

SEARCH, ADVERSE SELECTION AND MARKET CLEARING

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Abstract. This paper studies a dynamic matching model with adverse selection to examine whether or not the market almost clears if search friction is small. The economy is populated by two unit mass of infinitesimal (infinitely-lived) sellers, high type and low type sellers of equal size, and a positive unit mass of infinitesimal (infinitely-lived) buyers. In each period, sellers who know the quality of the good and buyers who do not observe the quality are randomly matched in pairs with a long side being rationed. For each pair, a price is randomly drawn. If either party disagrees, then the two agents return to the pool, waiting for another chance to be matched to another agent. If both parties agree, then the trade occurs, and the two agents leave the pool of unmatched agents (but not the economy), generating surplus from trading in each period at the drawn price while the agreement is in place. The long term agreement is dissolved by the decision of either party or by an exogenous shock. Upon dissolution of the long term relationship, both agents return to the respective pools of agents. In any stationary equilibrium with a positive probability of trading, both rates of unemployment and vacancy are uniformly bounded away from 0, even in the limit as search friction vanishes. We identify adverse selection as a fundamental source of the coexistence of unemployment and vacancy in addition to search friction and coordination failure caused by directed search.

Keywords: Matching, Search friction, Adverse selection, Undominated equilibrium, Market clearing, Unemployment, Vacancy