The Minimum Wage Effects on Earnings and Sorting: A Wage-Mobility Discrete Type Approach

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Abstract :
This paper estimates the effects of the introduction of a nation-wide minimum wage (MW) in Thailand on earnings and sorting. Using the Thai social security data, we show that there is a great degree of mobility differential among workers with similar wages. Hence traditional methods of measuring MW effects by classifying workers into wage bins based on workers' wages before the MW policy may give an incomplete picture of the earnings effects due to mobility heterogeneity. Moreover, they exclude unemployed workers without wage bins before the policy. In our analysis, we include both employed and unemployed workers and estimate their latent types using a semi-parametric model of wages and employment mobility with two-sided heterogeneity of Bonhomme et al. (2019) and Lentz et al. (2021). Using identification designs exploiting variation in exposure across workers' wage-mobility latent types, we find that the MW raised earnings with sizable spillover effects. We show that while the MW had little disemployment effect on employed workers, the probability of finding a job for unemployed workers who had been unemployed for at least a year declined. Moreover, sorting among new employment matches after the policy became less positive across workers of all age groups. We then use the two-sided heterogeneity model to perform simulation to decompose (i) the sources of gains on earnings into worker, firm, match and allocation effects, and (ii) the reduction of sorting into changes in job-to-job, employment-unemployment and unemployment-employment transitions. We find that for short tenure workers, the declined sorting is primarily driven by the change in their mobility pattern out of unemployment whereas for long tenure workers all three mobility channels are equally important. The sources of gains on earnings vary by worker types.