## Stephanie Kestelman: Research Statement

How can the tax and transfer systems be used to address inequality within and across spatial units? How does the interaction of different levels of government affect efficiency and distributional outcomes in federalist societies? My research will focus on policy tools that affect spatial allocation of economic activity, productivity, income inequality and the provision of public goods. I will focus on the following projects early in my research career:

Distributional and efficiency effects of tax policy: The Tax Cut and Jobs Act (TCJA) capped state and local property tax (SALT) deductions to \$10,000. My paper with Owen Zidar assesses the distributional and efficiency consequences of capping this deduction. Whether capping SALT improves or worsens distributional outcomes depends on the mobility response of high-income individuals. Most of the statutory burden might fall on high-income taxpayers since they pay more taxes and are more likely to itemize. If high-income people are mobile (e.g., Moretti and Wilson, 2017), they might flee high-tax areas in response to the SALT cap, causing the tax base to shrink. If this is the case, high-tax and high-spending locations will likely face fiscal challenges and will be pressured to reduce the provision of public services. The burden of the tax increase may be ultimately shifted to lower income people, who tend to be less mobile and have stronger preferences for government service provision. Encouraging high-income workers to leave highly productive locations like New York and California could also substantially reduce allocative efficiency and the scale of economic activity (Albouy, 2009; Hsieh and Moretti, 2018). However, if rich taxpayers are not that mobile, then the equity and efficiency consequences may muted and eliminating the policy may be relatively attractive.

We develop a spatial model with heterogeneous workers and federal and sub-federal governments, and use estimates from the literature to evaluate the effects of capping the SALT deduction. In the model, workers decide where to locate based on each state's taxes, wages, cost of living, and amenities. High- and low-skill workers face different real wages and effective taxes, and may value government services differently. The SALT deduction affects location decisions in partial equilibrium, through local real wages and public good provision responses, as well as in general equilibrium, through prices and government spending (Moretti, 2011; Suárez Serrato and Zidar, 2016; Diamond, 2016; Fajgelbaum et al., Forthcoming). Since this policy has never been implemented, leveraging the model to quantify its potential consequences is of academic and policy interest.

Housing policy: Housing prices have risen steadily since the 1970s across American cities, mostly to the detriment of low- and middle-income households. High rents not only displace lower income workers and disrupt neighborhood culture, but are also partly to blame for the increase in local income inequality (Diamond, 2016). We don't know, however, if the displacement of low-skill workers is inefficient. Hsieh and Moretti (2018) find that regulatory restrictions increase housing prices and promote spatial dispersion of productive workers. It is possible that some housing supply regulations, such as affordable housing requirements, improve allocative efficiency by subsidizing a minimum supply of workers to produce local low-skill-intensive goods and services. I will study whether subsidizing local low-skill labor supply reduces spatial dispersion. Cities like Denver have begun testing low- and middle-income housing subsidies (McGlinchy, Nov 14, 2018), so this work is of policy relevance.

I will develop a Rosen-Roback model where cities produce a mix of local goods with varying levels of relative skill demand. Individuals decide where to locate based on wages, rental prices, cost of living, and amenities. The local skill mix affects high-skill location through local real wages, rental costs, and prices of local goods. For a range of skill mix levels, local good prices will lead many high-skill workers to relocate to relatively cheaper and less productive areas, thus increasing spatial dispersion and lowering aggregate output (Hsieh and Moretti, 2018). I will use publicly available Census and ACS data, as well as panel variation in affordable housing policies (Gyourko, Saiz and Summers, 2008) to provide reduced form and structural estimates of the effects of affordable housing policies on efficiency and distributional outcomes.

Taxation and informal labor: Strengthening tax compliance has long been a goal of development practitioners (IMF, 2015). Not much has been written on whether and how workers and firms adjust to tax changes by entering the formal sector, thus changing their level of tax compliance. Using the tax system to induce formality may yield non-trivial efficiency and distributional gains. For instance, firms remaining informal for the sake of tax avoidance may be forgoing access to credit and government programs that would otherwise increase productivity. These firms may be inefficiently small and unproductive, which can negatively affect aggregate output (Hsieh and Klenow, 2009; Acemoglu and Dell, 2010). Informal workers, on the other hand, may be forgoing more productive jobs (Meghir, Narita and Robin, 2015), as well as benefits attached to formal employment (e.g., higher social security payout).

I will extend the model in Meghir, Narita and Robin (2015) to include income taxes. I will then use longitudinal administrative data (RAIS) from Brazil to measure how workers and firms respond to tax changes, following an approach similar to Dix-Carneiro and Kovak (2017). I can use my reduced form estimates to back out structural parameters from my model and calculate the fiscal, welfare and productivity effects of changing the Brazilian tax schedule to improve formality rates. I can also employ these estimates to characterize the tax schedule that optimizes revenue by encouraging greater corporate and labor force formality rates, and therefore broadening the tax base.

## References

- Acemoglu, Daron, and Melissa Dell. 2010. "Productivity differences between and within countries." *American Economic Journal: Macroeconomics*, 2(1): 169–88.
- **Albouy, David.** 2009. "The unequal geographic burden of federal taxation." *Journal of Political Economy*, 117(4): 635–667.
- **Diamond, Rebecca.** 2016. "The determinants and welfare implications of US workers' diverging location choices by skill: 1980-2000." *American Economic Review*, 106(3): 479–524.
- **Dix-Carneiro, Rafael, and Brian K Kovak.** 2017. "Margins of labor market adjustment to trade." NBER Working Paper No. 23595.
- Fajgelbaum, Pablo D, Eduardo Morales, Juan Carlos Suárez Serrato, and Owen M Zidar. Forthcoming. "State taxes and spatial misallocation." Review of Economic Studies.
- Gyourko, Joseph, Albert Saiz, and Anita Summers. 2008. "A new measure of the local regulatory environment for housing markets: The Wharton Residential Land Use Regulatory Index." *Urban Studies*, 45(3): 693–729.
- **Hsieh, Chang-Tai, and Enrico Moretti.** 2018. "Why do cities matter? Local growth and aggregate growth." *American Economic Journal: Macroeconomics.*
- Hsieh, Chang-Tai, and Peter J Klenow. 2009. "Misallocation and manufacturing TFP in China and India." The Quarterly journal of economics, 124(4): 1403–1448.
- IMF. 2015. Current Challenges in Revenue Mobilization: Improving Tax Compliance.
- "Denver McGlinchy, Audrey. Nov 14, 2018. IsTesting Housing Vouchers For Middle-Income Workers. Austin Will Be Watching." http://www.kut.org/post/ denver-testing-housing-vouchers-middle-income-workers-austin-will-be-watching.
- Meghir, Costas, Renata Narita, and Jean-Marc Robin. 2015. "Wages and informality in developing countries." *American Economic Review*, 105(4): 1509–46.
- Moretti, Enrico. 2011. "Local labor markets." In Handbook of Labor Economics. Vol. 4, 1237–1313. Elsevier.
- Moretti, Enrico, and Daniel J Wilson. 2017. "The effect of state taxes on the geographical location of top earners: evidence from star scientists." *American Economic Review*, 107(7): 1858–1903.
- Suárez Serrato, Juan Carlos, and Owen Zidar. 2016. "Who benefits from state corporate tax cuts? A local labor markets approach with heterogeneous firms." *American Economic Review*, 106(9): 2582–2624.