

Chapter 53

Measuring the Effects of Risk and Cultural Dimensions on the Adoption of Online Stock Trading: A Developing Country Perspective

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ABSTRACT

Online stock trading (OST) is a growing phenomenon across countries, yet there is a sparse literature focusing on the negative utilities (risks) that causing the low adoption. Drawing from perceived risk theory, this article attempts to fill the gap by identifying the influential risk factors that impede the acceptance of OST in a developing country, Pakistan. The study also applies the Hofstede cultural theory to ascertain the effects of cultural moderators on investors' usage behavior (UB). Based on structured questionnaire, 443 valid responses were received from current and potential investors. The model was tested using structural equation modeling through Smart-PLS. The results validate a negative and significant relationship between risk dimensions and investors' behavioral intentions (BI) to use OST. Especially time, financial, performance, privacy and opportunity cost risks are found having a negative impact on investors' BI. Moreover, the study finds that cultural dimensions, collectivism, and uncertainty avoidance, moderate the relationship between BI and UB.

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1. INTRODUCTION

Today, the Internet proliferation has radically changed the operations of brokerage houses and has enabled them to provide online services to their clients for performing seamless transactions irrespective of time and location (Ramayah, Rouibah, Gopi, & Rangel, 2009). Internet stock trading is the provision of on-line access by the brokerage houses to their client to execute buy or sell stock orders on the brokerage's Internet-based proprietary trading platforms (Carlos Roca, José García, & José de la Vega, 2009). High liquidity of financial assets, low transactions fees, faster transactions, better information transparency are the direct advantages whereas checking stock quotations, receiving real-time market news, performing transactions from anywhere and anytime are the indirect benefits that investors can gain from online stock trading (Guiso & Sodini, 2013; Lee-Partridge & Ho, 2003). The provision of online services to clients is also advantageous for brokers as it increases revenue by reducing operational expenses (Yiu, Grant, & Edgar, 2007). Traditional settings require excess staff and physical offices for smooth business operations (Cheng, Lam, & Yeung, 2006).

Despite the multiple advantages, high-speed digital gadgets/computers, and Internet access, the online stock trading is still in its infancy (Tai & Ku, 2013). In this respect, scholars have identified different factors by using the dominant information technology models¹ that contribute to investors' decision regarding adoption of online stock trading. For instance, social factors, facilitating conditions, information quality, compatibility, complexity, relative advantages (Lee-Partridge & Ho, 2003) perceived security, perceived privacy, perceived trust, usefulness, ease of use (Carlos Roca et al., 2009) injunctive norms, descriptive norms (Ramayah et al., 2009). However, the literature reveals a limited focus on reflecting the inhibitors (perceived risks) of online stock trading. There are fewer studies that examined perceived risk in the context of online stock trading adoption (Lee, 2009b; Tai & Ku, 2013). These studies used perceived risk as a single construct or with some specific dimensions. The current literature on technology acceptance divides risk into various dimensions, for example financial, time, physical, privacy, psychological, opportunity cost risks etc. (Featherman & Pavlou, 2003; Kassim & Ramayah, 2015; Martins, Oliveira, & Popovič, 2014). Such dimensions are still unexplored in the context of online stock adoption, especially in developing countries. In this regard, the perceived risk theory (PRT), i.e., the users' behavioral perception of risks, can be appropriately used to explain the acceptance process. In addition to PRT, this study uses the cultural theory of Geert Hofstede (1980) for evaluating the moderation effects of cultural dimensions on the usage behavior of online stock trading adoption.

Perceived risk dimensions are considered as key factors preventing customers' intentions regarding the adoption of information technology (Martins et al., 2014). Khedmatgozar and Shahnazi (2017) found that various risks are involved in online banking adoption, thereby, corporate clients in Iran prefer traditional banking method. Another study conducted Yang, Liu, Li, and Yu (2015) identified risk dimensions as main inhibitors of customers' mobile acceptance. Cultural dimensions have an influence on customers' adoption of IT. For example, Chen and Barnes (2007) reported that in contrast to Korea's online trade rate (54%), customers in Taiwan have lower trust on e-business, therefore, their online trade rate is only 20% (Lee, 2009b). The technology acceptance is profoundly dependent on users' cultural dimensions (Zhang, Weng, & Zhu, 2018). Using cultural theory, Baptista and Oliveira (2015) identified positive effects of the five cultural dimensions² on mobile banking usage behavior. Similarly, Khan, Hameed, and Khan (2017) found Individualism/Collectivism (I/C) and Uncertainty avoidance (UC) as significant moderators in online banking usage behavior. This study believes that the investors might be affected by their cultural values in the adoption of online stock trading.

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