

Helsingin yliopisto - Helsingfors universitet - University of Helsinki

Tiedekunta-Fakultet-Faculty Faculty of Social Sciences		Laitos-Institution-Department Department of Economic and Political Studies	
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Työn nimi-Arbetets titel-Title Evolutionary Stable Matching and Pricing: Comparisons of a Symmetric and Asymmetric Markets			
Oppiaine-Läroämne-Subject Economics: General Economics			
Työn laji-Arbetets art-Level Master's thesis	Aika-Datum-Month and year 2010-05-10	Sivumäärä-Sidantal- Number of pages 78	
Tiivistelmä-Referat-Abstract <p>This thesis analyses the evolutionary stability of different matching and pricing mechanisms. The aim of the thesis is to determine the evolutionary stable structure of an economy where buyers and sellers have a choice between a symmetric random matching and an asymmetric efficient matching market that differ in pricing mechanisms. Additionally, a stability property of an asymmetric market, where buyers differ in their possibility of meeting a seller, is studied.</p> <p>Two efficient markets with different pricing mechanisms are compared to a random matching market where prices are set by auctions. All the possible matches are made in the efficient markets. In the first comparison, prices are set by bargaining in the efficient market. In the other efficient market, prices are set via altered auctions.</p> <p>In neither of the comparisons can the random matching and an efficient matching market function simultaneously in an evolutionary stable equilibrium configuration. In the first comparison, the asymmetric efficient bargaining market structure is evolutionary stable if the ratio of buyers to sellers in the economy is small. The random matching market with auctions is evolutionary stable if the ratio is large. For intermediate values of the ratio, the starting state of the economy determines the stable equilibrium that the economy reaches. In the second comparison, the efficient market with altered auctions is always evolutionary stable over the random matching market with standard auctions.</p> <p>An asymmetric market is analysed further, by treating efficiently matched and consumers without the advantage of a determinate match separately, to determine the share of sellers that choose to serve consumers restricted from certain matching. The results show that the determinate matching market breaks down at a quite low ratio of restricted buyers to matched buyers.</p> <p>The evolutionary stability of different equilibrium pricing mechanisms in a random matching setting has been studied earlier. Lu and McAfee (1996) and Halko et al. (2007) respectively show that auctions are the evolutionary stable pricing mechanism when compared to bargaining or altered auctions. Kultti and Takalo (1999) demonstrate that auctions retain their superiority over bargaining if agents can choose to search or wait.</p> <p>The thesis uses a mathematical model to depict the economy, that is markedly similar to models of the abovementioned authors. The specifications of the matching and the pricing procedures are from search-theoretic models. The equilibrium selection criterion is the evolutionary stability of an equilibrium, which comes from evolutionary game theory. Replicator dynamics are applied to depict dynamic adjustment processes and to determine evolutionary stable equilibria in the comparisons.</p>			
Avainsanat-Nyckelord-Keywords efficient matching random matching pricing evolutionary stability			
Muita tietoja-Övriga uppgifter-Additional information			