Final Project Proposal

Motivations

Canada is currently experiencing record-breaking levels of household debt. Consumer spending is central to the Canadian economy and therefore to financial stability. However, with the household debt ratio reaching 163% there is a growing concern that households are overextended. Household debt reporting often mentions low interest rates and rising real estate prices as the main drivers. My aim is to build a model that could accurately predict household debt levels for Canadian family units, taking into account a variety of both quantitative and qualitative factors. In doing so we have attempted to bring additional factors to light, ones that are statistically significant, yet rarely mentioned in economic reporting.

Analysis

My task is to extract data from StatsCan website which is maintained by Government of Canada. As part of Data search will also reach out to other public and university website to get most accurate financial survey across Canada.

After obtaining the data, running OSEMN analysis to do necessary transformations and cleanups. Various analysis will be performed on the transformed data like statistical analysis and linear regression to identified key variables contributing to consumer debts. Will also be interested in various hypothesis testing to answer key questions on consumer debt. Beside this will be interested in applying unsupervised machine learning to see if we can find any additional factors that are statistically significant but are rarely mentioned.