資訊不對稱下均衡概念之關聯 ——以網路交易分析爲例

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本文旨在探討當交易期數與賣方型態爲賣方的私有資訊時,存有詐欺誘因的一般型兩期賣方,如何付出誠實交貨的代價以維持信譽,來吸引更多買方上網交易。我們利用 Kreps and Wilson 發展的「信譽效果」概念,以對偶方式呈現我們的兩期模型。然而,我們的模型有別於連鎖店賽局只用直觀準則,就可完全刪除買方用不合理猜測所支撐出的均衡。我們證明此模型,必須進一步採用DI 準則,甚至到策略穩定性要求,才有唯一的均衡路徑。這一部分的分析,是以往相關文獻上不需討論的,其間可清楚看出,在資訊不對稱下各均衡概念的差異。我們並應用 Gambit 對 Nash 均衡解作數值模擬,來更具體呈現上述各個均衡概念的關聯。我們的研究結果顯示,「信用評價制度」的引進,的確在鼓勵賣方採取誠實行爲上有其貢獻。

關鍵字:資訊不對稱、序列均衡、直觀準則、D1 準則、信譽、網路 交易

Connecting Equilibrium Concepts in Asymmetric Information—The Market for Online Transactions

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ABSTRACT

This paper builds a two-period signaling game to study whether or not the 'ordinary' long-run seller has sufficient incentive to gain credibility for his second sale by delivering the good in the first period. We assume that short-run (one-shot) buyer is uncertain about the seller's type, and whether or not the seller will be in the market in the second period is also seller's private information. This model can be viewed as a dual model of Kreps and Wilson. Contrary to the uniqueness of the results in Kreps and Wilson, we have multiple equilibrium paths passing the intuitive criterion. Hence, in order to obtain a unique equilibrium path, we must apply the criterion D1 and need strategic stability. Therefore, we can tell the discrepancy under each type of equilibrium concepts under asymmetric information. We also apply Gambit software to get a numerical simulation of all pure strategy Nash equilibria of this model. In the unique strategically stable equilibrium, when the probability of an 'ordinary' short-run seller is sufficiently low, the outcome is that the 'ordinary' long-run seller has sufficient incentive to gain credibility for his second sale by delivering the good in the first period. Hence, concern for reputation can encourage sellers to adopt honest delivery behavior, thereby benefiting the market for online transactions.

Key Words: asymmetric information, sequential equilibrium, intuitive criterion, criterion D1, reputation, online transactions