

- 1 **Q. Please confirm that in the historic market risk premium estimates on page 45 Mr.**
2 **Coyne now uses the “income” return or yield rather than the actual return of**
3 **income plus capital gain or loss for the bond returns.**
4
- 5 **a) Please provide the market risk premium estimate for both the US and Canada**
6 **based on the standard methodology of total equity minus total bond total**
7 **returns.**
8
- 9 **b) Please indicate when Mr. Coyne started using the income (yield) return in the**
10 **historic market risk premium estimates rather than the standard total return for**
11 **bonds.**
12
- 13 **c) Please provide any references to the academic literature that calculate the**
14 **market risk premium in the same way that Mr. Coyne does.**
15
- 16 **A. a) Mr. Coyne has used the “standard methodology” to compute the historical market risk**
17 **premium. Duff & Phelps, which is the provider of this annual return data, reports the**
18 **historical market risk premium as the difference between the return on large company**
19 **stocks and the income-only return on long-term government bonds. This results in a**
20 **historical market risk premium of 5.54 percent in Canada and 7.25 percent in the**
21 **U.S., based on Duff & Phelps’ return data through 2020.**
22
- 23 **b) Mr. Coyne has consistently used the historical market risk premium reported by Duff**
24 **& Phelps (and the previous publishers of this annual return data – Morningstar and**
25 **Ibbotson and Associates) in his ROE analysis in both Canada and the U.S. As**
26 **indicated above, the historical market risk premium reported by Duff & Phelps is**
27 **based on the income-only return on government bonds, not the total return.**
28
- 29 **c) The market return data used to calculate the historical market risk premium was**
30 **developed and first published by Dr. Roger Ibbotson. He received his bachelor's**
31 **degree in mathematics from Purdue University, his MBA from Indiana University,**
32 **and his PhD from the University of Chicago, where he taught for 13 years and served**
33 **as executive director of the Center for Research in Security Prices. He is currently**
34 **Professor in the Practice Emeritus of Finance at the Yale School of Management. He**
35 **is also chairman of Zebra Capital Management LLC. He has written extensively on**
36 **capital market returns, cost of capital, and international investment. He is the**
37 **founder, advisor, and former chairman of Ibbotson Associates, now a Morningstar**
38 **Company. He has written numerous books and articles including *Stocks, Bonds,***
39 ***Bills, and Inflation* with Rex Sinquefeld, which serves as a standard reference for**
40 **information and capital market returns.**