How Does Wealth Affect Labor Market Mismatch and Productivity?
By Jincheng "Eric" Huang

How does wealth affect the allocation of workers to firms? In a recent working paper, Jincheng "Eric" Huang and Xincheng Qiu, both PhD candidates at the University of Pennsylvania, argued that the distribution of wealth can directly influence the efficiency of labor market allocation resulting from an interaction between workers' self-insurance incentive and job search strategies. They called this interaction a "precautionary mismatch" motive.

Huang and Qiu developed a structural model with three key ingredients. First, workers and firms have different (types or levels of) skills, so that sorting exists in equilibrium. Second, the labor market is frictional and offers arrive randomly, so that it takes time to form an ideal match. Third, markets are incomplete, and workers can only self-insure against unemployment risk through risk-free savings.

The main mechanism of the model works as follows: Due to search frictions, there exists a trade-off between the speed of match formation and the quality of matches. As workers are risk averse, asset holdings affect this trade-off. A higher level of wealth not only makes a worker more willing to wait for better matches at the risk of longer time spent in unemployment, but also increases her outside options, pushing the worker to demand higher wage compensation. On the firm side, this means that matches with wealthier workers are profitable only if they yield higher productivity. As a result, the overall quality of matches improves with workers' wealth holdings.

In their paper, Huang and Qiu illustrated this key point by comparing the job matching strategies for workers with different amounts of wealth. In the model, workers closer to the borrowing constraint are more prone to be mismatched, and especially under-employed, as they are more eager to find a job.

The mechanism seems to be supported by data, as the authors noted. Using linked NLSY79 and O*NET data, which contains detailed information about the characteristics of workers and the occupations that occur in work histories, they constructed direct measures of worker skills and firm skill requirements following the method by Lise and Postel-Vinay (2020). Match quality was then defined by skill mismatch, namely, the distance between the two skill measures.

The paper shows that workers with more liquid wealth in their balances when entering the labor market generally have lower job-finding rates, while on the other hand they experience lower skill mismatch for the jobs they get, consistent with the model's prediction.

Huang and Qiu pointed out that the "precautionary mismatch" motive can lead to worse match qualities during times of financial constraints, one prominent example being the Great Recession. Labor misallocation not only reduces productivity, but also discourages vacancy creation as the

expected value of vacancies declines when firms find it harder to find good matches. The findings of this paper highlight the role that unemployment insurance can potentially play in labor market recovery by encouraging higher quality matches, a benefit that has so far been understudied.

Reference

Lise, Jeremy, and Fabien Postel-Vinay. 2020. "Multidimensional Skills, Sorting, and Human Capital Accumulation." *American Economic Review,* 110 (8): 2328-76.