SUPERVISOR/S: Zack Dorner
PROJECT TITLE: Do beliefs about future climate change affect farmer well-being?
FIELD: Agricultural economics
DIVISION/SCHOOL: WMS - School of Accounting, Finance & Economics
PROJECT LOCATION: Hamilton

PROJECT ABSTRACT:
There exist a range of beliefs in the wider population about the future impacts of climate change, and the rural sector in New Zealand is no different. Changing climate, including higher frequency of extreme weather events, could have a large impact on farms, forests, and growing operations. Given the roles of weather and climate in farming, worry about climate change could negatively impact farmer well-being, in line with emerging evidence for other industries internationally. Because mental health is an on-going challenge for the rural community, it is worth investigating whether beliefs about future climate risk negatively affect farmer well-being.

The SRDM is a biannual survey, conducted by Manaaki Whenua - Landcare Research (MWLR). It provides data on over 4,500 commercial and lifestyle farmers, foresters, and growers across the country, with locations recorded by postcode. You will undertake a literature review into the effects beliefs about climate change has on well-being. Next, you will process the SRDM data on climate beliefs and well-being and any other relevant variables. You will consider the role recent weather, climate deviations and/or major weather events has on beliefs about climate change. Finally, you will use regression models to investigate the influence of climate change beliefs on farmer well-being.

This project is fully funded by MWLR. You will be supervised by Dr Zack Dorner in the Waikato Management School, and will work independently on this project. There is also a second, related project also being funded for a summer research scholarship on climate and well-being. Therefore, you will benefit from the wider support network of MWLR and another scholarship student working with similar data and analytical techniques. This is an excellent opportunity to improve your data skills, broaden your networks, and work on a project that is highly relevant to one of our most important industries.

STUDENT SKILLS:
• Ability to perform an econometric analysis. Help on specific analysis methods and software will be provided.
• Writing skills for summarising literature, reporting on and discussing results.
• Basic data cleaning and set up

PROJECT TASKS:
• Perform a literature review on climate change beliefs and well-being, with a particular focus on farming, forestry, and growing. You will include a consideration of how recent weather and climatic events influences beliefs on climate change.
• Prepare the data on farmer climate change beliefs, well-being, and any other relevant co-variates.
• Analyse the data using an appropriate regression model to quantify the impact of beliefs about climate change on well-being
• Compile a report (around 6,000 words) from tasks 1 through 3.
• Create a final research poster highlighting key insights and findings from their report.

EXPECTED OUTCOMES:
• Student’s Research Poster (as per clause 6 of the Scholarship regulations)
• A report that will contribute to analysis of the well-being of farmers, foresters, and growers. A determination will be made if this report could form the basis for a journal article and/or other forms of research communication
• An opportunity for the student to develop econometric analysis skills, and networks with MWLR and a fellow student with similar research interests.
• Maintenance and potential expansion of research networks with MWLR
• A poster will be provided to University of Waikato for promotion of this summer research project, and may assist in communicating findings more widely from the research.