Title: Risk-Based Selection and the Optimal Design of Unemployment Insurance

Authors: Camille Landais, Arash Nekoei, Peter Nilsson, David Seim and Johannes Spinnewijn

Abstract: Despite the large existing literature on unemployment insurance (UI), two fundamental questions regarding its design remain unanswered: (i) Why is UI mandated (rather than subsidised for instance) and publicly provided in all developed countries? (ii) Why is coverage choice unavailable? In all (but 2) countries, there is no coverage choice nor additional insurance market for unemployment risk. Can risk-based selection explain such features of the UI design? While it has long been recognized as hindering the efficient private provision of UI, there is to date no evidence of the presence of such adverse selection in UI nor any evidence that it should explain such features of the UI design. Building on the unique institutional setting of Sweden, where UI is voluntary, we provide the first direct evidence of the presence of risk-based selection in UI and of its implication for the design of social insurance against unemployment risk. First, we document a strong positive correlation between unemployment risk and the choice of buying UI, even after controlling for a rich set of observables. Second, exploiting unique individual level variation in risk, we document that this correlation is not driven by moral hazard. Third, using unique variation in the price of UI, we document that the average cost of UI increases with the price of UI, and estimate the magnitude of the welfare-relevant adverse selection in the Swedish UI system. Finally, we use our estimates to explore the consequences for the optimal design of UI. In the absence of redistribution value towards high risk individuals or other externalities, our estimates imply that the actual subsidy for UI in Sweden is too high and a mandate at this coverage level would be socially inefficient.