UNIVERSITY OF TORONTO MISSISSAUGA

ECO220Y5: Introduction to Data Analysis & Applied Econometrics

Data Project One
F/W 2023/24

1 Is there a bubble in the Toronto real estate market? Does the data support the idea Toronto real estate might be heading for a crash?

1.1 Project Overview

Your goal is to describe some of the variables that might indicate risks facing the Toronto real estate sector. You should comment on the articles which discuss the severity of the situation for Toronto real estate both in relative and absolute terms. You will do this using the 'projectdata_Summer2021.xlsx' file provided. **You must include descriptive statistics**, for example: means, medians, variances/standard deviations; correlations, histograms, scatterplots, line graphs, conditional means across various countries, etc. You might also want to create or transform new variables from the existing ones. You do not need to discuss every variable. You cannot include regression analysis in this project as this will be covered in term two.

The data is a set of variables downloaded and combined from the MLS database, Statistics Canada, Equifax and the CMHC database. It comprises monthly time series data for Toronto and a few other cities or Canada as a whole. A brief description of the available variables is available in the excel file under the description tab (further description is available on the corresponding websites). Using suitable quantitative techniques from ECO220 describe some interesting characteristics of the variables you decide to focus on. In interpreting, explaining and assessing the validity of your output, you should read the articles provided. Try to pick out variables that might be related in some way to the question and discuss these. You can also search out your own literature to guide your discussion but be sure to include any other sources in a bibliography.. Avoid using any outside data as the goal of the project is to make your case using data analysis on the data you have been provided.

1.2 Project Submission

The project will not be marked based on length but rather how well you addressed the question. Your submission should not exceed 1200 words of text and 4 pages of graphs and tables. If it is written in a clear and concise style, and you have a good handle on generating useful graphs, this limit will be sufficient for a full mark. Write an assessment that is smart, not long. Highlight the findings that are puzzling, practically useful, thought provoking or seem to be counter-intuitive. Try to deliver a submission that is interesting and easy to follow, a short piece of statistical analysis that you yourself would like to read.

This Data Project is worth 7.5% of your final mark. All statistical analysis should be done using Stata. The final report should be submitted as a single written document in .pdf format and you must also include your DO file for Stata.