Interest Rate Forecast Issues

October 2016

Dr. Sean Cleary, CFA
Bank of Montreal Professor of Finance
Smith School of Business
Queen's University

Queen's
SCHOOL of BUSINESS

Why a 50/50 Approach as a "Best Estimate"?

- Recall:
  - SIRF: avg. error **-1.72%** / avg. % error **-92.9%**
  - Naïve: avg. error **-0.73%** / avg. % error **-39.5%**
  - 50/50: avg. error – **1.22%** / avg. % error **-66.2%**

- So why not Naïve?
  - Rates are likely to increase at some point in the future – it is the magnitude and timing that is difficult to predict; although a decline can never be ruled out (just look at the recent evidence)
  - 50/50 weight minimizes the chance of being "way off" in terms of what future rates turn out to be – essentially establishing forecasts as one limit (upper limit today) and existing rates as other limit (bottom limit today) – and then choosing the mid-point of this range as the most likely.

- Given the issues with both SIRF or Naïve in predicting the future, a 50/50 approach should minimize forecasting error

17

Queen's
SCHOOL OF BUSINESS

Conclusions

- Over the last eight years, the standard interest rate forecasts (SIRF) have exceeded actual 10-year Canada yields by a wide margin – 1.7% on average, representing a forecasting error percentage of -93% of the actual yields – **almost double the actuals.**

- This presents a **real risk** whenever such forecasts are relied upon.

- While not fully addressing forecasting risk, naïve forecasts using existing 10-year Canada yields would have improved forecasting accuracy significantly, reducing percentage forecast error by close to 60%.

- I recommend that the existing level of 10-year yields be used as one limit and the SIRF be used as the other limit, and that a 50/50 approach be used to obtain the "best estimate."

Queen's
SCHOOL OF BUSINESS

18