

Local Shocks, Discrete Choice and Optimal Policy

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Abstract

Economic opportunities and wages are unevenly dispersed across locations. The risk of being born in and having personal attachment to a low wage location creates a motive for social insurance. Policymakers must trade this motive off against its adverse impact on location choice and migration. Our paper develops the theory of optimal geographic social insurance. We provide new formulas that characterize optimal location-conditioned transfers and a quantitative analysis of such transfers for the US.

We model workers as solving dynamic discrete choice location problems and embed these problems into an optimal policy framework. The policy maker is assumed to observe and condition transfers on the locational choices of workers, but not their private locational preferences. In the simplest environment, optimal policy is characterized by a generalized multidimensional version of formulas originally derived by [Baily \(1978\)](#), [Saez \(2002\)](#) and [Chetty \(2002\)](#) in the context of unemployment insurance. This formula equates the marginal benefit of a transfer to the recipient with the marginal resource cost where the latter incorporates behavioral sufficient statistics describing the elasticities of migration with respect to transfers. The discrete choice framework allows us to connect these sufficient statistics to structural primitives and quantitatively evaluate optimal policy. We extend the model to a rich dynamic setting with endogenous wage determination. This complicates optimal policy formulas through the introduction of terms capturing the option value of future relocations and the impact of relocations on the wage distribution.

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We use the approach of Hotz and Miller (1993) to estimate the migration costs and other structural parameters. We then quantitatively evaluate optimal geographic policy at steady state and under various adjustment scenarios.

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