Where is Standard of Living the Highest? Local Prices and the Geography of Consumption

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Abstract

There are large differences in mean income across US cities, but little is known about the levels of standard of living in each city—defined as the amount of market-based consumption that residents are able to afford. In this paper we provide the first estimates of standard of living by commuting zone for households in a given income or education group, and we study how they relate to local cost of living. Using a novel dataset, we observe all debit and credit card transactions, check and ACH payments, and cash withdraws of 5% of US households' in 2014 and use it to measure mean consumption expenditures by commuting zone and income group. To measure local prices, we build income-specific consumer price indices by commuting zone. We uncover vast geographical differences in material standard of living for a given income level. Low income residents in the most expensive commuting zone enjoy a level of consumption that is about half that of low income residents in the most affordable commuting zone.

In the second part of the analysis, we endogenize income and estimate the standard of living that low-skill and high-skill households can expect in each US commuting zone, once we account for geographical variation both in cost of living and also in expected income. We find that for college graduates, there is no relationship between consumption and cost of living, suggesting that college graduates living in cities with high costs of living—including the most expensive coastal cities—enjoy a standard of living on average similar to college graduates with the same observable characteristics living in cities with low cost of living—including the least expensive Rust Belt cities. For high school graduates and high school drop outs we find a significant negative relationship between consumption and cost of living, indicating that expensive cities offer lower standard of living than more affordable cities. The differences are quantitatively large: High school drop outs moving from the most to the least affordable commuting zone would experience a 23.5% decline in consumption. In the last part of the paper we quantify the effect of geographic sorting of households into high- and low-cost commuting zones on consumption inequality at the national level.

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