Volume 2: Cost of Capital: Expert Opinion of James Coyne- Capital Structure and Risk Profile

Q. Please provide the market risk premium estimate for both the US and Canada:

a) Based on the standard methodology of total equity minus total bond total returns.

b) Please indicate when Mr. Coyne or Mr. Trogonoski first used the income (yield) return in the historic market risk premium estimate, rather than the standard total return for bonds.

c) Please provide any references to the academic literature that calculate the market risk premium in the same way that Mr. Coyne does.

d) Can C&T confirm that in its 2011 generic decision the AUC stated:
52. The Commission notes that long-term average data on achieved historical market risk premiums are usually used to estimate the required market equity risk premium going forward

e) Can C&T confirm that by using the yield on long term debt rather than the return, they are not estimating what the AUIC (sic) referred to as the historical market risk premium?

A. a) The historical market risk premium detailed on page 42 of Concentric's *Cost of Capital* report, Volume 2, uses the methodology, as calculated and defined by Kroll (formerly Duff & Phelps), of the total return on large company stocks less the income only portion of long-term government bonds for the period from 1919-2022 for Canada and 1926-2022 for the U.S. Concentric does not have access to a version of the Kroll calculation that uses long-term government bond "total" returns.

b) Concentric has consistently used the historical market risk premium reported by Kroll (and the previous publishers of this annual return data – Duff & Phelps, Morningstar and Ibbotson and Associates) in its ROE analysis in both Canada and the U.S. As indicated above, the historical market risk premium reported by Kroll is based on the income-only return on government bonds, not the total return.

c) The calculation of the historical market risk premium was defined by Morningstar Inc. on page 59 of the 2010 Ibbotson Stocks, Bonds, Bills, and Inflation, Valuation Yearbook, as follows: *Historical Market Risk Premium equals total return on large company stocks less income only return on long-term government securities.* The market return data used to calculate the historical market risk premium was developed and first published by Dr. Roger Ibbotson. He received his bachelor's degree in mathematics from Purdue University, his MBA from Indiana University, and his PhD from the University of Chicago, where he taught for 13 years, and served as executive director of the Center for Research in Security Prices. He has written extensively on capital market returns, cost of capital, and international investment. He is the founder, advisor, and former chairman of Ibbotson Associates. He has written numerous books and articles including Stocks, Bonds, Bills, and Inflation with Rex Sinquefield, which serves as a standard reference for information and capital market returns.

d) Confirmed. Concentric additionally notes that, as described on page 46 of its report, the BCUC's September 2023 GCOC decision supported use of an equal weighting of the historical and forward-looking MRP for Canada and the U.S.

e) Concentric's estimate of the historical market risk premium is not an estimate of the yield on long-term debt. It is an estimate of the historical market risk premium consistent with both Kroll's cited definition and the historical market risk premium the AUC is referring to.