Why Do Firms Adopt Innovations in Bandwagons? Evidence of Herd Behavior in Open Standards Adoption

Abstract
This study examines the bandwagon (or wave) patterns of new technology adoption in the context of firms’ adopting Internet-based, open standards networks under incomplete information. We hypothesize mechanisms underlying bandwagon pressure based on theories of network effect and herd behavior. We further hypothesize two moderators on herd behavior—related technology experience and market competition, motivated by two theoretical views of herd behavior, namely the informational effect and competitive pressure. Using data of 544 firms in the financial services industry, our empirical analysis shows that open standards are indeed subject to adoption bandwagons—that is, a firm’s adoption is positively associated with the extent of adoptions in its trading community, that is, by its competitors and business partners. Further, firms are more likely to imitate competitors in more competitive markets, while their related technology experience helps to mitigate such a tendency of herding. This suggests that firms, in making adoption decisions, may rely on their internal information rather than the external signal, especially when the external signal becomes less informative in highly competitive markets due to possible herding. These results shed new light on the informational view of herding in innovation adoption. Firms need to take a long-term view about technology adoption in the sense that using current technologies may serve as a step stone to newer technologies in the future.

Keywords:
Corporate Investment, Innovation Adoption, Herd Behavior, Network Effects, Open Standards, Market Competition, Informational View of Herding, Financial Services