

Our Spatial Paper

Your Name

January 9, 2025

Abstract

Please be concise.

1 Project Plan

- Idea Formation and Lit Review Jan 13-17 [together]
- Theory - Coming up with a Model Jan 20-22 [together]
- Theory - Solving the Model Jan 23-24 [Key Person =]
- Coding (data, estimation, counterfactual, and results) - Jan 27 - Jan 31 [Key Person =]
- Writing - Feb 4 - 7 [Key Person =]

2 Introduction

Your introduction here.

3 Background and Diagnostic

Why is the question or policy you want to examine important? Why is a quantitative spatial model the right tool to answer the question? Are there any particular features of the policy/economic environment that are important for the analysis? Feel free to focus on one or a few aspects that you want to study in depth and identify the underlying mechanisms, which will inform you about the key elements to be included in your model.

4 Model

Write down the model that directly speaks to the mechanisms you identified in the previous step. You need to specify all the building blocks and solve for the equilibrium (equilibria). Please be clear and concise, and feel free to leave

tedious derivations in the appendix or cite any relevant derivations you want to lift from existing papers. You are encouraged to tweak or simplify an existing model, like the one in Monte et al. (2018). If you want to be more creative, feel free to select components from the “menu of quantitative spatial models” in Section 2 of Redding and Rossi-Hansberg (2017). When tweaking an existing model or building a model of your own, make sure you include only the necessary elements related to your proposed mechanisms. Importantly, please be aware of the time and feasibility constraints when specifying your model.

5 Data and Estimation

Describe the data you use to estimate the model. What variables do you need? How do you access them? How do you plan to estimate the model? For parameters that you will calibrate, justify your choices. For parameters that you will estimate, explain your strategy.

6 Counterfactual

Carefully describe the counterfactual exercise (i.e., a policy that you want to evaluate) you want to examine. What is your plan for implementing it? Are you going to fully invert the model to back out fundamentals? Are you going to use exact hat algebra to solve the model in changes? For the purpose of this problem set, you can restrict your attention to policies that are local in nature (i.e., policies that target a specific county or a set of counties independently of others). If you are interested in a non-local policy (i.e. a policy like a construction of interstate highways that affect many counties simultaneously), you do not need to compute changes in fundamentals with high level of precision (e.g., changes in commuting costs in each county), a rough approximation will suffice

7 Appendix

Painful proofs go here.