The Value of Commuting Time and Efficient Job Assignment in the Gig Economy

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The online "Gig Economy" highlights the importance of efficiently matching workers and firms given the short-term nature of job assignments and the frequent re-matching process. I estimate the potential value of optimal matching workers and firms on one specific dimension - commuting time. I analyze short term (one day or less) assignments between workers and firms made on a Gig Economy platform that specializes in shift work. Workers can apply for shifts on a first come/first served basis. I estimate a hedonic model of worker preferences for shift attributes to understand the trade-offs workers make. I estimate the dollar value of commuting time for users of mass transit and drivers and compare that to the value of work time. I also estimate the value to firms of workers they have used before and, given the "stickiness" of firm/worker matches on the site, I calculate the economic value of creating high value (that is, low commute time) matches early in a firm/worker relationship. The analysis provides insights into how much economic value can be created by matching workers and firms more successfully based on commute time, as well as the value of commuting infrastructure investments.