

# Honours Theses, Academic Year of 2010-11

2010-11

**Year:**

Emma Adlakha

**Student**

**Name:**

[Impacts of Climate Change on Agriculture in Nova Scotia](#)

**Title:**

Dr. Scott Skjei

**Supervisor:**

**Abstract:** In this analysis, the impact of climate change on agriculture in Nova Scotia is estimated. Using the Ricardian method of analysis, climate variables are regressed on the value of farmland in the province of Nova Scotia. The regression output produced from the relationship of climate variables and the value of farmland is found to be suffering from the phenomenon of autocorrelation. Once the regression output is corrected for autocorrelation, the regression is ran again and agriculture in Nova Scotia is found to be unaffected by increasing temperatures and increasing amounts of precipitation.

**Year:** 2010-11

Nick Broz

**Student  
Name:**

[An Examination of the Current Canadian Market](#)

**Title:**

**Supervisor:** Dr. Burc Kayahan, Dr. Scott Skjei

**Abstract:** Is there a housing bubble in Canada? Analysis will first be conducted by estimating the user cost of home ownership compared to the yearly rent of a comparable home. A second analysis will be conducted to analyze the behaviour of various regional markets. I conclude that testing for an overheating of the Canadian housing market must be done at a regional level and testing for a national housing bubble is unlikely to be accurate. A policy implication is that the policy structure available to cool certain overheated markets will have adverse effects on other stable markets.

**Year:** 2010-11

William Turner

**Student  
Name:**

[Cost-benefit Analysis of a Natural Gas Lateral Pipeline to the Annapolis Valley](#)

**Title:**

**Supervisor:** Dr. Burc Kayahan, Dr. Scott Skjei

**Abstract:** This a study of the economic benefit of bringing natural gas to the Annapolis Valley, Nova Scotia. Large volume potential customers are profiled and found to be

primarily using Bunker C residual fuel oil, which then is contrasted with natural gas in terms of use, efficiency, price and environmental effects. Based on the customers' energy needs, the construction cost of a 105km 6 inch lateral pipeline connecting to the provincial pipeline network north of Halifax is calculated. With 2010 average prices for Bunker C and natural gas a Net Present Value of \$51.8 million is established for the project with a 31% Internal Rate of return and break even of four years. As the economic value of this project depends greatly on the price differential between the fuels a sensitivity analysis is conducted. The environmental costs of emissions are quantified to incorporate externalities into the analysis. Limitations of the study examine why a favourable economic analysis does not necessarily mean a viable project. Based on the IRR the project does appear financially viable from a commercial standpoint.

**Year:** 2010-11

Meng Xue Zhang

**Student  
Name:**

**Title:** [Canadian Pension System: Problems and Reform](#)

**Supervisor:** Dr. Burc Kayahan, Dr. Scott Skjei

**Abstract:** Under the great pressure of the aging population and the recent recession, Canadians are facing a national pension crisis. The pension issue has increasingly become one of the hot topics of concern in the government, the public and academia. This paper provides a thorough examination of the current Canadian public pension system. It discusses in detail the major programs and benefits in the three-pillar pension system. Using the existing literature on particular issues regarding the pension system (i.e. pension coverage, replacement rate, contributions, etc.), I provide an overall

discussion of the pension system in Canada and the challenges faced by the future retirees. Problems are explained in demographic, economic and administrative perspectives. This paper also infers two possible solutions for pension reform: one is to improve the system by fixing the current one and the other is to innovate by carrying out a new program. These proposals, Vertical Expansion of the CPP (VEC) and Canada Supplementary Pension Plan (CSPP), are explained and compared in this paper. Finally, pension facts and strategic reform response in Nova Scotia are presented.