

## **Female Labor Force Participation and Care of Children in Coastal New Jersey**

### Research Question

This research focuses on factors affecting female labor force participation in New Jersey's coast, specifically, transaction costs associated with childcare. By transaction costs we mean opportunity cost of time associated with commuting and accessibility to areas suitable for childcare. We define these areas as childcare facilities, parks, recreation centers, and playgrounds. The research question is: Do commute times from daycare facilities affect labor force participation and job choices of women, and do they differ to their partners', by marital status, or by number and age distribution of children? To answer this question, we use census tract data collected by the United States Census Bureau and New Jersey local agencies. Variables of interest are employment status, and facilities location. Control variables include residential amenities and transportation characteristics. Methods are statistical analysis, including spatial regressions to account for the possibility of clusters and spatial patterns (see Kawabata and Abe 2018).

### Motivation

Models of urban spatial structure and commute times, for example Alonso (1964) and Mills (1972), explain the relationship between variables of labor force participation such as distance to Central Business District (CBD), wages, and housing prices, particularly at the New Jersey shore where commute times and housing prices may be organized around coastal urban centers. They state a foundation to understanding individuals, and households' decisions on residence and work locations. However, these models focus on spatial variables alone, and assume households are a single economic unit. There is evidence that accounting for intra-household bargaining leads to

results that differ from analysis that assume a single economic unit model (see for example Knowles 2012). Therefore, this project focus on decisions of females, and how the same spatial models are adapted to include variables such as marital status, number and age of children, and access to childcare facilities or spaces, like playgrounds.

A sustainable resilient community is one where each individual can achieve their potential, within the constraints of a sustainable use of available resources available, and without compromising future generations' ability to meet their needs (Emas 2015). Decisions of number of children, residential location, and work, are related to this objective directly (i.e. through the population growth channel and use resources use) and indirectly (i.e. through human capital- children's education and parents' wages- and resilience of a community). Furthermore, oftentimes choices of the unitary household differ from individual females. For example, it may be the optimal choice for the household to have the mother refrain from work, because, on average, women hold the responsibility of childcare, whether themselves or through an agency. But this may not reflect her optimal individual choice. In order to understand female's constraints to participate in the job market, we also need to understand whether it is feasible to access larger job markets given current conditions of access to, or lack of, childcare alternatives. The proposed analysis assesses this in the context of coastal communities, given their importance to the New Jersey economy and future threats to resiliency in respect to climate change.

### Keywords

Female labor participation, childcare, commuting zones, Census data

## References

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