

**Q. Evidence of Ms. McShane Page 49**

- (a) Ms. McShane calculates the average common equity return in Canada on page 49 over different time horizons. Please provide the average CPI rate of inflation over those same time horizons and the real rate of return.
- (b) Please indicate what Ms. McShane's forecast long run inflation rate is and the expected return on the Canadian equity market given the real rate of return estimated in a) above. If the long run inflation forecast exceeds the mid point of the Bank of Canada's range please indicate why she expects the Bank not to be able to enforce its policy objectives.
- (c) In the calculation of the market risk premium of 6.75% would she agree that the realized inflation rate over the period that generated the 11.0-12.0% equity return differs from the inflation forecast implicit in the current 4.25%-5.25% forecast long Canada bond yields? Why or why not?

A. (a) The requested real returns are presented below:

	1924-2008	1947-2008
Returns	11.3%	11.6%
Inflation	3.1%	4.2%
Real Returns	8.2%	7.4%

- (b) The most recent (April 2009) long-term (2009-2019) consensus forecast of inflation is approximately 2.0%, consistent with the mid-point of the Bank of Canada's range. Adding the historic average real return to the forecast long term rates of inflation would produce returns in an approximate range of 9.5% to 10.0%. That calculation, however, presumes a one-for-one relationship between the real return and the rate of inflation. A review of the historical return and inflation values over the period 1924-2008 shows the following:

Inflation Range	Nominal Equity Return	Average Rate of Inflation	Real Equity Return
Less than 1%	14.5%	-1.5%	16.0%
1-3%	12.8%	1.9%	10.9%
3-5%	4.8%	4.1%	0.7%
Over 5%	12.5%	9.2%	3.3%

1 The historic data indicate that the real rate of return on equities has generally been  
2 lower at higher rates of inflation. The observed negative relationship between the  
3 real return and the inflation rate support reliance on nominal historic returns for  
4 the purpose of estimating the equity risk premium from historical data.  
5

- 6 (c) Yes. The long-term Canada bond yield forecasts as provided by the Consensus  
7 Economics *Consensus Forecasts* presumably are consistent with the  
8 corresponding consensus forecast rates of inflation, referenced in response to (b).  
9 The historic rates of inflation are provided in response to (a).