HONOURS THESIS

Location, location, innovation:
The impact of local environmental factors on regional innovation in Australia

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Declaration

Except where appropriately acknowledged this thesis is my own work, has been expressed in my own words and has not previously been submitted for assessment.

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Signature                  Date
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In loving memory of my Lolo Abe. I hope you would be proud by what I have achieved.
“As a matter of fact, capitalist economy is not and cannot be stationary. Nor is it merely expanding in a steady manner. It is incessantly being revolutionized from within by new enterprise, i.e., by the intrusion of new commodities or new methods of production or new commercial opportunities into the industrial structure as it exists at any moment.” - Schumpeter, 1942

“A smart innovation agenda, in short, would be quite different from the one that most rich governments seem to favour. It would be more about freeing markets and less about picking winners; more about creating the right conditions for bright ideas to emerge and less about promises of things like green jobs. But pursuing that kind of policy requires courage and vision and most of the rich economies are not displaying enough of either.” - The Economist, 2010
7.2.1 Direct Effects ................................. 36
7.2.2 Indirect Effects ............................... 37
7.3 Additional Remarks ............................. 38

8 Conclusion .......................... 39

A Summary Statistics ..................... 45
B Primary Industries by Year ............. 45
C Industry Counts ............................ 46
D Correlations ............................... 46
E Unit of Observation ........................ 47
F Moran’s I Scatter (Innovation log-transformed) ................. 48
G LISA Map (Australia) ..................... 50
H LISA Significance Map (Australia) ............ 51
I LISA Map (Melbourne and Sydney) ......... 52
J Moran’s I (not logged) ..................... 53
K Moran’s I scatter (not logged) ............. 54
L Spatial Panel Model Specifications ............. 56
   L.1 SAR Model ............................... 56
   L.2 SEM Model ............................... 56
   L.3 SAC Model ............................... 56
M Results form SAR, SEM, and SAC Fixed Effects Estimation ........... 57
N Results from non-spatial panel model (FE and RE) ............. 58
O Results for Primary Industry differences ..................... 59
P Spatial Panel Random Effects Results ............. 60

List of Figures

1 Neighbour Connectivity Histogram ................................. 17
2 Moran’s I Scatter: Mean (log) Innovation (2009-2015) .................... 20
3 Local Indicators of Spatial Autocorrelation Map (Australia) ............... 21
4 Local Indicators of Spatial Autocorrelation Map (Eastern States) ......... 21
List of Tables

1. Spatial Weights Matrix Summary Statistics ................................................. 17
2. Tests for Spatial Dependence (Autocorrelation): (log) Innovation ................... 19
3. Quadrant Relationships in Moran’s I Scatter Plot ......................................... 19
4. Spatial Panel Specifications ........................................................................... 24
5. Summary of Results from General Model (i) Estimation ................................. 33
6. Spatial Durbin Model (Fixed Effects) Results ............................................... 35
7. Direct and spillover effects of different model specifications (Source: Elhorst (2010)) ... 36
8. Direct and Indirect Effects (SDM (i)) .............................................................. 38
10. Summary Statistics .......................................................................................... 45
11. Count of Primary Industries ............................................................................ 45
12. Summary of Industries within a region ............................................................ 46
13. Correlation Table ............................................................................................. 46
14. Tests for Spatial Dependence/Autocorrelation (for innovation not log-transformed) .... 53
15. Spatial Panel Estimation Results ..................................................................... 57
16. Results from non-spatial Fixed and Random Effects Panel Model .................... 58
17. Summary of Industry Differences (all spatial models) ...................................... 59
18. Spatial Panel Results: Random Effects ............................................................ 60
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Abstract

This paper investigates the determinants of innovation among Australian regions, focussing on the spatial dimension of innovation and innovative-related activities in creating spillover effects. Through ‘exploratory’ and ‘confirmatory’ spatial data analysis we find evidence that innovation activity is spatially dependent, and that there is evidence of spatial clustering of highly innovative regions. Applying spatial econometric techniques, we estimate a Spatial (panel) Durbin Model to control for spatial autocorrelation to analyse the driving forces of innovation throughout regions. We find that the number of university campuses within a region along with university research has a significant and positive effect on local levels of innovation. In terms of spillover effects, we find that population density creates a negative indirect effect; where neighbouring region’s population density adversely impacts innovation levels.

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