Available online at www.sciencedirect.com
ScienceDirect
European Economic Review 52 (2008) 259–282
EUROPEAN ECONOMIC REVIEW
www.elsevier.com/locate/eer

Does resorting to online dispute resolution promote agreements? Experimental evidence

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Received 6 December 2004; accepted 3 April 2007
Available online 24 May 2007

Abstract

This paper presents an experiment performed to test the properties of an innovative bargaining mechanism (called *automated negotiation*) used to resolve disputes arising from Internet-based transactions. The main result shows that the settlement rule tends to *chill* bargaining as it creates incentives for individuals to misrepresent their true valuations, which implies that automated negotiation is not able to promote agreements. However, this perverse effect depends strongly on the conflict situation. When the threat that a disagreement occurs is more credible, the strategic effect is reduced since defendants are more interested in maximizing the efficiency of a settlement than their own expected profit. The implications of these results are then used to discuss the potential role of *public regulation* and *reputation* mechanisms in Cyberspace.

JEL classification: C78; C91; D74; K41

Keywords: Online dispute resolution; Electronic commerce; Bargaining; Arbitration; Experimental economics

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0014-2921/$ - see front matter
doi:10.1016/j.euroecorev.2007.04.004

1. Introduction

By reducing transaction costs, the open structure of the Internet offers businesses and consumers a new and powerful tool for electronic trade (Shapiro and Varian, 1998). For example, Internet technology lowers buyer search costs by providing them a wider array of products and services from different sellers than they would have in geographically defined markets. The Internet reduces seller search costs as well, by allowing them to communicate product information cost effectively to potential buyers, and by offering sellers new ways to reach buyers through targeted advertising and one-to-one marketing (Bakos, 2001; Garicano and Kaplan, 2001). From this point of view, electronic commerce is widely expected to increase social welfare by intensifying competition and helping the consumers to enjoy lower prices and more choices.

However, what makes the Internet such an interesting medium for exchange creates also a number of legal obstacles which could hinder the full economic potential of electronic commerce from being reaped. The characteristics of the Internet make traditional dispute resolution through judicial procedures unsatisfactory for many controversies that arise in electronic commerce (Froomkin, 1997). For instance, suppose that a buyer purchases a product from an auction site and something goes wrong with the sale (e.g. the seller may ship a damaged item or the item may have been incorrectly described in the auction). Such a problematic Internet-based transaction raises several issues about how disputes can be resolved in the virtual environment of electronic markets. First, such a transboundary transaction creates legal uncertainty about which jurisdiction is competent and about the applicable law. Second, given that the parties are physically distant, it seems difficult to haul them into court. Third, the low transaction value may simply discourage the parties to resort to a costly legal process. Consumers who participate in this type of commerce expose themselves to a heightened level of risk due to the anonymity and location of the individual making a sale or purchase.[1] During the medieval period, such international trade was governed by rules of private international law, the *lex mercatoria*.[2] Following this idea, many authors have argued that a distinct set of substantive rules should be created in order to regulate the electronic commerce insofar as the application of legal rules which focus on the concept of territory is questionable in the case of ubiquitous computer networks such as the Internet (Johnson and Post, 1996).

The need to regulate the electronic commerce has precipitated the creation of several *online dispute resolution* companies that offer computer-aided bargaining forums in order to settle conflict situations. These mechanisms consist of proprietary software which utilize the Internet as a means to more efficiently engage parties in *automated negotiation* of monetary sums. Automated negotiation appears to be an attractive solution to an

[1]This uncertainty can explain why buyers lack trust and confidence in online transactions. For example, 62% of the european consumers declare that the lack of legal protection is the main reason for not purchasing goods online (OCDE, 2002). Furthermore, despite the rapid growth in business-to-consumer e-commerce sales, they still account for a very small share of overall transactions. For example, in the United States, where most Internet transactions take place, business-to-consumer penetration was just 0.48% of retail sales (Coppel, 2000).

[2]The *lex mercatoria* (or *law merchant*) is a body of principles and regulations applied to commercial transactions and derived from the established customs of merchants and traders rather than the jurisprudence of a particular nation or state. The law merchant owed its origin to the fact that the civil law was not sufficiently responsive to the growing demands of commerce, as well as the fact that trade in medieval times was practically in the hands of cosmopolitan merchants who wanted a prompt and effective jurisdiction (Greif et al., 1994; Benson, 1996).