

YOU ALWAYS TAKE THE WEATHER WITH YOU: THE ROLE OF CLIMATE IN DETERMINING AGRICULTURAL LAND PRICES

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Climate change could have profound implications for agricultural productivity. International literature attempts to predict the scale of these impacts using hedonic analysis, exploiting current variation in climate (e.g. Mendelsohn et al. (1994), Schlenker et al. (2005;2006)). We utilise a national mesh-block level dataset on property valuations and rich spatial, monthly timescale climate data to explore the cross-sectional drivers of rural land values in New Zealand. Climate affects rural land values in two ways: as a determinant of the productivity of the land in agricultural production, and as a natural amenity affecting quality of life. We attempt to separate the productive and consumptive effects of climate with a structural model that distinguishes the two transmission channels, defining climate variables based on the agronomic and climate amenity literatures. We use a two-step estimation strategy to test the hypothesis that the productive climate variables affect rural land values indirectly through agricultural profitability, while consumptive climate variables do affect land values but have no effect on agricultural profitability. Preliminary results suggest we have been at least partially successful in separating the two effects of climate, and that the productive value of climate is more important than the consumptive value of climate.

as suggested in the recent literature by Burger et.al (2009) and Kohl (2012). The results suggest that China has experienced greater net trade-creation in their exports and imports compared to India due to all PTAs, and both have experienced net trade creation in their exports due to APTA membership, when zero and missing trade flows are considered.