Volume 3, Section 1 - McShane, Cost of Capital
Q. (page 41, lines 1111-1114, and Appendix B, page 15)
a. How can Ms. McShane conclude that there has been an absence of any upward or downward trend in historic equity market returns when her Appendix B, Table B-3, figures clearly show, for both Canadian and U.S. equity markets, that there has been a decline in stock returns from the 1980s through to the most recent 10 -year period?
b. While most credible economic forecasters and consensus economic surveys predict that nominal North American equity returns for the next 5 to 15 years will be well below $10 \%$ and hence extend the decline that Ms. McShane's Table B-3 reveals began during the 1980s, Ms. McShane apparently believes that the decline in equity returns will be reversed, as she expects future equity market returns to be in the range of $\mathbf{1 1 . 5 \%}$ to $\mathbf{1 2 . 5 \%}$ (page 41, lines 1112-1113). What are the future economic forces or environmental trends that Ms. McShane expects to cause equity prices to rise more quickly in North America in the future, than they have over the past decade, and therefore cause equity rates of return to be higher than they have been over this period? Please explain, covering such potentially important forces as (i) the trend in interest rates, (ii) the trend in inflation, (iii) North American and world economic growth, (iv) the impact of climate change and environmental concerns and related expenditures, and (v) terrorism.
A. (a) In drawing her conclusion from the referenced table, Ms. McShane took into account the levels of the returns in the 1990s/1997-2006 relative to those in all previous decades provided, including the 1940s and 1960s. The returns in the 1990s/1997-2006 are higher than in either of those two previous decades. In addition, the 1990s and 1997-2006 are partially overlapping. If, instead, the Canadian stock returns are expressed as non-overlapping 10-year average returns, the lack of a discernible downward trend in the Canadian equity returns is perhaps clearer. The decade-by-decade averages are as follows:

| $1947-1956$ | $18.9 \%$ |
| :--- | ---: |
| $1957-1966$ | $8.8 \%$ |
| $1967-1976$ | $7.5 \%$ |
| $1977-1986$ | $17.8 \%$ |
| $1987-1996$ | $10.9 \%$ |
| $1997-2006$ | $11.0 \%$ |

Source: Canadian Institute of Actuaries, Report on Canadian Economic Statistics, 1924-2006.

Since 10-year periods are relatively short for purposes of discerning trends (particularly in equity returns), the data set out in Schedule 9, and summarized in Table B-4 in Appendix B, were also used. These averages suggest that the achieved equity returns in Canada do not exhibit an upward or downward trend.
(b) The average return (based on the arithmetic average) for the S\&P/TSX composite over the past decade was, as noted in response to 274(a), 11.0\%. Ms. McShane's estimate of the market risk premium of $6.5 \%$ at the forecast long-Canada yield of $4.5 \%$ to $5.0 \%$ results in an expected value of the market return of $11.25 \%$ to $11.5 \%$. Given the randomness of equity returns, Ms. McShane does not regard that estimate as significantly different from the returns achieved by the S\&P/TSX composite over the past decade nor as implying a reversal in a downward trend in returns. Moreover, a comparison of the expected value of $11.25 \%$ to $11.5 \%$ to the corresponding returns of over the past decade (1997-2006) for the major Canadian equity indices shows the following:

## Average Return 1997-2006

| S\&P/TSX Composite | $11.0 \%$ |
| :--- | :--- |
| S\&P/TSX Capped Composite | $12.5 \%$ |
| S\&P/TSX 60 | $12.0 \%$ |

The S\&P/TSX 60 is a capitalization-weighted index of 60 large liquid Canadian stocks and it is a constituent index of the S\&P Global 1200. The S\&P/TSX capped composite index limits the weight that is given to any single company to $10.0 \%$, and thus reduces the impact of a single company's performance (i.e., Nortel). A comparison of the expected value of the equity market return of $11.25 \%$ to $11.5 \%$ to the achieved returns of these two alternative Canadian equity market benchmarks suggests that the expected return is lower, not higher, than the equity market returns during the past decade.

With respect to the economic forces or factors cited in the question, interest rates and inflation are expected to remain relatively low, which is positive for corporate profits. Low interest rates also point to relatively low fear of accelerating inflation, which translates into relatively low bond market risk. With respect to growth, the consensus forecast for real GDP growth of the G7 (which currently makes up just under $60 \%$ of the world GDP) is expected to grow more quickly in the aggregate than over the past decade. Growth in GDP for the G7 was approximately $1.5 \%$ from 1997-2006 and is expected to be $2.4 \%$ over the next decade based on the 2008-2017 forecast real GDP growth rates for the seven countries published by Consensus Economics, Consensus Forecasts, April 2007.

According to a 2007 World Bank report, Global Economic Prospects, growth in the global economy from 2006-2030 may exceed that experienced during 1980-2005, with
the main thrust coming from developing countries. Climate change is a risk to future growth, but Barclays Capital predicts that the need to adapt to climate change will actually spark an "energy revolution" that will boost the global economy. Terrorism is also a risk to financial markets and future growth, as it can have a negative impact on investor and consumer confidence, potentially resulting in an increase in the required risk premium (i.e., a flight to quality) but lower corporate profits.

