

## **Job Market Paper Abstract**

Thousands of newspapers, newsletters, television shows, blogs and many more are in constant demand to report on changing economic conditions. The availability of financial data at daily frequencies allows for nowcasting of these economic conditions, potentially updating them every trading day. This paper combines daily and weekly financial data with monthly macroeconomic indicators in a mixed frequency probit (MFP) regression to forecast and nowcast US and Canadian recessions. The methodology is developed from Chen and Tsay's (2011) approach that uses polynomials to weight higher frequency data in generalized autoregressive distributed lag models. Using data from 1971/9 to 2019/1, out of sample analysis for nowcasts and forecasts of recession probabilities show improvements in the quadratic probability score (QPS) of up to 17%, compared to a benchmark model that aggregates financial data into monthly frequencies. This increases to a 30% improvement when looking at the onset of a recession. The Diebold Mariano test also indicates statistically significant improvements in out of sample prediction at the 1% level. Further analysis shows that the bond market and real activity market hold the most information about the future and current state of the economy in the US and Canada. A mixed frequency artificial neural network (MF-ANN) method is also used as comparison, showing promising results that indicate further research should be carried out in this area.