

1 **Q. Reference: Page 3, Lines 33-34:**
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3 **“My best estimate is that the market risk premium is 5.0%...”**
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5 **Is the long-run government bond return the same as the risk-free rate? If no, please**
6 **explain why not and provide Dr. Booth’s estimate of the long-term government bond**
7 **return.**
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10 **A.** The true long run risk free rate would be the internal rate of return on a discount bond
11 equivalent to the maturity the investor has in mind. This avoids all the reinvestment rate
12 problems associated with the intermediate cash flows. To the extent that the 30 year bond
13 requires all the intermediate cash flows to be reinvested it is not genuinely risk free and its
14 true maturity or duration is shorter. However, it is the best estimate of a long run risk
15 (nominal) free rate for two reasons:

- 16 1) The yield curve gets flatter as you go out longer so the differences in yields between
17 the 30 year and a genuine 30 year discount bond if one could be created get smaller;
18
19 2) The cash flows of utilities have similar reinvestment rate risk since they also have
20 large intermediate cash flows and as a result a shorter duration.
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22 Conceptually the best approach would be to determine the duration of the utility’s shares and
23 then match it with the forecast yield of a similar maturity LTC bond. However, Dr. Booth
24 does not believe that in practise this approach makes a material difference and as far as he
25 is aware has never been accepted by a regulatory board in Canada. Although Lazar and
26 Prisman, as OEB Board witnesses, did attempt such an approach in 2007.
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28 Experienced returns on LTC bonds only equal expected returns if on average over the
29 forecast horizon the yield is constant.
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