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VIA EMAIL

November 16, 2012

**BRITISH COLUMBIA UTILITIES COMMISSION
GENERIC COST OF CAPITAL PROCEEDING EXHIBIT A2-30**

To: All Registered Parties
(*BCUC-GCOC*)

Re: British Columbia Utilities Commission
Project No. 3698660/G-20-12
Generic Cost of Capital Proceeding

Commission staff submits the following document for the record in this proceeding:

TD - Long-Term Returns - October 2012

Yours truly,

for: Erica Hamilton

/dg
Attachment



October 19, 2012

AN ECONOMIC PERSPECTIVE ON LONG-TERM FINANCIAL RETURNS

Highlights

- Our assessment of financial returns based on economic fundamentals suggests that diversified portfolios will likely deliver an average annual return between 4.00% and 6.00% over the next decade.
- Cash will likely provide an average annual return of 2.00%. Meanwhile, bonds are likely to return less than their coupon on a total return basis due to capital losses on longer-term bonds created by rising interest rates. The DEX Universe Bond index is projected to return roughly 3.00% on an average annual basis.
- Equity markets among major developed economies will likely return 7.00% annually, on average. However, this assumption does not include any allowance for higher price-to-earnings multiples. Moreover, exposure to emerging markets could boost equity returns; however, we must caution that these investments do carry materially greater risks.

Investors have had to stomach an extraordinary level of financial market volatility over the course of this economic recovery. Given these wild swings in asset prices, it becomes very difficult from the perspective of an investor to assess what returns they should expect over the medium to long term in developing their financial plans. In this report, we update our outlook for financial returns by major asset class (cash, bonds, and equities) based on expectations of future economic fundamentals and interest rates. We conclude that diversified portfolios should deliver an annual average return of 4.00% to 6.00% over the next decade.

Cash to return 2.00%

The benchmark for cash is the average yield on Government of Canada 3-month T-bills which is anchored by the Bank of Canada's overnight rate. The rebalancing of monetary policy in the coming years will undoubtedly raise the yield on cash to a more normal level – we estimate the long-term average level of the overnight rate to be roughly 3.00-3.50%. The yield on T-bills should also be somewhere in that range. However, we need to acknowledge that the starting point for cash returns is well-below normal. And we are still in an uncertain economic environment filled with risks. Any of those risks materializing could precipitate a prolonging of the lower-for-longer interest rate environment, which in turn would lower the average cash return over the next decade. Indeed, most forecasters have overestimated the timing of rate increases in recent years. From the perspective of financial planning, it is prudent to have conservative return assumptions; as such we would recommend using 2.00% as a prudent assumption for the return on cash over the next ten years.

FINANCIAL PROJECTIONS OVER THE NEXT DECADE	
Financial Instrument	Average Annual % Return
Cash (3-Month T-bills)	2.00%
Bonds (DEX Universe Bond Index)	3.00%
Equities	
Canada (S&P/TSX Composite)	7.00%
U.S. (S&P 500)	7.00%
International (MSCI EAFE)	7.00%
Source: TD Economics	

Bonds to deliver 3.00%

For Canadian bonds, we use the total return on the DEX Universe Bond Index as a benchmark. The economic fundamentals would suggest that for an average shaped yield curve in a moderate growth, low inflation economy whose government does not have a structural deficit problem, a diversified bond portfolio should return close to 5.00% on an annual average basis.

Unfortunately, we do not have an average shaped yield curve, at the moment. In fact, the current yield curve is close to its historical low, which presents a material risk to the return on bonds. When interest rates do eventually increase, the prices of bonds fall – and the lower the current interest rate, the bigger the capital loss is when it increases. Thus, given that rates are so low, the increased rate of income derived from higher yielding bonds is entirely offset by the capital loss on the bond itself. This is further detailed in the textbox on page 3.

As interest rates gradually return to their neutral level in the coming years, the impact of these capital losses lowers the average annual total return on the DEX Index to roughly 3.00%. Active bond traders can minimize their capital losses and boost their returns by underweighting long-term bonds when rates rise. However, we again recommend using more conservative assumptions in financial planning and assume a 3.00% return on bonds.

Equities to return 7.00%

We used two methods of assessing the return on equities for which we used the S&P/TSX Composite, the S&P 500, and the MSCI EAFE Indexes as benchmarks for Canadian, U.S., and International equities, respectively. One used projections of long-term economic fundamentals (referred to as the dividend-growth model), while the other leveraged academic research on estimating the return on equities over cash. In both instances, the return on equities was estimated to be roughly 7.00%. However, there are several caveats to this estimation.

- There will likely be large swings in equity valuations over the next ten years. These projections are simply the average over a ten-year time frame.
- The estimate is conservative and does not include underlying shifts in valuations. In other words, we have assumed no increase in price-to-earnings ratios.
- One cannot discount the possibility of active money managers beating equity indexes.
- Exposure to sector-based investments or emerging market equities could elicit higher returns. Our assessment indicates that the MSCI Emerging Markets Index could deliver an annual return of 11.00% to 12.00%. However, we must caution that these higher returns are associated with considerably higher volatility and greater investment risk.
- We do not account for the impact of exchange rate fluctuations on portfolios. Given the prospects of strong demand for commodities and the fiscal challenges facing industrialized countries other than Canada, our assumption is that the Canadian dollar will remain strong. Although the currency will fluctuate, TD Economics expects that the impact on portfolios on average over the next decade will be limited.

Portfolios to return 4.00% to 6.00%

Using the above projections, we then calculate the returns on some representative portfolios. Table 2 shows three portfolios: an income portfolio with a heavy weighting in cash and fixed income, a growth portfolio with a heavy weighting towards equities, and a balanced portfolio. The returns on these portfolios range from 4.00% to 6.00%. While there will certainly be years where these portfolios achieve higher rates of return, they will likely be offset by periods of weakness. The low return on fixed income over the next few years, especially given the potential capital losses on longer-term bonds, suggests that investors may need to have exposure to equities in order to bolster portfolio returns. Some investors may be discouraged by our

PROJECTED AVERAGE ANNUAL RETURNS ON REPRESENTATIVE PORTFOLIOS OVER THE NEXT DECADE						
Portfolio	% Share of Asset Class					% Rate of Return
	Cash	Bonds	Canadian Equity	U.S. Equity	International Equity	
Income	10%	60%	15%	8%	7%	4.1%
Balanced	5%	45%	25%	13%	12%	5.0%
Growth	5%	15%	40%	20%	20%	6.2%

Source: TD Economics

assessment that the average return on a balanced portfolio will be in the mid-single digits. However, it is important to remain conservative in building a financial plan. After all, the impact of getting the planning assumptions wrong is not equal in its consequences. Building a conservative plan and

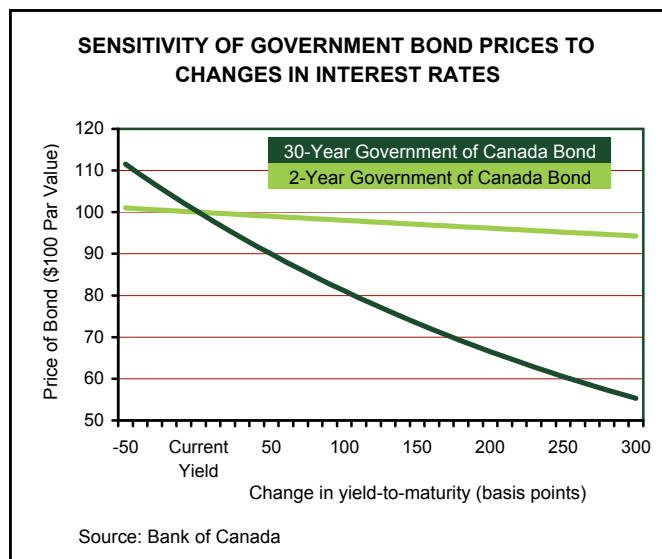
having a better-than-anticipated performance is a financial windfall in retirement; but, assuming higher returns and saving inadequately could lead to a lower standard of living in one's golden years.

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Bonds, Rising Interest Rates, and Capital Losses

Over the next decade, we are expecting DEX Universe Bond Index to provide an average annual return of 3%. Why is this the case when, in the long-run, our estimate for the average annual return on the index is almost 5%? The answer is that a bond purchased today at current yields will decline in value if interest rates rise in the future. Bond yields and prices are inversely related, so when yields are low, prices are high, and vice-versa. The sensitivity of bond prices to moving interest rates depends on a variety of factors, but is increased both as the maturity of the bond lengthens and the lower the current interest rate is. Consider a 2-year and 30-year government bond both trading at their \$100 par value at the prevailing interest rate. If interest rates were to rise by one percentage point, the price of the 30-year bond would fall to \$81.10, while the price of the two-year bond would fall to \$98.05. These capital losses are magnified as interest rates rise further, but also when the starting point is lower. The price declines are larger when interest rates move from 1.00% to 2.00% than from 4.00% to 5.00%. Thus, given that interest rates are at their lowest levels in decades, and will eventually rise, the potential for capital losses on bonds is extremely relevant today.



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