Title: The demand for urban diversity - a multiple markets approach

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Abstract:
In this paper we offer a different take on the description of the city. While we recognize that a city is a place where people work, it is most definitely also a place of living. In the sense that people live their lives i.e. buying groceries, meeting up at a café, watching a movie at the cinema and enjoying art at a gallery. We propose a new measure for capturing the city-life aspect of housing quality and proceed to estimate the demand for this quality in a 2nd stage hedonic pricing study using multiple markets. We identify five markets across Denmark. Three is within and around Copenhagen, the capital. One is in Aarhus, the 2nd largest city. The last market is the suburbs and rural areas close to Aarhus. We estimate a pricing function for each market. We find that the number of different services, such as restaurants, cinemas, retail etc. within a 1 km radius of the residence to increase price with 0.1-0.7%.

We move beyond the implicit prices of the hedonic price function as we estimated the inverse demand for city life using the 2nd stage multimarket approach. We expected the demand for city-life to depend on the price for city life, a number of demographic demand shifters and the price for living area. Given the functional form of the 1st stage pricing function, prices are endogenous. We solved this using an IV-strategy, where we matched each household with all other households in a multidimensional space. Then we used the price of the two "closest" neighbors as an IV. To avoid unobserved quality invaliding our instrument we excluded observations in a 500 m radius.

The literature offers little guidance for the functional form of the demand function. We provide the results from a linear and a semilog specification. Based on our data, both describe the demand relation equally well. Both provides approximately the same fit, and judged by sign and significance the same demand relations. As expected we find the demand for city-life to decrease with the price for city-life and increase with the price of living area. Households substitute between living area where they can enjoy company at home or city-life where they can enjoy company in public.
In summary, we propose a new measure of city-life, which in our application is reflected well in the pricing function across several markets with large variation in urbanization. We conduct a 2nd stage hedonic study using multiple market to create variation in price and quantity and a well-known identification strategy, to show how the demand for city-life varies across demographics.

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