice.  
13 "The use of evidence-based  
14 justification for scenarios has two  
15 (2) important advantages. The  
16 statistical justification --  
17 justification can be assessed by the  
18 Board and its Intervenors, and  
19 clearly defined risk tolerance levels  
20 can be applied."  
21 MR. MICHAEL TRIGGS: I take it that is  
22 your evidence?  
23 DR. WAYNE SIMPSON: Yes.  
24 MR. MICHAEL TRIGGS: Now, you said in  
25 your report that the 2012 DCAT is sen -- substantially

1 improved from previous versions.

2                   This must give you confidence that MPI  
3 listens to suggestions for improvements and is willing  
4 to adopt change?

5                   DR. WAYNE SIMPSON: I'm not sure I  
6 would use the word "confidence". In what sense do you  
7 think it gives me confidence? It gives me information  
8 to ponder. I wouldn't say confidence.

9                   MR. MICHAEL TRIGGS: Well, does it make  
10 you believe that MPI will listen to evidence, consider  
11 it, and adapt its -- its programs, its changes -- make  
12 changes?

13                   DR. WAYNE SIMPSON: I'm not sure what  
14 evidence I have that -- of that.

15                   MR. MICHAEL TRIGGS: Well, you've --  
16 you've seen that we've -- you've suggested and you  
17 stated that MPI has made changes from past positions.

18                   Do you feel it's likely that we'd be  
19 willing to do that in the future?

20                   DR. WAYNE SIMPSON: There's been  
21 considerable progress. And if that continued, I would  
22 -- I would agree with your comment, yes.

23                   MR. MICHAEL TRIGGS: And you've seen  
24 the progress made to be a significant and a positive  
25 step?



1 DR. WAYNE SIMPSON: Yes.

2 MR. MICHAEL TRIGGS: Now, you have  
3 cited in your report and also in the slide presentation  
4 there the need for greater transparency in the  
5 information going into the analysis.

6 Is that correct?

7 DR. WAYNE SIMPSON: Yes.

8 MR. MICHAEL TRIGGS: You've also cited  
9 the need for greater collaboration between MPI, the  
10 Board, Intervenors, to develop a consensual process for  
11 the assessment of the DCAT analysis and the scenarios  
12 chosen.

13 Is that correct?

14 DR. WAYNE SIMPSON: Yes.

15 MR. MICHAEL TRIGGS: If those two (2)  
16 issues were properly addressed, would this be an  
17 important improvement in the current DCAT analysis and  
18 further enhance its credibility?

19 DR. WAYNE SIMPSON: Yes.

20 MR. MICHAEL TRIGGS: If you go to page  
21 18 of your report, the -- the first paragraph. Are you  
22 there? The last couple of sentences there, you state:

23 "The data used in the details of the  
24 analysis are not presented. As this  
25 report -- as this report indicates

1 above, these results may depend  
2 heavily on older evidence, less  
3 relevance in modern ec -- economy,  
4 since the TXS data from 1956 finds no  
5 period with similar adverse  
6 outcomes."

7 Is that correct?

8 DR. WAYNE SIMPSON: Yes.

9 MR. MICHAEL TRIGGS: Now, I'm going to  
10 be summarizing very generally Mr. Johnston's testimony.  
11 And I'd ask you just to accept that my summary is  
12 correct. But Mr. Johnston has said that he's not  
13 giving much weight to the pre-1956 data, but it's just  
14 something he can't simply ignore.

15 Now, what I want to know and make clear  
16 is, what is your position about the weight on the pre-  
17 1956 data? Is it to be completely ignored because it's  
18 irrelevant? Or should it at least be looked at,  
19 analyzed to see if there's anything that can be learned  
20 from it, and then make an assessment of how much weight  
21 should be given to it?

22 What is your position on that?

23 DR. WAYNE SIMPSON: The -- the  
24 methodology -- I mean, the notion of a weight, in a  
25 sense, is pretty arbitrary in this context, because

1 what you do is you take data and you put it into an  
2 order and you pick off the -- the 5th percentile.

3                   If you then start adjusting the data,  
4 you know, it's pretty arbitrary how much you would  
5 adjust to accommodate any particular thing. I think if  
6 I were given the choice, as essentially I've been given  
7 the choice, be -- or, of creating the choice, between  
8 giving it a hundred percent weight, which is because  
9 the -- all of the -- the adverse scenarios occur in the  
10 '30s, or giving it no weight, then I would clearly give  
11 it no weight.

12                   MR. MICHAEL TRIGGS: Okay, but don't  
13 you think it would be reasonable to at least, you know,  
14 have some consideration to it? It's not a simple  
15 mathematical formula. As you said, there's very many  
16 factors that has happened since, you know, prior to  
17 World War II that are no longer -- may no longer be --  
18 exist today. But isn't it reasonable to give some  
19 consideration and assign at least some weight?

20                   You just can't dismiss it entirely  
21 because of it's -- because of a date.

22                   DR. WAYNE SIMPSON: I'm not dismissing  
23 it because of a date. I'm -- I'm dismissing it because  
24 my understanding of the development of economics, and  
25 in particular, macroeconomics stabilization policy

1 leads me to believe that we have learned a number of  
2 things about how to address financial and real economic  
3 shocks to economies and that we have considerable  
4 evidence since the post -- the sec -- the post-second-  
5 World War period -- in the post-second-World War period  
6 that -- that we can manage the economy much better - in  
7 other words, address those downturns much better than  
8 we could prior to the second World War.

9                   So that is the -- the most significant  
10 factor to my mind. And that's really what drove me  
11 when I saw the data from 1919 to date, looking at the  
12 equity returns. The first reaction I had was, This is  
13 driven by the Great Depression, because the Great  
14 Depression has not been repeated and, in my opinion and  
15 in the opinion of a lot of economists, is not going to  
16 be repeated.

17                   MR. MICHAEL TRIGGS: I guess the  
18 underlying assumption there is that the politicians who  
19 are in charge at the time when decisions have to be  
20 made are going to listen to that advice and -- and take  
21 that advice and not be precluded from taking advice  
22 because of very political views they may hold, such as  
23 Mitt -- Mitt Romney saying that he would not bail out  
24 the financial institutions or the auto industry.

25                   DR. WAYNE SIMPSON: For people who had

1 real power, we have two (2) data points, if you will.  
2 We have George Bush, Junior, and we have Barack Obama,  
3 because the financial downturn began at the end of the  
4 Bush presidency and continued through the beginning of  
5 the Obama presidency.

6           And in fact, you see a great deal of  
7 continuity of policy between those two (2) Presidents  
8 who had diametrically different positions, at least  
9 their parties do. I suspect that, in my view, Romney's  
10 rhetoric is just that - rhetoric; that faced with the  
11 situation that Bush and Obama faced, he would do  
12 similar things, because he would get similar advice.

13           MR. MICHAEL TRIGGS: When I read your  
14 reports, what it tells me is that you're a person who  
15 likes to base decisions on evidence. You like to  
16 consider all your data. You'll sift through it. You  
17 analyze it to find an answer that's hidden in it.

18           Is that a fair assessment?

19           DR. WAYNE SIMPSON: Yes.

20           MR. MICHAEL TRIGGS: Now, is that why  
21 you made the statement:

22           "DCAT can be a useful tool for the  
23 ana -- for analy -- [excuse me] --  
24 for the analysis of risk facing MPI's  
25 operation and investments and the

1 responses needed."

2 It's a useful tool because DCAT requires  
3 an analysis of risk, an analysis of data, an analysis  
4 of assumptions.

5 Is that a fair assessment?

6 DR. WAYNE SIMPSON: Yes, it's a more  
7 thorough and -- and complex analysis of the information  
8 available.

9 MR. MICHAEL TRIGGS: Now, in your  
10 report you make a number of comments about other  
11 methodologies. Is that correct?

12 DR. WAYNE SIMPSON: Yes.

13 MR. MICHAEL TRIGGS: I'd like you to  
14 turn to page 10 of your report, please.

15

16 (BRIEF PAUSE)

17

18 MR. MICHAEL TRIGGS: Okay. In the  
19 second paragraph, under the heading, "Pros and Cons  
20 According to MPI," you state:

21 "MPI correctly notes that while the  
22 percentage of premium Kopstein  
23 approach is easier to understand and  
24 calculate than the other approaches,  
25 it is not clearly linked to the risks

1 MPI faces."

2 Am I correct to say that this  
3 methodology -- that's the Kopstein methodology -- does  
4 not consider the risk that RSR is intended to protect  
5 against?

6 DR. WAYNE SIMPSON: Yes, except insofar  
7 as it does index the risks to the -- to claims, which  
8 is a useful index. I would, as a rough guide, suspect  
9 that the size, the absolute size of risks, would rise  
10 with the size of the operation, which would be  
11 reflected in the claims.

12 So there -- there is -- there is some  
13 indexing that is useful. So, you know, if they just  
14 had an absolute number and stuck to it since 1989, I  
15 suspect it would be less useful.

16 MR. MICHAEL TRIGGS: I guess the  
17 question is: Does risk rise with premium growth? And  
18 I think the next statement you say:

19 "Indeed, the main risks affect the  
20 assets and liabilities of the  
21 Corporation, not premiums, per se."

22 So is it fair to say that the risks  
23 facing MPI are to -- its assets will shrink and that  
24 its liabilities may grow? There's no really  
25 significant risk to premiums.

1 Is it fair to say that?

2 DR. WAYNE SIMPSON: I think I'd stand  
3 by the claim that it's useful to index -- it was  
4 useful, the Kopstein index, to -- his rule, to claims,  
5 because that roughly reflects the size, or the -- or,  
6 premiums, I'm sorry, because that roughly reflects the  
7 size of the operation, and it captures inflation and so  
8 on.

9 That's the only point I'm trying to make  
10 there. If you're trying to make -- well, I did make  
11 the point that it is not related, for example, to the  
12 risk that they would face on the investment side, which  
13 we've seen do - - have been changing dramatically.

14 MR. MICHAEL TRIGGS: Yes, and as -- as  
15 I said to you like, you know, MPI's risks are shrinking  
16 assets and increasing liabilities, the -- not the  
17 premiums.

18 Is that correct?

19 DR. WAYNE SIMPSON: Okay.

20 MR. MICHAEL TRIGGS: And you go on to  
21 state:

22 "This limitation of Kopstein's  
23 approach is clear in the current  
24 uncertain stock market environment."

25 So the current uncertain stock market



1 environment can potentially result in significant  
2 losses to MPI's assets, but this risk is irrelevant to  
3 Kopstein's approach?

4 DR. WAYNE SIMPSON: Yes.

5 MR. MICHAEL TRIGGS: Now, you go on to  
6 say:

7 "Risk to the value of MPI's  
8 investment portfolio should be  
9 reflected in any risk assessment and  
10 mitigation strategy, and the RSR  
11 target needs to consider the risks  
12 associated with -- with, for example,  
13 a repeat of the sharp financial  
14 downturn of 2008 and '09."

15 So isn't it an essential component of  
16 risk management to identify the risks, assess the risk,  
17 develop mitigation strategies, which include setting  
18 aside appropriate reserve?

19 Is it fair to say that that is what DCAT  
20 is about, when it considers these factors, whereas a  
21 percentage of premiums does not?

22 DR. WAYNE SIMPSON: Yes.

23 MR. MICHAEL TRIGGS: Would you agree  
24 with me that the insurance industry in Canada is  
25 heavily regulated?

1 DR. WAYNE SIMPSON: If you want a non-  
2 expert's opinion, I would agree.

3 MR. MICHAEL TRIGGS: Would you also  
4 agree with me that one of the main reasons why it's  
5 heavily regulated is to protect the public?

6 DR. WAYNE SIMPSON: I would presume  
7 that's a major consideration.

8 MR. MICHAEL TRIGGS: Now, there are  
9 various legislation in Canada governing the insurance  
10 industry, such at the federal level, there's the  
11 Canadian and British Insurance Companies Act; and in  
12 Manitoba there's the Insurance Act. I think every  
13 province and territory has an Insurance Act.

14 They all speak to the requirement that  
15 insurance companies have, quote, "appointed actuaries."  
16 Now, I'm not aware of any, but maybe you are, of any  
17 requirements for there being an appointed economist?

18 DR. WAYNE SIMPSON: Is that a question?

19 MR. MICHAEL TRIGGS: Yes. Are you  
20 aware --

21 DR. WAYNE SIMPSON: Am I aware of any  
22 require --

23 MR. MICHAEL TRIGGS: Yes.

24 DR. WAYNE SIMPSON: I am not aware of  
25 any such requirements, no. But if there's a job

1 available and they need someone, I'm -- I'd be  
2 interested in the job posting.

3 MR. MICHAEL TRIGGS: The -- the CAC  
4 (MANITOBA) has retained you to provide analysis of the  
5 issues associated with risk management and target the  
6 Corporation's Rate Stabilization Reserves.

7 Is that correct?

8 DR. WAYNE SIMPSON: Yes.

9 MR. MICHAEL TRIGGS: And as you also  
10 said earlier you're aware that they've retained Andrea  
11 Sherry to be an independent actuary.

12 Is that correct?

13 DR. WAYNE SIMPSON: Yes.

14 MR. MICHAEL TRIGGS: And I believe you  
15 said that Ms. Sherry is an expert at DCAT. Is that  
16 correct?

17 DR. WAYNE SIMPSON: She's a -- she's a  
18 practitioner. To me, she's an expert, yes.

19 MR. MICHAEL TRIGGS: And DCAT is used  
20 by her employee -- employer, Wawanesa Insurance? I  
21 said that wrong.

22 DR. WAYNE SIMPSON: Let's try  
23 econometrics.

24 MR. MICHAEL TRIGGS: I got that one  
25 right eventually.

1 DR. WAYNE SIMPSON: I understand that  
2 to be the case, yes.

3 MR. MICHAEL TRIGGS: And OSFI, the  
4 Office of the Superintendent of Financial Institutes,  
5 which regulates her employer, believes that DCAT is  
6 ready for prime time.

7 Is that correct?

8 DR. WAYNE SIMPSON: In the context of a  
9 private insurer, possibly. I -- I really don't know.  
10 I -- I assume yes.

11 MR. MICHAEL TRIGGS: And you probably  
12 don't know how long, but I'll ask anyways, how long  
13 OSFI has been using DCAT in the prime time?

14 DR. WAYNE SIMPSON: Is it multiple  
15 choice?

16 MR. MICHAEL TRIGGS: Yeah, "yes" or  
17 "no".

18 DR. WAYNE SIMPSON: I don't know.

19 MR. MICHAEL TRIGGS: Do you know if the  
20 CAC (MANITOBA) does an actuary review of this DCAT?

21 DR. WAYNE SIMPSON: If CAC (MANITOBA)  
22 has done an actuarial review of -- of which DCAT? Of --

23 MR. MICHAEL TRIGGS: The -- the MPI  
24 2012 DCAT, the one that we're discussing.

25 DR. WAYNE SIMPSON: No, they haven't.

1 MR. MICHAEL TRIGGS: Now, you said that  
2 you and Ms. Sherry -- and the other gentleman's name  
3 escapes me, but he has worked at -- he has --

4 DR. WAYNE SIMPSON: Peter -- Peter  
5 Dyck.

6 MR. MICHAEL TRIGGS: Peter Dyck.

7 MR. BYRON WILLIAMS: Could I interrupt,  
8 Mr. Triggs? Just because I want to make sure that we  
9 understand your previous question, in terms of an  
10 actuarial -- actuarial review, just to make sure that  
11 the answer is fully candid.

12 There's two (2) ways one could presume  
13 you were asking that. If you -- I wasn't sure if you  
14 were asking have -- has it been run through a parallel  
15 DCAT model? Or has the actu -- has Ms. Sherry looked  
16 at it?

17 I wasn't sure what you were asking, and  
18 I just -- I just don't want to let the answer go on  
19 with -- without having a bit more clarification.

20 MR. MICHAEL TRIGGS: Certainly. I was  
21 asking whether or not Ms. Sherry -- if he was aware of  
22 whether CAC (MANITOBA) has had Ms. Sherry do a review  
23 of the DCAT.

24 DR. WAYNE SIMPSON: She -- she reviewed  
25 the documents available to her and, in that sense --

1 but she didn't -- I -- I was interpreting it in the  
2 fashion of: Did she run a parallel DCAT analysis? And  
3 the answer to that would be -- would be no. But she  
4 certainly reviewed the documents and provided me with  
5 useful information about a DCAT, how it should be done,  
6 and read the report that I -- I wrote and made comments  
7 on it, some of which I incorporated.

8

9 CONTINUED BY MR. MICHAEL TRIGGS:

10 MR. MICHAEL TRIGGS: Okay. Do you know  
11 whether or not Ms. Sherry, in her professional  
12 capacity, uses the pre-1956 data of the -- from equity  
13 markets to run her -- her models through her work?

14 DR. WAYNE SIMPSON: No.

15 MR. MICHAEL TRIGGS: No, you're not  
16 aware, or...?

17 DR. WAYNE SIMPSON: I'm not aware.

18 MR. MICHAEL TRIGGS: Are you aware of  
19 other actuaries, such as Mr. Pelly, who is here,  
20 whether he uses the pre-1956 data in his work on DCATS?

21 DR. WAYNE SIMPSON: No.

22 MR. MICHAEL TRIGGS: Did Ms. Pelly  
23 (sic) review your slide that was shown at the end, the  
24 -- the chart with the -- the \$100 million? Did she  
25 review that slide?

1 DR. WAYNE SIMPSON: I'm sorry, Mr. --

2 MR. MICHAEL TRIGGS: Oh, it's --

3 DR. WAYNE SIMPSON: Ms. Sherry?

4 MR. MICHAEL TRIGGS: Ms. Sherry, I  
5 should say, yes. Sherry, yes.

6 DR. WAYNE SIMPSON: No. I don't think  
7 I circulated that to her, no. This was -- this was  
8 done fairly recently.

9 MR. MICHAEL TRIGGS: And I believe in  
10 your --

11 DR. WAYNE SIMPSON: Let me -- actually,  
12 I believe -- I believe I did copy her on that. I think  
13 -- I think she did see it, yes.

14 MR. BYRON WILLIAMS: Mr. Triggs, on  
15 that one we would undertak -- undertake to double-check  
16 whether or not she reviewed, because I'm not sure  
17 either of our memory is -- is...

18 DR. WAYNE SIMPSON: Yeah. I -- I could  
19 check my email records, but when -- when I sent it, I  
20 believe -- I believe I did copy her, actually.

21

22 CONTINUED BY MR. MICHAEL TRIGGS:

23 MR. MICHAEL TRIGGS: So you don't -- I  
24 guess, though, you don't recall whether she replied or  
25 responded to your analysis then though, did you?

1 DR. WAYNE SIMPSON: She either  
2 responded favourably or not at all. I could check  
3 that.

4

5 (BRIEF PAUSE)

6

7 MR. MICHAEL TRIGGS: Yes.

8 MR. BYRON WILLIAMS: Yes, CAC

9 (MANITOBA) undertakes to review a) whether Ms. Sherry  
10 reviewed Professor Simpson's slide show, and b) whether  
11 she commented upon it, in terms of the -- the estimate  
12 of the 100 million associated with the minus 20 percent  
13 decline in equities over a cumulative four (4) year  
14 period.

15

16 --- UNDERTAKING NO. 20: CAC (MANITOBA) undertakes  
17 to review a) whether Ms.  
18 Sherry reviewed Professor  
19 Simpson's slide show, and  
20 b) whether she commented  
21 upon it, in terms of the  
22 estimate of the 100 million  
23 associated with the minus  
24 20 percent decline in  
25 equities over a cumulative



1 four (4) year period

2

3 CONTINUED BY MR. MICHAEL TRIGGS:

4 MR. MICHAEL TRIGGS: In your  
5 examination-in-chief you stated that, when you were  
6 referring to your team and the review of your work,  
7 that you said, "I think they agree with me."

8 That seems to leave a lot of uncertainty  
9 as to whether they actually do or do not.

10 DR. WAYNE SIMPSON: I have no evidence  
11 to suggest they don't agree with me.

12 MR. MICHAEL TRIGGS: Do you have  
13 evidence that suggests that they do agree with you?

14 DR. WAYNE SIMPSON: Yes. I have email  
15 correspondence and a meeting, actually, with Ms. Sherry  
16 to suggest that they were -- look quite favourably upon  
17 the work I did.

18 THE CHAIRPERSON: Do you mind if I  
19 interject a few questions here, just for my  
20 clarification? Could you explain Ms. Sherry, where --  
21 what she does or what the relationship is between your  
22 work and her?

23 I'm -- it's not clear in my mind what --  
24 what's -- what transpired there.

25 DR. WAYNE SIMPSON: She -- well, she is

1 a DCAT practitioner. I gather she works at Wawanesa.  
2 And she was retained by CAC (MANITOBA) and the Public  
3 Interest Law Centre to assist with the -- with the  
4 expert -- provide expert advice. She did not have any  
5 role in writing the report. I wrote the report. But  
6 they -- she was provided with the report and asked to  
7 comment on it, similarly the addendum.

8                   And it strikes me that in most of the  
9 correspondence on these issues regarding the DCAT, I  
10 would have routinely copied her when I sent material to  
11 -- not always Peter Dyck, but usually Andrea Sherry,  
12 because after all, we're talking about a DCAT, and she  
13 does these things. And so I wanted to get things right,  
14 in terms of the -- in terms of what DCATs do, how they  
15 go about it, what kinds of assumptions they make, as  
16 much as possible. And so she was very useful in that -  
17 - in that process.

18                   And I relied on her, for example, when  
19 she said that when you do a DCAT, the MCT is a natural  
20 byproduct. And I made the comment in the -- in the  
21 report that they are inextricably linked in that sense,  
22 that one comes out of the other. Now, the actual  
23 mechanics of that, she could explain for better than I  
24 can.

25                   THE CHAIRPERSON:     Now just again to

1 clarify, she commented on your report, or she commented  
2 -- she also read the DCAT that had been prepared by  
3 MPIC?

4 DR. WAYNE SIMPSON: She would have read  
5 the materials, including the amen -- the original and  
6 amended DCAT provided by the report, provided by MPI,  
7 yes.

8 THE CHAIRPERSON: Again, her commentary  
9 would have been to the effect that your -- your  
10 calculations were plausible in the context of the  
11 information she had before her?

12 DR. WAYNE SIMPSON: I would have to --  
13 I -- I seem to recall sending my calculations to her,  
14 my rough calculations, as I put it. I don't -- I  
15 certainly didn't get any negative comment, whether I  
16 got any comment at all sort of in this last-minute  
17 phase was -- I am not sure. I couldn't say whether she  
18 said anything positive, but she didn't say anything  
19 negative.

20 MR. BYRON WILLIAMS: Mr. Chairman just  
21 for again -- for purposes of clarifications, if you  
22 would assist in -- when you were referring to  
23 calculations, were you referring to the estimate of the  
24 impact of the minus 20 percent? Or were you referring  
25 to the overall calculations of the report?

1 THE CHAIRPERSON: The minus 20 percent.

2

3 CONTINUED BY MR. MICHAEL TRIGGS:

4 MR. MICHAEL TRIGGS: Do you know why Ms  
5 -- Ms. Sherry is not here today?

6 DR. WAYNE SIMPSON: I'd assume she's  
7 working, but I don't know.

8 MR. MICHAEL TRIGGS: Do you know why  
9 she did not submit in writing any evidence for the  
10 panel to consider on this, on the DCAT?

11 DR. WAYNE SIMPSON: No.

12 MR. MICHAEL TRIGGS: Now if we can go  
13 to the -- the slide, and when I refer to "the slide",  
14 it's the slide with the -- it had the -- this morning  
15 it had the \$100 million figure, the 20 percent decline.

16

17 (BRIEF PAUSE)

18

19 DR. WAYNE SIMPSON: You're talking  
20 about the rough calculations table ---

21 MR. MICHAEL TRIGGS: Yes, that's  
22 correct. So did you consider the budgeted equity  
23 investment income in your assessment?

24 DR. WAYNE SIMPSON: No

25 MR. MICHAEL TRIGGS: Do you think that

1 would be an important consideration?

2 DR. WAYNE SIMPSON: If you're -- I'm  
3 not sure what you're now asking me. I am taking the  
4 calculations from two (2) DCAT points provided by MPI,  
5 and I'm extrapolating. Beyond that, I am doing nothing  
6 more. So I -- I wouldn't engage in any further  
7 calculations beyond what is presented in the table.

8 MR. MICHAEL TRIGGS: Yes. So you're --  
9 you didn't consider the fact that -- I've got to keep  
10 checking the microphone to see it's on.

11 You didn't consider the fact that MPI  
12 had previously budgeted income off of this return when  
13 a decline happens?

14 DR. WAYNE SIMPSON: Are you talking  
15 about the amount that's budgeted in the base scenario?

16 MR. MICHAEL TRIGGS: Yes.

17 DR. WAYNE SIMPSON: Well, when you're  
18 comparing your decline in equity scenario to the base  
19 scenario, implicitly you're always doing that.

20

21 (BRIEF PAUSE)

22

23 MR. MICHAEL TRIGGS: Okay. What if I  
24 told you MPI is budgeting to earn \$108 million in  
25 equity investment income between 2013/'14 and 2016/'17?

1 These figures are in AI-9, pages 1 and 2, if you're  
2 interested.

3 So is this an important factor to  
4 consider in your analysis?

5 DR. WAYNE SIMPSON: It would certainly  
6 be an important factor to consider in a DCAT analysis,  
7 which I have not done.

8 MR. MICHAEL TRIGGS: Yeah, you -- you  
9 haven't done a DCAT analysis. And I think your  
10 testimony was that, earlier, you've never done a DCAT  
11 analysis.

12 Is that correct?

13 DR. WAYNE SIMPSON: That's what I said.

14 MR. MICHAEL TRIGGS: So if MPI's only  
15 loss is equity investment income over the next four (4)  
16 years, then it would lose \$100 million relative to its  
17 budgets.

18 That's already bigger than the \$100  
19 million calculation, isn't it?

20 DR. WAYNE SIMPSON: There are other  
21 things going on that are not captured there besides the  
22 equity loss.

23 MR. MICHAEL TRIGGS: Such as?

24 DR. WAYNE SIMPSON: Well, you have  
25 other elements in the investment portfolio, right. And

1 you have other aspects of the operations on the -- on  
2 the real side, if you will.

3 MR. MICHAEL TRIGGS: Yeah. So that --  
4 that \$108 million is only in the equity component.  
5 That's the -- the factor that's at risk.

6 DR. WAYNE SIMPSON: Yes, I understand  
7 that.

8 MR. MICHAEL TRIGGS: So those other  
9 elements aren't taken into consideration here. So you  
10 said other things are at -- at -- so what are they?

11 DR. WAYNE SIMPSON: Well, let me -- let  
12 me rephrase my answer then. You -- what you're trying  
13 to assume is that over a four (4) year period the --  
14 the equity return is zero instead of 108 million? I'm  
15 just trying to clarify what the question is.

16 MR. MICHAEL TRIGGS: I guess the point  
17 is that even before a decline in equity market happens,  
18 MPI is assuming -- has budgeted to make money off of  
19 the -- of this. So it's not making the money, it  
20 didn't make that money, and now it's losing money  
21 because of the decline.

22 DR. WAYNE SIMPSON: That is exactly the  
23 comparison between the base scenario and the adverse  
24 event scenario.

25

1 (BRIEF PAUSE)

2

3 MR. MICHAEL TRIGGS: So you have -- a  
4 20 percent decline in your scenario results in a loss  
5 of \$75 million to the Corporation's equity balance.

6 Is that correct, subject to check?

7 DR. WAYNE SIMPSON: If you're comparing  
8 '14/'15, which is the basis of the RSR calculation,  
9 then it goes from -- it -- the -- the net gain from  
10 going from minus thirty-five (35) to minus twenty (20)  
11 is 75 million.

12 MR. MICHAEL TRIGGS: Let me --

13 DR. WAYNE SIMPSON: You would -- you  
14 would compare columns 5 and 8 for '14/'15.

15 MR. MICHAEL TRIGGS: Okay. Now you get  
16 a little bit confusing here. So the Basic equity  
17 balance -- the DCAT shows that the Basic equity balance  
18 as of the beginning of 2013/'14 is three hundred and  
19 twenty (320) -- \$372.7 million.

20 Subject to check, is 20 percent of this  
21 number equal to \$75 million?

22 DR. WAYNE SIMPSON: Three-hundred and  
23 seven (307) million?

24 MR. MICHAEL TRIGGS: Three seventy-two  
25 (372) million.



1 DR. WAYNE SIMPSON: Three seventy-two  
2 (372). Oh, that's pretty close.

3 MR. MICHAEL TRIGGS: So a 20 percent  
4 decline -- so a 20 percent decline, your scenario  
5 results in a loss of 75 million to the Corporation's  
6 equity balance.

7 Is that correct?

8 DR. WAYNE SIMPSON: Yes.

9 MR. MICHAEL TRIGGS: So...

10

11 (BRIEF PAUSE)

12

13 MR. MICHAEL TRIGGS: Okay. So it looks  
14 like in your scenario results in a \$75 million loss in  
15 equity balances, plus another \$108 million in loss  
16 equity investments over four (4) years. That totals  
17 \$183 million relative to budget.

18 Is that equal to the 100 -- \$100  
19 million?

20 DR. WAYNE SIMPSON: Well, you're going  
21 off the board here. The -- the DCAT process asks for  
22 an evidence-based justification of a particular  
23 scenario, which is not an imagined scenario, not a  
24 stress test, but is based upon, as we have it here, a  
25 four (4) year return to the TSX.

1                   What we've done is we've taken evidence  
2 that we can gather on four (4) year returns to the TSX  
3 -- or, you've taken evidence. And what we've seen from  
4 the post-'56 period is that an adverse scenario at the  
5 5th percentile is a decline of minus 16.4 percent over  
6 that period.

7                   We haven't talked about, you know,  
8 decline and recovery. There's a little bit of an  
9 element there that probably should be captured. But,  
10 you know, there are all sorts of other imagined  
11 scenarios, the plausibility of which I do not know,  
12 because I haven't presented with any evidence based on  
13 an empirical probability distribution which would allow  
14 me to assess that evidence in the context of the risk  
15 tolerance levels that we've established.

16                   MR. MICHAEL TRIGGS:    The 20 percent  
17 decline, that was your scenario that you put forward  
18 and that you're submitting to the Board.

19                   Is that correct?

20                   DR. WAYNE SIMPSON:    The minus 20  
21 percent scenario is a slight -- slightly worse than the  
22 minus 16.4 percent that comes from the 5th percentile  
23 of the post-'56 returns, yes.

24                   MR. MICHAEL TRIGGS:    And that's the one  
25 (1) you put forward to the Board. And I seem to recall

1 you said it was a -- a rough estimate, a written on the  
2 back of a napkin type of estimate.

3 Is that correct?

4 DR. WAYNE SIMPSON: Written on a  
5 spreadsheet.

6 MR. MICHAEL TRIGGS: This -- earlier  
7 this morning you said napkin, but same thing.

8 DR. WAYNE SIMPSON: Envelope. I  
9 actually said envelope, if we're being accurate.

10 MR. MICHAEL TRIGGS: Envelope. Okay,  
11 sorry. Okay. Now, the PUB -- the Board, they have the  
12 serious job of determining what a RSR level is, because  
13 of the impacts it'll have. And do you think it's  
14 appropriate for them to consider rough estimates,  
15 something that's not been run through a DCAT?

16 DR. WAYNE SIMPSON: I would prefer to  
17 see a minus 16.4 or a minus 20 percent decline in  
18 equity scenario run through the DCAT. I think that  
19 would improve the Board's understanding of -- of how  
20 much the consideration only of the post-'56 data  
21 matters. And I think it would also provide some  
22 evidence of a -- of progress towards a consensual  
23 process in which both the Intervenors, the Board, and  
24 MPI played a role.

25

1 (BRIEF PAUSE)

2

3 MR. MICHAEL TRIGGS: Now, you've made a  
4 statement about the operational risk metho --  
5 methodology and it kind of confuses me. This is at  
6 page 19 of the -- your report, if you could go to  
7 there.

8

9 (BRIEF PAUSE)

10

11 MR. MICHAEL TRIGGS: It's in the  
12 second-last paragraph. Middle sentence says:

13 "One of the strengths of the RA/VaR,  
14  
15 risk methodology] approach is setting  
16 the RSR target range as being its  
17 stability since the projections  
18 change only gradually as new evidence  
19 of MPI's operations and investments  
20 is added."

21 Is that correct?

22 DR. WAYNE SIMPSON: That's what I  
23 wrote.

24 MR. MICHAEL TRIGGS: Yes. Now, I'll  
25 put it to you, and this is subject to check, but the

1 operational risk methodology had, for the nin -- to the  
2 2007 GRA, produced a range of 50 million to \$80  
3 million; that the 2010 GRA produced a range of 96  
4 million to 241 million; that at the two hundred and  
5 twelve (212) (sic) GRA it produced a range of 144  
6 million to 243 million; and at this GRA, it has  
7 produced a range of one ninety-three (193) to 291  
8 million.

9 Do you consider that stable and gradual?

10 MR. BYRON WILLIAMS: Before the witness  
11 answers the question, Mr. Triggs, just can you provide  
12 the witness with confidence that all -- all of those  
13 assumptions were based on the same time horizons for  
14 the value at risk? And also the same equity load.

15 And, sir, if -- if -- that would be  
16 helpful. Because we -- the -- the history of this,  
17 obviously, has been we've used one (1) per -- one (1)  
18 year time horizons, two point five (2.5). So if you're  
19 going to be putting those to the witness, and -- and if  
20 you can provide assurance of that, the witness  
21 certainly is available to answer that question.

22

23 (BRIEF PAUSE)

24

25 MR. MICHAEL TRIGGS: Yeah, Mr.

1 Williams, I can advise that these are the outputs that  
2 came from the Board-approved methodology and that they  
3 are consistent.

4 MR. BYRON WILLIAMS: Then the witness  
5 can answer the question. And if MPI will just do CAC  
6 the favour of -- of checking back and making sure of  
7 that 2007 number, we'll do the same.

8 CAC (MANITOBA) will undertake --  
9 certainly, the witness is available to answer the  
10 question. CAC (MANITOBA) will undertake to review the  
11 VaR outputs, the RA/VaR outputs, to -- to respond, in  
12 terms of whether they were consistent in the core  
13 estimates being 25 percent equity and also two point  
14 five (2.5) year horizon. If they are not consistent,  
15 CAC will advise the Board of that.

16

17 --- UNDERTAKING NO. 21: CAC (MANITOBA) to review  
18 the RA/VaR outputs to  
19 respond, in terms of  
20 whether they were  
21 consistent in the core  
22 estimates being 25 percent  
23 equity and also two point  
24 five (2.5) year horizon

25

1 DR. WAYNE SIMPSON: My -- my turn?

2

3 CONTINUED BY MR. MICHAEL TRIGGS:

4 MR. MICHAEL TRIGGS: Yes.

5 DR. WAYNE SIMPSON: Well, I think the  
6 operative words here are "has been" its stability. And  
7 I think the reference there I'm making is to my -- my  
8 report with Dr. Hum, the previous reports from 2006 and  
9 2009, where the RA/VaR approach, we thought, had  
10 provided both a -- a fairly transparent and replible --  
11 replicable approach to -- to this problem.

12 In recent years, it has not been as  
13 stable, which I think is the point you're making. And  
14 I interpret that as picking up some of the volatility  
15 associated with the investment portfolio. And that's  
16 all a good thing.

17 But I think it's picking up, probably,  
18 in a -- in a very crude way, in precisely the kinds of  
19 -- expressing precisely the kinds of concerns that MPI  
20 has expressed with the methodology, which it -- it's  
21 had its day, and it probably doesn't do as good a job  
22 as other methods, such as the DCAT. So I -- I would  
23 agree with that.

24

25 (BRIEF PAUSE)

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MR. MICHAEL TRIGGS: In your report that you've submitted, the September 14th report, you stated that the RSR could be as low as \$81 million. Is that correct?

DR. WAYNE SIMPSON: Do you have a page on this?

MR. MICHAEL TRIGGS: I believe it's in the recommendations, and it's page 20.

DR. WAYNE SIMPSON: Page 20? Oh, I see. I -- I'm simply listing the Kopstein percentage of premium numbers that come out of the amended DCAT report.

MR. MICHAEL TRIGGS: Yeah, and I think before that you say there is no reason to alter the RSR target range generated by this method?

DR. WAYNE SIMPSON: That's what I say.

MR. MICHAEL TRIGGS: So you are then recommending to the Board that they keep that -- that range?

DR. WAYNE SIMPSON: The rough calculations that I made -- that I presented today suggest to me that if you were setting an RSR target on the DCAT procedures based on the post-'56 data, you would probably set an RSR target at the low end of the



1 Kopstein range because, you know, seventy-seven (77) to  
2 81 million is -- is closer to a hundred (100) than is  
3 150 million. So I might suggest a little lower target  
4 now than I would have at that point.

5 MR. MICHAEL TRIGGS: Okay. Do you  
6 recall testifying before the PUB in October 2008, on  
7 the day that the stock market -- the TSX crashed eleven  
8 hundred (1,100) points?

9 DR. WAYNE SIMPSON: You're testing my  
10 memory. Is the answer yes?

11 MR. MICHAEL TRIGGS: Yes. You don't  
12 recall that day?

13 DR. WAYNE SIMPSON: I probably recalled  
14 it better when I looked at my investment and pension  
15 statements later. But at the time, no, it doesn't  
16 particularly stick in my mind. Stock markets go up and  
17 down.

18 MR. MICHAEL TRIGGS: Yeah. You don't  
19 recall Professor Hum wanted to be excused from his  
20 testimony because it was such a unprecedented event?

21 DR. WAYNE SIMPSON: I can imagine Dr.  
22 Hum reacting in that fashion.

23 MR. MICHAEL TRIGGS: Did -- did you  
24 predict the crash or warn of its potential? Any warn -  
25 - any way warn of it?

1 DR. WAYNE SIMPSON: Anyone who had the  
2 confidence in the -- that that crash was going to  
3 occur, not just predicted but put their money behind  
4 it, is lying on an island somewhere in the South  
5 Pacific and not testifying before the PUB.

6 MR. MICHAEL TRIGGS: I'll take that as  
7 a no.

8 DR. WAYNE SIMPSON: No.

9 MR. MICHAEL TRIGGS: Just out of  
10 curiosity, did you check the equities market today?

11 DR. WAYNE SIMPSON: No, it was up  
12 yesterday.

13 MR. MICHAEL TRIGGS: So subject to  
14 check, I'm advising you that for the fiscal year that  
15 ended February 2009, MPI had budgeted \$104 million in  
16 income from its equity investments. Because of the  
17 stock market crash that we just spoke of, MPI...

18

19 (BRIEF PAUSE)

20

21 MR. MICHAEL TRIGGS: Okay. Sorry. Our  
22 total invest -- let me correct that. Our -- MPI  
23 budgeted total investment income was \$104 million, not  
24 just the equities. Because of the stock market crash  
25 that we just spoke of, the investment totalled \$4

1 million. That's a real number. It's a loss of -- a  
2 real loss of a \$100 million, and it was suffered just  
3 three and a half (3 1/2) years ago.

4                   If the RSR was set at only \$81 million  
5 as you recommended as reasonable, you say in the lower  
6 end, MPI would have had then to seek an additional \$19  
7 million from Manitobans at a time they -- they were  
8 going through the great recession.

9                   In your professional opinion, is that a  
10 prudent way for MPI to manage its affairs?

11                   DR. WAYNE SIMPSON: The -- the advice  
12 that I saw from investment -- the investment community  
13 when the stock market crash occurred, and in the  
14 aftermath when there was a great deal of uncertainty in  
15 the stock market, was to say to people, Don't bail,  
16 hold your stocks; they'll come back. And I'm assuming  
17 MPI took much the same advice with much the same  
18 result.

19                   MR. MICHAEL TRIGGS: No, my -- my  
20 question was -- pointed out that MPI suffered \$100  
21 million loss from budget, and that's money that was  
22 planned to be spent that was needed for its programs.  
23 And this money had to come from somewhere. And if it  
24 was going to come -- if the RSR was at \$81 million,  
25 that's \$19 million more that has to come from

1 ratepayers in the middle of the -- the great recession.

2 And the question was: In your  
3 professional opinion, is that a reasonable way for MPI  
4 to manage its affairs?

5 DR. WAYNE SIMPSON: Well, I stand by my  
6 previous answer, and I suspect if you look at the -- I  
7 think you took February to February figures, didn't  
8 you?

9 MR. MICHAEL TRIGGS: Yes.

10 DR. WAYNE SIMPSON: Yeah. They're --  
11 that -- the fiscal year is April 1 to March 31, right?

12 MR. MICHAEL TRIGGS: No.

13 DR. WAYNE SIMPSON: Or is it February  
14 to February? So that's why you took the February  
15 figures. Okay. So you're not going to recover this  
16 all at once, which is why invest -- the investment  
17 community said, Hold the money and -- and you'll  
18 recover. So you have to find bridge financing for  
19 this.

20 One method, obviously, is to have some  
21 sort of rate surcharge. The rate surcharge -- and what  
22 was it, 18 million? I don't know what a rate surcharge  
23 would be on 18 million, but I -- I don't know that it  
24 would be rate shock. If you're taking the most drastic  
25 example out of the last recession, I think -- I think

1 I'm -- I'm not troubled by it.

2 MR. MICHAEL TRIGGS: Yeah, but you also  
3 have to rebuild your RSR as well.

4 DR. WAYNE SIMPSON: Over time, and it -  
5 - it rebuilt pretty fast once stocks recovered; at  
6 least my pension fund did.

7 MR. MICHAEL TRIGGS: At page 5 of your  
8 report, the second-last paragraph, you state:

9 "The scientific approach to large,  
10 unforeseen, nonrecurring events invol  
11 -- involves specification of a risk  
12 tolerance level corresponding to a  
13 confidence level for statistical  
14 analysis. A level commonly adopted  
15 is a ninety-seven point five (97.5)  
16 confidence level, which would  
17 correspond to an event having a 2.5  
18 percent annual chance at occurring,  
19 or a one (1) in forty (40) year  
20 event."

21 Board Order 150/'07, which is copied on  
22 page 17 of your report, it states:

23 "The RSR should be large enough to be  
24 able to withstand an unforeseen loss  
25 of a magnitude not anticipated to

1 occur once -- more than once in forty  
2 (40) years."

3 To your knowledge, is the one (1) in  
4 forty (40) year event something that can be modelled in  
5 the DCAT report?

6 DR. WAYNE SIMPSON: Yes.

7 MR. MICHAEL TRIGGS: Would it be  
8 reasonable to base the RSR target on a scientific  
9 approach and using Board-endorsed risk tolerance?

10 DR. WAYNE SIMPSON: I think if the  
11 Board believes that the 2 1/2 percentile is an  
12 appropriate balance of the benefits and costs, as I've  
13 discussed, instead of 5 percent, then I would say yes.

14 MR. MICHAEL TRIGGS: Am I correct in  
15 saying that the percentage of premium methodology is  
16 neither based on scientific approach or the Board's  
17 endorsed risk -- risk tolerance?

18 DR. WAYNE SIMPSON: I would agree.

19 MR. MICHAEL TRIGGS: Now, I'm going to  
20 take you to page 20 of your report, please. This is  
21 where you -- you make your recommendations. And you  
22 made the recommendations:

23 "There is no reason to alter the RSR  
24 target range generated by the  
25 percentage of premium method applied

1 to forecast net written premiums."

2 On page 20, the second bullet -- second-  
3 last bullet, you state:

4 "The percentage of premium is  
5 unrelated to risk."

6 Is that statement correct?

7 DR. WAYNE SIMPSON: That's what I  
8 wrote, yes.

9 MR. MICHAEL TRIGGS: Is it -- is it  
10 fair to say that the percentage of premium approach  
11 doesn't do the job of assessing risk?

12 DR. WAYNE SIMPSON: Yes.

13 MR. MICHAEL TRIGGS: Okay. At page 20,  
14 in the same sentence, you also state:

15 "The percentage of premium  
16 methodology has the advantage of  
17 being the incumbent method of  
18 calculating the target RSR."

19 Is that correct?

20 DR. WAYNE SIMPSON: That's my  
21 understanding.

22 MR. MICHAEL TRIGGS: Okay. Now, I can  
23 understand why tenured professors see value in  
24 maintaining the status quo of retaining incumbents, but  
25 why would anyone else see any value in retaining

1 something that's not competent to do the job? Why?

2 DR. WAYNE SIMPSON: Well, I think  
3 there's a number of reasons. One (1) of which is not  
4 only academics, but the public in general resist  
5 change. Or at least when there is change, they want to  
6 have a good reason for the change. And I think, in  
7 this case, in communicating to the public, you would  
8 prefer to stick with an incumbent methodology until you  
9 had something that was clearly better, in the sense  
10 that you could explain it to the public to replace it.

11 MR. MICHAEL TRIGGS: Okay. You have,  
12 however, pointed out the DCAT addresses the risks faced  
13 by MPI. Is that correct?

14 DR. WAYNE SIMPSON: Properly  
15 constituted, yes.

16 MR. MICHAEL TRIGGS: You also state in  
17 this paragraph that:

18 "DCAT is a useful tool for assessing  
19 the size of the RSR, particularly  
20 when important new risks emerge."

21 Is that correct?

22 DR. WAYNE SIMPSON: Yes.

23 MR. MICHAEL TRIGGS: You note that  
24 there is still uncertainty in the equities market. Is  
25 that correct?



1 DR. WAYNE SIMPSON: There is always  
2 uncertainty in equities markets, and the recent  
3 uncertainty is higher than uncertainty during other  
4 periods, yes.

5 MR. MICHAEL TRIGGS: Is it fair to say  
6 ---

7 DR. WAYNE SIMPSON: With the exception  
8 of the 1930s ---

9 MR. MICHAEL TRIGGS: Is it fair to say  
10 that while that uncertainty continues to exist, MPI is  
11 facing real risk to its assets?

12 DR. WAYNE SIMPSON: You keep using the  
13 word "real risks". When I think of real risks, I'm  
14 thinking of situations where the Corporation would be  
15 forced to liquidate its holdings. We're not talking  
16 about that are we? What we're talking about is  
17 situations where, on paper -- that is, the book value -  
18 - the market value has gone down.

19 I'm not presuming that you're forced to  
20 liquidate your holdings. I'm assuming that you are  
21 finding other ways to manage your business than  
22 liquidating holdings just because the equities are  
23 declining.

24 MR. MICHAEL TRIGGS: Are you familiar  
25 with the IFRS accounting rules with regard to

1 recognizing impaired losses? Impaired investments ---

2 DR. WAYNE SIMPSON: No, no.

3

4 (BRIEF PAUSE)

5

6 MR. MICHAEL TRIGGS: Have you done any  
7 analysis of the extent to which investment managers  
8 continue to trade during downturns?

9 DR. WAYNE SIMPSON: I've attended  
10 seminars on it. I don't study this area, no.

11 MR. MICHAEL TRIGGS: Isn't it true that  
12 this made-in-Manitoba DCAT is the best tool available  
13 for objectively and rationally assessing the quality --  
14 assessing and quantifying the risks facing MPI?

15 DR. WAYNE SIMPSON: Not at this time.

16 MR. MICHAEL TRIGGS: What is the best?

17 DR. WAYNE SIMPSON: I don't think we  
18 yet have an answer to that until we, as I said before,  
19 have a full confidence in the DCAT in -- in the form of  
20 a consensual basis for the way in which it's operated,  
21 the way in which the scenarios are determined.

22 MR. MICHAEL TRIGGS: Okay. And as my  
23 earlier question, that you answered affirmative, was  
24 that assuming that those -- that was taken care of,  
25 that would be a huge improvement in the credibility of

1 the process?

2 Is that correct?

3 DR. WAYNE SIMPSON: That's correct.

4 Let me elaborate at this point. Here's my concern, in  
5 a very candid fashion. With the Kopstein approach,  
6 it's just rule of thumb. With the RA/VaR approach, you  
7 get actual forecasted. You can replicate those numbers;  
8 you get an answer. With the DCAT approach, I think the  
9 suspicion, until it is eliminated, is that you start  
10 out with a number you want to get for the RSR and then  
11 you find scenarios that justify that. And that is  
12 going to be a concern until that is put to bed. That's  
13 why I said, Not at this time.

14

15 (BRIEF PAUSE)

16

17 MR. MICHAEL TRIGGS: So is what you're  
18 suggesting is that the Corporation chose a number and  
19 then directed its internal actuary and its appointed  
20 actuary to ignore their professional obligations and  
21 come up with results to deal -- to produce that number?

22 DR. WAYNE SIMPSON: No.

23 MR. MICHAEL TRIGGS: Then what are you  
24 suggesting then? What's wrong with the DCAT?

25 DR. WAYNE SIMPSON: I suggested that

1 the -- the nature of the DCAT analysis, and in  
2 particular the choice of scenarios, is such that there  
3 are risk with very low probabilities that will generate  
4 extremely high RSRs. And until there is a consensus on  
5 how to resolve the suspicion that the scenario choice  
6 is driven by the size of the RSR that you want, that  
7 the DCAT remains problematic.

8

9

(BRIEF PAUSE)

10

11 MR. MICHAEL TRIGGS: All right. Well,  
12 we'll have to give some thoughts to your words of --  
13 your choice of words are suspicious, but I'll move on.

14 And -- but I'd like to ask: Am I  
15 correct in saying that the percentage of premiums  
16 methodology is void of any consideration for potential  
17 instabilities in the equities market?

18 DR. WAYNE SIMPSON: Yes.

19 MR. MICHAEL TRIGGS: Do you acknowledge  
20 that the stated purpose of the RSR is to protect  
21 motorists from large premium increases that may  
22 otherwise be necessary as a result of unexpected events  
23 and losses arising from non-reoccurring events or  
24 factors?

25 DR. WAYNE SIMPSON: That -- those

1 certainly aren't my words, but I take that as the --  
2 the purpose of the RSR, yes.

3 MR. MICHAEL TRIGGS: That's correct.  
4 If you can go to page 11, please, of your report.

5

6 (BRIEF PAUSE)

7

8 MR. MICHAEL TRIGGS: The third  
9 paragraph, near the end, you say -- you state:

10 "Put simply and starkly, how much  
11 should the target RSR from a DCAT  
12 analysis be discounted to reflect the  
13 fact that all vehicle owners must be  
14 insured by MPI and MPI's solvency and  
15 general financial condition is  
16 directly -- [excuse me] -- is insured  
17 directly by the Province of Manitoba  
18 and indirectly by the same vehicle  
19 owners as taxpayers."

20 Is that correct?

21 DR. WAYNE SIMPSON: Yes, I think that's  
22 summarizing earlier positions that Professor Hum and I  
23 took in earlier reports too, yes.

24 MR. MICHAEL TRIGGS: Is it your  
25 position that the -- the Board should discount the --

1 the DCAT RSR level because if an unexpected event  
2 occurs and MPI is put in a position of dire financial  
3 straits, that this is not a problem, because the  
4 Government of Manitoba can take money out of schools  
5 and hospitals and meet MPI's shortfalls?

6 DR. WAYNE SIMPSON: I wouldn't put it  
7 that way, no.

8 MR. MICHAEL TRIGGS: I have no further  
9 questions for this witness.

10

11 (BRIEF PAUSE)

12

13 MR. BYRON WILLIAMS: Mr. Chairman,  
14 before moving to the next witness, might Mr. Williams  
15 be excused for a one (1) minute break?

16 THE CHAIRPERSON: In fact, I think we  
17 should take more than one (1) minute. We should take  
18 ten (10) minutes and return -- resume the proceedings  
19 at about twenty-five (25) to 3:00. Thank you.

20

21 --- Upon recessing at 2:23 p.m.

22 --- Upon resuming at 2:39 p.m.

23

24 THE CHAIRPERSON: I believe we're ready  
25 to resume the proceedings. I apologize for being late.

1 Ms. Grammond, please.

2 MS. CANDACE GRAMMOND: Thank you, Mr.  
3 Chairman.

4

5 CROSS-EXAMINATION BY MS. CANDACE GRAMMOND:

6 MS. CANDACE GRAMMOND: So, Professor  
7 Simpson, I have a few questions for you relative to  
8 your report and evidence that you've given to this  
9 point. I'm going to start out by asking some questions  
10 about the minimum capital test. There is reference to  
11 that in your report. And we'll probably refer to it as  
12 "MCT" for the purposes of the record.

13 So you've said in your report -- and I'm  
14 looking at page 5 in the last paragraph that we see on  
15 page 5 -- that:

16 "The MCT was designed to assess the  
17 capital required for a private  
18 company in a competitive industry to  
19 forestall insolvency. It was  
20 therefore questionable whether the  
21 test was applicable to a public Crown  
22 corporation with a monopoly over  
23 Basic insurance.

24 You -- are you with me?

25 DR. WAYNE SIMPSON: Yes.

1 MS. CANDACE GRAMMOND: And just before  
2 we get into that statement, it's my understanding that  
3 the MCT is the solvency ratio prescribed by the oppos -  
4 - Office of Superintendent of Financial Institutions of  
5 Canada, or OSFI?

6 DR. WAYNE SIMPSON: Yes.

7 MS. CANDACE GRAMMOND: Now, coming back  
8 to your statement that I read in a minute ago, is it  
9 the -- the MCT itself which is of questionable  
10 relevance to a public Crown corporation, or is it the  
11 threshold used to gauge the relative adequacy of a test  
12 ratio result?

13 DR. WAYNE SIMPSON: It's the latter.

14 MS. CANDACE GRAMMOND: Now, in your  
15 report -- and this is on page 10 -- you also state with  
16 respect to MCT -- if anyone's following, it's page 10,  
17 roughly in the middle of the page. You've made the  
18 statement that:

19 "There does not appear to be any  
20 analytical method or direct evidence  
21 that would inform the PUB as to the  
22 appropriate MCT score or range of  
23 scores for a monopoly insurance  
24 provider."

25 And here's the question: If it came to



1 pass that a more rigorous DCAT approach was used to set  
2 the RSR target level to the satisfaction of the PUB,  
3 would MCT ratios calculated in that DCAT be expected to  
4 inform the PUB in that regard?

5 DR. WAYNE SIMPSON: I think that's an  
6 interesting use of the -- of the DCAT, to generate MCTs  
7 and -- and see what level they were at. Yes, I think  
8 that's -- that would be an interesting number to have.  
9 Yeah.

10 MS. CANDACE GRAMMOND: Thank you.  
11 You've also stated in -- in your report -- and this is  
12 on page 6, and I apologize for jumping. This is page 6  
13 in the first paragraph. Mr. Pelly assures me there's a  
14 logic to the jumping. On page 6, the first paragraph,  
15 you've made the statement, or you -- you asked the  
16 question:

17 "Is an instrument designed to manage  
18 the risk of insolvency in competitive  
19 industries in the private sector,  
20 like the MCT and/or DCAT, appropriate  
21 for the design of an RSR target to  
22 protect consumers of a Crown  
23 corporation from the risk of  
24 excessive price increases?"

25 Given the recommendations in your

1 report, have you settled on an answer to that question  
2 with respect to the DCAT? And if so, what is it?

3 DR. WAYNE SIMPSON: Well, I think,  
4 first, this is a summary of positions taken in the 2006  
5 report with Professor Hum. But I think at the time we  
6 had a lot of questions about the DCAT and MCT that --  
7 some of which have been alleviated by the progress I've  
8 mentioned that MPI has taken. And, if you will, I -- I  
9 guess I've come around to the notion that the DCAT,  
10 properly constituted, can be a valuable tool. I wasn't  
11 sure at that time because the out-of-house report  
12 didn't have the kinds of features that would give us  
13 any confidence that we would even get this far.

14 MS. CANDACE GRAMMOND: Thank you. On  
15 page 11 of the report, you ask:

16 "How much should the target RSR from  
17 a DCAT analysis be discounted to  
18 reflect the fact that all vehicle  
19 owners must be insured by MPI, and  
20 MPI's solvency and general financial  
21 condition is insured directly by the  
22 Province of Manitoba and indirectly  
23 by the same vehicle owners as  
24 taxpayers?"

25 And I -- I appreciate you were asked

1 about this earlier, but can you tell us whether you  
2 have now settled on a complete or even partial answer  
3 to that question? And if so, what is it?

4 DR. WAYNE SIMPSON: I think the -- my  
5 answer to that really relates to the risk tolerance  
6 that I mentioned and the benefits and costs of that.  
7 And it's my sense that we should err on the side -- not  
8 err; we should choose a risk tolerance that deals,  
9 perhaps, with a 1:20 risk, but not a 1:700 risk  
10 precisely for the reasons that have been -- you set out  
11 here -- I've set out here, that you've repeated.

12 MS. CANDACE GRAMMOND: Thank you. And  
13 can -- can you tell us what you mean in the -- the  
14 excerpt that I referenced, about discounting a DCAT  
15 analysis? Maybe give us an example of what that might  
16 entail.

17 DR. WAYNE SIMPSON: Well, coming back  
18 to my -- my current point, it may be the case that a  
19 private insurer might want to look at adverse  
20 scenarios, say in the first percentile, or the -- the  
21 .1 percentile, precisely for reasons of -- of solvency.  
22 Whereas, I think for a monopoly public insurer, the  
23 five (5) -- fifth percentile is -- is more than  
24 adequate to insure against risks which have some  
25 reasonable chance of occurring.

1 MS. CANDACE GRAMMOND: Thank you. Now,  
2 Professor Simpson, we've talked a little bit about the  
3 interplay between the DCAT and the MCT, and you've said  
4 in your report that the two (2) are inextricably linked  
5 and can be considered as connected methodologies. Can  
6 you tell us, in your view, in what manner the MCT as  
7 applied by Manitoba Public Insurance is dependant on  
8 the DCAT, and then conversely, in what manner is the  
9 DCAT as applied by MPI dependant on the MCT?

10 DR. WAYNE SIMPSON: As I said, I am not  
11 an expert in the DCAT methodology, and in this sense I  
12 think this is an example of where in -- in passing my  
13 report to Andrea Sherry and listening to her comments  
14 about the MCT, I made the statement that the MCT is an  
15 inextricable by-product, if you will, of the DCAT  
16 analysis. And in so far as the MCT had once been used  
17 -- or proposed to be used for the RSR, I thought that  
18 the number would still be valuable and so I put that  
19 statement in. I don't claim to have expert opinion on  
20 that, but I guess Andrea Sherry would.

21 MS. CANDACE GRAMMOND: Now, Dr.  
22 Simpson, In your report you've also recommended that  
23 the DCAT and MCT analysis as the same evolve and  
24 improve should be an important but not a soul indicator  
25 of the target RSR. And that's found on page 20 of your

1 report.

2 Can you tell us whether your  
3 recommendation there is based more so -- or based  
4 primarily on the inherent relative weakness of the  
5 DCAT-MCT approaches or the inherent relative strength  
6 of the risk analysis value-at-risk or gross premium  
7 approaches?

8 DR. WAYNE SIMPSON: The -- the DCAT --  
9 in terms of methodology to get at the risks and to  
10 think about kinds -- what kinds of savings funds you'd  
11 need to deal with, with plausible risks strikes me as  
12 the best approach, in principle. Of course the devil  
13 is always in the details. And I inelegantly put it at  
14 the end of my -- my cross-examination from MPI, there -  
15 - the -- the -- there have to be some principles  
16 recognized that give everyone confidence in the process  
17 of generating a number from the DCAT that are not there  
18 with the other two (2) approaches. That's really what  
19 I was trying to say. And once you put in place a  
20 consensual approach that eliminates those -- those  
21 concerns then I think you have a tool that is extremely  
22 valuable for future RSR determination.

23 MS. CANDACE GRAMMOND: Okay. Thank  
24 you. I'm going to move then to pages 7 and 8 of your  
25 report, this is where we have a summary, in essence, of

1 the 2009 report that yourself and Dr. Hum prepared. So  
2 we see on page 7 in the last paragraph, second  
3 sentence, you've stated in the context of comparing the  
4 DCAT and the risk analysis, that in the 2009 report it  
5 was argued that the objective and scope of the risk  
6 analysis more directly applies to the objectives of the  
7 RSR to ensure basic rate stability in the face of  
8 significant adverse non-recurring events.

9                   Can you tell us, in 2009, in what  
10 respect was it or what respect were -- were it that the  
11 risk analysis applied more directly to the objects of  
12 the RSR?

13                   DR. WAYNE SIMPSON: Well, I think there  
14 are two (2) parts to this. One (1) is that the DCAT  
15 is more -- is a broader instrument to look at the  
16 financial condition of the company but the other aspect  
17 of this was some -- I guess, fairly violent objection  
18 to the nature of the scenarios that had been produced  
19 for the DCAT analysis at that time, which was the  
20 external -- done externally. I think the Christie  
21 Report.

22                   And we had some things to say about  
23 that, both in terms of the basis for the scenarios, and  
24 I think also, the -- the nature of the management  
25 response to the scenarios. I think there was a 3

1 percent inflation scenario that particularly drew  
2 Professor Hum's ire.

3

4 (BRIEF PAUSE)

5

6 MS. CANDACE GRAMMOND: Now, Professor  
7 Simpson, do you hold the same view today that we've  
8 just been discussing that was referenced in the 2009  
9 report, or is it your view that the improvements that  
10 we've seen to the DCAT have diminished your concerns?

11 DR. WAYNE SIMPSON: I think it's fair  
12 to say that the -- my opinion of the DCAT has risen.  
13 The -- the -- it -- I'm not completely sold on it, but  
14 I would open -- open the possibility that I -- I could  
15 be sold on it in the future and I suspect other people  
16 could be, as well. The other approaches are far more  
17 limiting, and in that respect they are useful  
18 indicators once a use -- a better DCAT approach is  
19 adopted.

20 MS. CANDACE GRAMMOND: Thank you. Now  
21 continuing in this section of your new report that  
22 talks about the 2009 report that you and Dr. Hum  
23 prepared, we see on page 8 in -- in the middle of the  
24 page you've made the statement that, and this is at the  
25 beginning of that middle paragraph:

1 "An optimal RSR -- [or sorry] An  
2 optimal target RSR will balance the  
3 need for premium stability from  
4 unexpected events that have some  
5 reasonable probability of occurrence  
6 with the need to avoid excessive  
7 reserves to protect against rare  
8 events that have an extremely low  
9 probability of occurrence."

10 In the context of MPI and the setting of  
11 the Basic RSR target, and giving due consideration to  
12 appropriate public policy matters, in your opinion at  
13 what probability level does the likelihood of an  
14 occurrence transition from reasonable to extremely low?

15 DR. WAYNE SIMPSON: I think in this  
16 context 1:20.

17

18 (BRIEF PAUSE)

19

20 MS. CANDACE GRAMMOND: Now, still on  
21 page 8 of your report, and in the last paragraph the  
22 statement is made -- this is the second sentence of the  
23 last paragraph:

24 "There must be some reasonable  
25 tolerance for risk associated with



1 any target RSR determination, and  
2 that tolerance should recognize that  
3 funds placed in an -- in an RSR could  
4 be used productively elsewhere in the  
5 Manitoba economy."

6 And you've commented on this a little  
7 bit today. Is this reasonable tolerance for risk  
8 related to or perhaps the same as the reasonable --  
9 reasonable probability of occurrence that was  
10 referenced earlier on page 8?

11 DR. WAYNE SIMPSON: Yes, they're the  
12 same.

13 MS. CANDACE GRAMMOND: Okay. I'm going  
14 to move then, Dr. Simpson, to some questions about the  
15 -- the percentage of premium, or the Kopstein approach.

16 There's some discussion in your report  
17 on page 10, in the middle of the page, where you've  
18 indicated that you agree with MPI that the percentage  
19 of premium approach is not clearly linked to the risks  
20 MPI faces, and you've stated that the main risks eff --  
21 effect the assets and liabilities of the Corporation.  
22 You conclude that other methodology should at least  
23 supplement, if not replace, the percentage of premium  
24 approach to setting the RSR target.

25 Is that a fair summary of your report,

1 or this excerpt of your report?

2 DR. WAYNE SIMPSON: Yes.

3 MS. CANDACE GRAMMOND: Now, subject to  
4 check, if you wish, would you agree that the written  
5 premiums within Basic have tended to grow over the  
6 years at a slower rate than the claims liabilities  
7 within Basic?

8 DR. WAYNE SIMPSON: I'd accept that,  
9 yeah.

10 MS. CANDACE GRAMMOND: So if the -- the  
11 level, or the right level for the Basic -- Basic RSR  
12 target at the time of the Kopstein report was between  
13 10 and 20 percent of annual premium, then given the  
14 faster growth in liabilities than we -- we see in  
15 premium, and given that claims liabilities are part of  
16 the main risk to MPI, what does this imply about the  
17 adequacy of the 10 to 20 percent of premium range at  
18 this point in time?

19 DR. WAYNE SIMPSON: Yes. I was only  
20 really indicating that it was fortunate that the  
21 Kopstein approach was linked to something that grew as  
22 the company grew, but there probably are better things  
23 to index it to than premiums, such as claims  
24 liabilities. But this also points out the importance  
25 of actually modelling some of these risk, because in

1 fact this is one (1) of the adverse scenarios that  
2 comes out the DCAT report.

3

4 (BRIEF PAUSE)

5

6 MS. CANDACE GRAMMOND: Would it be your  
7 view that the faster growth in claims liabilities  
8 relative to premiums should be considered as compelling  
9 evidence that the Corporation's risks, or future risks,  
10 are growing, at least in absolute terms?

11 DR. WAYNE SIMPSON: Yeah, I think  
12 that's fair to say. Yeah, there -- there's a scale  
13 factor here that would have to be applied, especially  
14 when you're comparing, you know, over decades.

15 MS. CANDACE GRAMMOND: Okay. And still  
16 with respect to the Kopstein approach, on page 20 of  
17 your report -- and this is, again, roughly in the  
18 middle of the page -- you've stated that:

19 "While the percentage of premium  
20 methodology is unrelated to risks  
21 faced by MPI, it has the advantage of  
22 being the incumbent method of  
23 calculation."

24 And I appreciate that Mr. Triggs asked  
25 you some questions about this. Can you tell us, in --

1 in general terms, it -- whether it's your view that  
2 incumbency is a relevant consideration in terms of  
3 setting the -- the target at this point?

4 DR. WAYNE SIMPSON: Well, the  
5 expression is the devil you know as opposed to the  
6 devil you don't. And -- and that is, you know, people  
7 are more comfortable with something that they know than  
8 something that can go very wrong. And, in that sense,  
9 I think until we get more confidence in such mechanisms  
10 as the DCAT, and I think there's been a great deal of  
11 progress in the last few years in doing that, that it's  
12 wise to stick with the -- the Kopstein method, which is  
13 the -- the tried and true method.

14 That said, you know, my own look at the  
15 -- at the -- the DCAT results, and using a minus 20  
16 percent scenario, suggests that maybe the Kopstein RSR  
17 is a bit too generous.

18 MS. CANDACE GRAMMOND: Dr. Simpson, on  
19 cross with Mr. Triggs you talked about the public  
20 questioning change and, you know, having a -- a fairly  
21 easy explanation to provide to the public in terms of  
22 the calculation methodology. How do you weigh that --  
23 that factor that is of -- of understandability by the  
24 public with the complexity of insurance accounting and  
25 rate-setting, which are also arguably very directly

1 related to the interests of consumers?

2 DR. WAYNE SIMPSON: Well, I think it's  
3 -- you know, I -- I think -- I'm not sure what I think  
4 given the -- to that question. Maybe I'm just tired.

5 MS. CANDACE GRAMMOND: You can take a  
6 minute to think about it.

7 DR. WAYNE SIMPSON: Okay.

8

9 (BRIEF PAUSE)

10

11 DR. WAYNE SIMPSON: I guess my only  
12 response, really, would be that all -- all -- my  
13 understanding of these processes -- the Kopstein is  
14 very simple to understand, that's one (1) of its  
15 valuable features; the DCAT far more difficult -- is  
16 that the DCAT accomplishes a number of things that the  
17 Kopstein approach, or the RA/VaR cannot do. And that  
18 gives it a great deal of promise, but that promise has  
19 to be realized in something that is -- that is suitable  
20 to all parties.

21 MS. CANDACE GRAMMOND: Okay. Thank  
22 you, Professor Simpson. I'm going to move then into  
23 some questions with respect to investment risk. On  
24 page 12 of your report, in the last paragraph, and this  
25 is at the beginning of the last paragraph on page 12,

1 you've stated:

2 "Consider the case of the increased  
3 volatility of investment returns  
4 arising from the recent financial  
5 downturn and recovery since this is  
6 certainly one (1) of the most  
7 significant changes in the risks  
8 faced by MPI."

9 In your opinion, what is the evidence  
10 that the Corporation's investment risk is increasing?

11 DR. WAYNE SIMPSON: Well, the -- the  
12 RA/VaR gives us some indication that -- of the  
13 direction it's going, and in that sense I -- as I noted  
14 in the report, it has some virtue as an indicator  
15 there. In terms of the DCAT, I guess you're adding  
16 data points to the modern period, and those data points  
17 say that you can get a severe financial and economic  
18 contraction, but they also tell us that it won't be as  
19 severe as -- as earlier ones like the 1930s.

20 MS. CANDACE GRAMMOND: So you would say  
21 then that your view with respect to increasing risk is  
22 related to the financial crisis of 2008 and '09?

23 DR. WAYNE SIMPSON: Not exclusively,  
24 because I think in fact the worst outcome over four (4)  
25 years was in the '70s. I mean, we've had some other

1 bad periods in the modern era. And the '70s were  
2 another distinctive period out of which I think we  
3 learned a great deal about dealing with inflation. The  
4 whole idea of inflation targeting which has become  
5 ingrained in the Bank of Canada's reports on -- on what  
6 its doing and what its targets are, and so on, that you  
7 may be familiar with, all came out of that era.

8                   So we constantly learn about the  
9 economy, and one (1) of the things we try to learn from  
10 that is how to moderate the -- the fluctuations in the  
11 economy, try to esteem -- achieve a steady rate of  
12 growth that is not excessive and doesn't generate the  
13 kinds of stagflation we had in the '70s, and at the  
14 same time can offset these -- these declines.

15                   And so this just adds one (1) more piece  
16 to that puzzle. The difference between the '70s and  
17 the '90s, which are the two (2) principal episodes that  
18 I think would inform us on -- on stock market risk, was  
19 that the '90s one -- the -- the -- sorry, the '70s one  
20 and today, the one in 2008, the stock market of '07 --  
21 '07/'08, was a -- was a sharper downturn financially,  
22 but less sharp economically than some of the earlier  
23 downturns.

24                   So that's new grist for the mill. And -  
25 - and, you know, economists -- if you look at -- at,

1 you know, some of the principal writing in economics  
2 recently there's been a renewed effort to link the  
3 financial sector to the -- to the macro-economy. And  
4 this is an effort to try to kind of understand what  
5 exactly went on in 2000 -- in 2007/2008 in a fashion  
6 that -- it was a little bit different from what had  
7 happened either in the '70s with stagflation, or the  
8 '30s with the great depression, or some of the  
9 intervening upturns and downturns in the economy.

10 I -- I don't know if that was assistive,  
11 or assisted anything -- maybe I was just blathering  
12 there.

13 THE CHAIRPERSON: It was interesting.

14

15 (BRIEF PAUSE)

16

17 CONTINUED BY MS. CANDACE GRAMMOND:

18 MS. CANDACE GRAMMOND: So, Professor  
19 Simpson, just continuing to talk about the financial  
20 events in the 2008 time frame, is it your view that --  
21 that what occurred then actually changed the level of  
22 risk faced by MPI, or did the events just change the  
23 estimated measurement of that risk?

24 DR. WAYNE SIMPSON:: Well, I think  
25 those are -- two (2) are linked if you're trying to



1 provide -- you know, you're trying to assess risk on  
2 the basis of the evidence you have, as opposed to what  
3 you might imagine could happen. And it's -- it's  
4 another set of data points that indicates the  
5 volatility of the -- of the stock market. It's not out  
6 of line -- I was trying to say that it's not out of  
7 line with some of the other experiences in the -- in  
8 the post '56 period. But it's another set of data  
9 points, and in that sense it undoubtedly added a bit to  
10 the volatility.

11 In other words, if you went from 1956 to  
12 -- and we could do this: Take the data from 1956 to  
13 2006, say, there would be somewhat less volatility than  
14 there is taking it out to 2012, because you have this  
15 episode, this recent episode, which produced some  
16 additional volatility.

17 But not -- not different from other  
18 episodes, and indeed not as -- as big as some earlier  
19 episodes in the post-'56 period.

20

21 (BRIEF PAUSE)

22

23 MS. CANDACE GRAMMOND: So, Dr. Simpson,  
24 just so that -- that we're clear, is it your view that  
25 the financial events in the 2008 and 2009 time frame

1 actually made a fundamental change to the risks  
2 inherent in investing in equities, or did it just make  
3 us more aware of what those risks are?

4 DR. WAYNE SIMPSON: It made us more  
5 aware of what those risks are. For example, if I could  
6 refer you to the addendum where I take the data and I  
7 sort it for the -- the old data, the data '90 to '55  
8 and the data from '56 on. And that's where I -- I  
9 pointed out, you know, when you look at all the data  
10 considered by MPI in their adverse scenarios it's, you  
11 know, '30s, '30s, '30s, '30s, '30s.

12 But if you look at the '56-on data in  
13 the right-hand column, you can see that the adverse  
14 scenarios are -- are sprinkled out. The -- the worst  
15 is minus 31 percent in 1977. The next one is a 2004,  
16 actually. And then there's a '76/'77.

17 So the -- the very worst episodes don't  
18 appear until -- it's only the, one (1), two (2), three  
19 (3), four (4), five (5), six (6), seventh-worst episode  
20 is 2011.

21 Well, that's reflecting the data from  
22 2007 to 2011, and that gives you a retur -- a negative  
23 23.65 percent, right. So -- so that -- you know, just  
24 in sort of rating what has happened since '56, the --  
25 the most recent episode is -- adds some adverse data

1 points, but they're not, by any stretch, the most  
2 extreme.

3                   And then -- even then when you look down  
4 this further, you don't find any of those other points  
5 until the 2000 -- until January 2011, right. So in --  
6 mixed in with that you've got 1960, '78, '77, '76, '77,  
7 '78, a lot of '70s.

8                   So that's why I made that comment about  
9 the stagflationary period, which again is now part of  
10 the -- our understanding about how to manage a modern  
11 economy. And there are some efforts now to understand  
12 exactly what happened in the most recent one just  
13 because of the -- of the financial nature of the -- of  
14 the disturbance.

15                   But it's by no means one of the worst.

16                   MS. CANDACE GRAMMOND:   Now, Dr.  
17 Simpson, you've testified both on direct and in your  
18 cross-examination with Mr. Triggs about looking at the  
19 stock market data prior to 1955. And if -- if I heard  
20 your evidence correctly, on direct I think you said you  
21 wouldn't place any weight on the pre-1956 data. And  
22 then on cross you said if you had to choose between 100  
23 percent weight and no weight, you would pick no weight.

24                   Am I restating your evidence correctly?

25                   DR. WAYNE SIMPSON:   Yes. Yes.

1 MS. CANDACE GRAMMOND: Now, what --  
2 what we are trying to understand is, is it your view  
3 that the pre-1956 data is of no relevance because those  
4 types of market swings are just not possible in today's  
5 environment?

6 DR. WAYNE SIMPSON: They're not  
7 plausible. Impossible is -- isn't -- isn't a  
8 statistical -- statistically, anything's possible,  
9 right; we're talking about plausibility.

10 And what I'm saying is that we have a  
11 great deal of evidence that -- including this most  
12 recent recession -- that the swings are not as wild as  
13 they used to be. And we also have -- at least  
14 economists have some understanding of why that -- why  
15 that's the case and what we've learned out of the Great  
16 Depression, stagflation period and so on.

17 MS. CANDACE GRAMMOND: But if those  
18 events are possible, albeit implausible, is it still  
19 your view that absolutely no weight should be attached  
20 to that data, or is there an argument to be made for  
21 some weight to be put on that data?

22 DR. WAYNE SIMPSON: If you take a risk  
23 tolerance of 5 percent, then essentially you're picking  
24 a point -- I get minus 16.43 percent -- where  
25 essentially no weight is attached to something very

1 much -- any further down the adverse event scenario.  
2 For example, you don't effectively place any weight on  
3 the 1977 outcome of minus 31.65 percent. So it's a  
4 question of: Should those be in -- in this line of --  
5 of a -- of equity returns?

6                   And what I'm saying is no, both because  
7 of -- of what we now understand about modern economic  
8 management but also just in terms of the body of  
9 weight. Just look at that page, on the left-hand side  
10 of that page, of the sorted four (4) year TSX returns.  
11 What are the dates one them? 1933, 1933, 1930, all the  
12 way down the page. All 1930s.

13                   So this drives the entire adverse  
14 plausibility -- adverse event scenario. And I can  
15 unequivocally say that's -- that's not very useful, in  
16 my view.

17

18                   (BRIEF PAUSE)

19

20                   MS. CANDACE GRAMMOND: I guess,  
21 Professor Simpson, not trying to be difficult, just  
22 trying to get our heads around your evidence. When you  
23 say that, that data is not very useful, okay, I  
24 understand why your saying that.

25                   But isn't there a bit of a gap between

1 not very useful and completely tossed out of the  
2 analysis?

3 DR. WAYNE SIMPSON: The way the process  
4 works, you're trying to essentially devise -- as  
5 statics does, you're trying to devise a cutoff point.  
6 I mean -- static -- statisticians and econometricians  
7 do this all the time, in all sorts of testing methods,  
8 is they -- they live with conventional cutoff points.

9 And once you do that, you have to live  
10 with that outcome. But, I mean, just to restate what I  
11 said, if you look at the adverse events using all of  
12 the data, you will not find a single point in the 5th  
13 percentile and below, not a single point, that occurs  
14 after 1956. In fact, you won't find one that occurs  
15 after 1941.

16 And so, in that context, I would place  
17 no weight on this data, because, as it stands, it takes  
18 all the weight.

19 MS. CANDACE GRAMMOND: Professor  
20 Simpson, when you talk about the need to at some point  
21 pick a cutoff point -- those aren't your exact words  
22 but I think that's what you said -- does that -- would  
23 that lead you to agree with the idea that measuring  
24 risk is not an exact science?

25 In other words, there is an element of

1 judgement that can play a role?

2 DR. WAYNE SIMPSON: Yes.

3 MS. CANDACE GRAMMOND: Dr. Simpson, can  
4 you share your views on the relative merits of using an  
5 economic scenario generator fully calibrated to the  
6 Canadian economy as an alternative to the current  
7 DCAT's approach to selecting modelling assumptions for  
8 an equity decline adverse scenario?

9 DR. WAYNE SIMPSON: I take it that a --  
10 this would be a broader instrument that would look at  
11 other outcomes in the economy. And certainly the TSX  
12 is not the only indicator of stock market gains and  
13 risks, so I take that point.

14 I think for the equity portion, this is  
15 a reasonable piece of data to use. If you start  
16 looking at other things, such as the links, say,  
17 between equity returns and other elements in the  
18 investment portfolio -- interest rates and so on, then  
19 I think you need a broader economic perspective. And  
20 I've heard some discussion that -- that's something  
21 that MPI is at least considering.

22 And then you would need a broader model  
23 that reflected the -- the a links in the financial  
24 sector of the economy, at a minimum.

25 MS. CANDACE GRAMMOND: Okay, thank you.

1 I just have a few more questions, Dr. Simpson, for you.  
2 On page 16 of your report -- and this is again roughly  
3 in the middle of the page, it's just under the heading,  
4 "Item 4: Issues to be Addressed for DCAT." So page 16,  
5 section 4. You've stated there in the first paragraph:

6 "The DCAT can be a useful tool for  
7 the analysis of the risks facing  
8 MPI's operations and investments and  
9 the responses needed. In this  
10 section, we suggest that there are  
11 three (3) aspects of the DCAT  
12 analysis: transparency, evidence-  
13 based justification of adverse  
14 scenarios, and stability, that are  
15 needed if DCAT is to assist in the  
16 assessment of the adequacy of the RSR  
17 target from year to year."

18 My question is this: With respect to  
19 the need for transparency, in your opinion, what are  
20 the most significant deficiencies and the most  
21 prominent barriers in this regard in the current DCAT?

22 DR. WAYNE SIMPSON: Well, I -- I think  
23 there are still questions about exactly what the -- the  
24 DCAT -- the in-house DCAT model is doing and whether --  
25 and whether that would always be the best way to go



1 about modelling the -- the Corporation.

2                   There is an external report, the Cheng  
3 report, that suggests that he has reviewed the model  
4 and found it adequate. I -- I don't know how much he's  
5 delved into the model. But I pointed out somewhere  
6 else in my report that you can often get useful  
7 information by taking a model and tweaking it and see  
8 how it -- it works. And these kinds of things are  
9 useful to say, Well, you know, what's critical to the  
10 model?

11                   One way of finding out what's critical  
12 to the model is looking at different components of the  
13 model and saying, Well, if we change this assumption,  
14 this happens. So this is not a critical assumption.  
15 If we change this assumption, this happens. Well,  
16 that's a pretty significant result, so this is a  
17 critical part of the model.

18                   And while I don't expect a DCAT report  
19 to do that, I think, in terms of transparency and  
20 trying to understand what the model does and what's  
21 important in the model, those kinds of exercises would  
22 be -- would be quite useful to everyone concerned.

23                   MS. CANDACE GRAMMOND: Thank you. Now,  
24 with respect to the second piece, or the second aspect  
25 of the analysis that you commented on -- and that's the

1 evidence-based justification for adverse scenarios --  
2 can you comment on your view of what are the most  
3 significant deficiencies or prominent barriers in that  
4 regard?

5 DR. WAYNE SIMPSON: I think the process  
6 here would -- should involve an early distribution of  
7 the proposed DCAT report and the proposed RSR, which  
8 allows time for comment and consideration and a  
9 consideration of what alternative scenarios might be  
10 justified.

11 And my example, again, is the decline in  
12 equities scenario, where I would argue that the  
13 scenario relies far too heavily on results that are not  
14 pertinent to the modern economy. So I think there has  
15 to be a process by which these results are generated  
16 early, absorbed, considered, and recast, and  
17 alternatives proposed.

18 MS. CANDACE GRAMMOND: Thank you. With  
19 respect to the third aspect of the DCAT stability, can  
20 you comment on the most significant deficiencies and  
21 barriers in the current DCAT, in your opinion?

22 DR. WAYNE SIMPSON: Well, it perhaps  
23 was an unfair comparison, but I was -- I was struck by  
24 the -- the number that came out of the externally  
25 generated -- the Christie report. And as I said, my

1 colleague, Derek, in particular, took umbrage at this -  
2 - at the proposed scenarios.

3 My assessment of the current process is  
4 that if we get the transparency and the evidence-based  
5 justification of adverse scenarios right, we'll get a -  
6 - a degree of stability unless we have very strong  
7 evidence that something is dramatically changing, with  
8 regard to some asp -- some crucial aspect of MPI's  
9 operations.

10 And that -- that could be increased  
11 volatility in the stock market. That could be  
12 increased volatility, in terms of claims losses. It  
13 could be a variety of -- probably there aren't too many  
14 other possibilities; climate change has been talked  
15 about, in terms of hail storms.

16 These -- there could be new evidence  
17 that would change our view of those things, but I think  
18 if -- if we establish standards and stick to them, you  
19 probably will get a considerable degree of stability  
20 out of the first two (2).

21 MS. CANDACE GRAMMOND: Thank you. Now,  
22 Dr. Simpson, in your report on page 20 -- and you don't  
23 -- you can go there is you wish, you don't necessarily  
24 need to -- you recommend that a consensual process be  
25 adopted for the assessment of the DCAT analysis and the

1 scenario was chosen.

2 Can you tell us what you would envision  
3 in terms of that consensual process including whether  
4 you're thinking of something that would take place  
5 within the GRA process, or outside of the GRA process?

6 DR. WAYNE SIMPSON: In terms -- well,  
7 I'll -- I'll take it in two (2) steps. One (1) is in  
8 terms of the model. I'm not sure that the -- the  
9 hearing process allows people to absorb a seminar, if  
10 you will, on how the model works and what its crucial  
11 assumptions are. So that might be done outside the GRA  
12 process.

13 On the other hand, I think in a -- a  
14 part of the GRA process would have to be that once the  
15 model generates a report, that that report be examined  
16 and revised as appropriate in terms of the scenarios  
17 that are used, and chosen, and so on. And -- and for  
18 that probably the hearing process is adequate for the -  
19 - understanding the model, I think that almost has to  
20 take place between -- between hearings, but that's --  
21 you know, I'm not -- I'm not an expert in the GRA  
22 process.

23 MS. CANDACE GRAMMOND: One (1) last  
24 question, Dr. Simpson. Can you comment on what might  
25 be an appropriate approach to set an RSR target range

1 as opposed to an RSR target point from the DCAT  
2 resulting from a consensual process?

3 DR. WAYNE SIMPSON: There -- there are  
4 actually a number of ways you could go about this, and  
5 -- and the -- one (1) of the rea -- I thought at first  
6 I would say something about this in my report and I  
7 decided not to because I thought it -- it clouded the  
8 issues a little bit, just because -- you could go about  
9 this in a variety of ways.

10 You could, for example, bound the ninety  
11 (90) -- the 5th percentile. You could say, Let's do  
12 ninety-two and a half (92 1/2), ninety-seven and a half  
13 (97 1/2). That's one (1) way of doing it. So that's  
14 the -- the 2 1/2 percentile and the 7 1/2 percentile,  
15 and you'd get a ran -- a target.

16 A more sophisticated way would be to  
17 take the -- the in -- to take the probability  
18 distributions that we're generating that -- the claims  
19 loss, the hail storm, the decline in equity scenarios,  
20 and to combine them in a fashion that's been combined  
21 in the combined scenario, I would argue with only TSX  
22 data since '56, and then to generate, in a -- in a  
23 Monte Carlo fashion, to generate a set of outcomes and  
24 to -- from that generate a range for the RSR. That  
25 would be another way to kind of go about it.

1                   But, you know, there's -- there's  
2 probably a variety of ways to do it that would make --  
3 that would make statistical sense. I don't have any  
4 recommendation on any specific way at this point.

5                   MS. CANDACE GRAMMOND:    Mr. Chairman,  
6 those are my questions for Professor Simpson.

7                   THE CHAIRPERSON:    Professor Simpson, I  
8 -- I know that it's late in the day and you're probably  
9 tired but I have some questions. I -- I have to ask  
10 follow-up questions in regards to your encapsulation of  
11 the issues you have with DCAT, and namely your sense  
12 that -- that the -- the problem with the DCAT is  
13 ultimately you can game (phonetic) the outcome under  
14 the current state of affairs, if you were to adopt  
15 DCAT. In other words, if you have a target level you  
16 want to reach, you set the scenario so you reach that  
17 target level.

18                   And then -- so am I interpreting your  
19 comments wrong?

20                   DR. WAYNE SIMPSON:    Yeah. I mean,  
21 that's an observation I make, but if you go back to my  
22 first slide where I talked about the probability  
23 distribution, I had a normal distribution up there, and  
24 you look at the risks, you can get worse and worse and  
25 worse adverse scenarios with smaller and smaller

1 probabilities. And that gets us into the area of  
2 imagined risk, stress tests, what my colleague Derek  
3 Hum used to call "Black Swans", that are imaginable but  
4 for which either we've had no experience with, or based  
5 on any sort of empirical analysis would have a very,  
6 very, very small probability of occurring.

7           Should we be protecting against that  
8 given the opportunity costs? If there were no cost,  
9 sure, but there is a cost. There's always a cost to an  
10 action in -- in economic terms. And the cost here is  
11 that you were tying up ratepayer's funds to insure  
12 against risks that are very, very, very unlikely to  
13 occur.

14           So I think in that context you have to -  
15 - you have to reach some sort of a -- a threshold, and  
16 I've suggested the 5 percent threshold. But the link  
17 between the -- any RSR level you could -- not any one  
18 you could imagine, there's probably some limits -- but  
19 a very high RSR level and a -- and a presumed risk with  
20 a very low probability of occurrence is -- is there, if  
21 you don't have to provide evidence that that risk is in  
22 fact plausible.

23           THE CHAIRPERSON: But in this case the  
24 -- there was evidence provided on most of those  
25 scenarios, and while one may argue about the data-set

1 with respect to the stock -- stock portfolio  
2 performance, it nonetheless is -- is a fixed number and  
3 it's hard to game that. I mean, I -- unless we get  
4 some -- we get some really out -- outlandish results in  
5 the stock market, the data-set will probably be with us  
6 for a long time.

7 In other words, we won't get much of a  
8 change from forty-three point nine (43.9) -- minus  
9 forty-three point nine (43.9) in the foreseeable  
10 future. In other words, you can't game that number.

11 And I'm looking, for example, at the  
12 hail. I -- I don't know that you can game -- you can -  
13 - I guess what I'm getting at is in -- in what way do  
14 you -- do you see that a outcome can be gamed if you  
15 accept the DCAT as it's now offered for us for  
16 decision?

17 DR. WAYNE SIMPSON: Well, the minus  
18 forty-three point nine (43.9), if you look at the post-  
19 '56 data, is so unlikely as on all definitions of  
20 plausibility that we've entertained to be implausible.  
21 If you look at it in terms of the data since 1919, you  
22 would say, Well, it is plausible. What I've argued is  
23 that, and I -- I think I'm speaking for a large  
24 proportion of the economic community, if no one else,  
25 that they would not expect this kind of event to occur



1 given what we understand about the way in which a  
2 modern economy responds to the kinds of things that  
3 happened in the 1930s. And we have lots of evidence  
4 for that, because when we look at the results since  
5 then we don't -- we don't see those kinds of things.

6                   And it is true that if you -- if you go  
7 with the 1919 on data, you're stuck with the minus  
8 forty-three point nine (43.9) or a close variant of it  
9 forever. Well, not forever. Forever as far as far as  
10 we're concerned, that's for sure. Because all those  
11 numbers come from the '30s and they're not going to be  
12 offset by anything that's going to happen in the next  
13 few years.

14                   It is also true that if you say just go  
15 from '56 you're going to be stuck with the numbers that  
16 are generated out of the -- out of the '70s, but I  
17 think you've got a truer picture of what actually is  
18 going on today.

19                   And my main point there in saying that  
20 was really that -- it was really about the -- the  
21 notion that keeps coming up about stress testing and  
22 imagined scenarios. And I was pleased to see Mr.  
23 Johnston saying, Well, I need some evidence to kind of  
24 support these kinds of things, because that would be  
25 exactly my response.

1                   So it -- it -- gaming in that -- in that  
2 sense. There's a -- there's a 1:1 link between the --  
3 the imagined scenario and whatever number R -- would --  
4 would be appropriate for an RSR, regardless of what  
5 retained earnings actually are.

6                   I just wanted to make that point,  
7 because that does not exist with the Kopstein approach,  
8 it does not exist with the RA/VaR approach, as -- as  
9 inadequate as they are in other ways. And that's  
10 precisely why I -- I focussed on the question of -- of  
11 a process that was consensual, that would build  
12 confidence in the -- in the model and the scenarios  
13 that are -- that are considered.

14                   THE CHAIRPERSON: I guess a follow-up  
15 question -- I think part of your recommendations  
16 suggest to me that you're recommending we stay with the  
17 Kopstein approach for the time being, tweak -- tweak  
18 the DCAT some more, and then when the confidence level  
19 is at a sufficient level then we -- we would adopt DCAT  
20 and -- and so on.

21                   I guess the question is: Couldn't you  
22 adopt the DCAT immediately and -- and do the tweaking  
23 later on?

24                   DR. WAYNE SIMPSON: I don't feel  
25 confident enough in -- in the model, that is to say, in

1 -- in the understanding of what the model does to -- to  
2 pass judgment on that. On the basis of my experience  
3 with the decline in equities scenario, I have some  
4 concerns about a process that would admit the possibil  
5 -- the -- the kind of decline in equities scenario that  
6 -- that was proposed in the amended DCAT report. Those  
7 are really the -- the nature of my -- my concerns. So  
8 I would say no, not right now.

9

10 (BRIEF PAUSE)

11

12 THE CHAIRPERSON: I think that's all  
13 the questions we have. Are there any other details to  
14 address before we adjourn?

15

16 (PANEL STANDS DOWN)

17

18 MS. CANDACE GRAMMOND: There may be.  
19 Mr. Oakes isn't here. So he obviously won't be cross-  
20 examining. We might just want to ask Ms. Peters if she  
21 has any questions for the Witness.

22 MS. LIZ PETERS: No, I have no  
23 questions.

24 MS. CANDACE GRAMMOND: Then the next  
25 question would be whether Mr. Williams has any re-

1 direct.

2 MR. BYRON WILLIAMS: Thank you for the  
3 opportunity, but CAC (MANITOBA) has no re-direct. And  
4 we thank the panel for the courtesy and -- and all  
5 parties to -- to Professor Simpson.

6 MS. CANDACE GRAMMOND: So I think,  
7 then, Mr. Chairman, we are done unless Ms. Kalinowsky  
8 has any other matters. So our next hearing date is  
9 Tuesday, the 23rd. We'll be back at 9:30 with any  
10 evidence that Mr. Johnston is going to give that we  
11 discussed earlier. And then he would be cross-examined  
12 on that if there is cross-examination. And then I'll  
13 do my closing and the rest -- or the Intervenors then  
14 after my -- myself.

15 THE CHAIRPERSON: So thank you very  
16 much to -- to Dr. Simpson for both the reports and --  
17 and your presence here today. I know it's a long day,  
18 but thank you very much. It was very interesting. At  
19 least to me it was very interesting. So we are  
20 adjourned until Tuesday morning, at 9:30.

21

22 --- Upon adjourning at 3:33 p.m.

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Certified Correct,

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Cheryl Lavigne, Ms.



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