

**Event Studies in Operations and Supply Chain Management:  
An Overview and Two Empirical Studies**

by

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**(Conducted in English)**

**Abstract:**

The first study is a comprehensive literature review of event studies in OSCM. Analyzing 29 event studies published in renowned OSCM journals between 1995 and 2017, we find that OSCM researchers generally follow the standard procedures in conducting event studies, but pay less attention to some methodological issues ranging from addressing the confounding events to expanding the event windows. Based on our analysis, we provide several recommendations for future event studies in OSCM, such as the opportunity for studying external events in the non-U.S. context, the caution of expanding the event windows, and the need to deal with the self-selection bias.

The second study is an empirical application of the event study method. It is well understood that a natural disaster such as earthquake will have a negative impact on firms located in the disaster area, but it is unclear whether the disaster will also affect the disaster-stricken firms' industry peers located in other areas, especially in other countries. While those industry peers might benefit from the disaster due to the competitive advantage gained over the disaster-stricken firms (competitive effect), it is also possible that those firms might suffer from the disaster due to their linkages to the disaster-stricken firms (contagion effect). Based on a natural experiment in which a series of earthquakes struck Kumamoto, Japan's Silicon Island, in April 2016, we conduct an event study and find that the earthquakes have a negative impact on the stock returns of the semiconductor manufacturers located in China, suggesting that the contagion effect outweighs the competitive effect. Moreover, the negative impact is more pronounced for firms with supply chain connections with Japanese firms, confirming the contagion effect via interfirm linkages. However, we also find a positive impact among Chinese firms with high inventory turnover and customer concentration, supporting our ability-motivation-opportunity (AMO) perspective which suggests that firms with the ability (high inventory turnover) and motivation (high customer concentration) to take advantage of the opportunity (earthquakes) and reap more benefits from the misfortune of their overseas competitors. Overall, our research reveals the dynamic effects of a natural disaster across national borders, providing important implications for global supply chain management and competition.

The third study aims to empirically examine the influence of 3D printing (3DP) adoption with the event study method. 3DP is an emerging innovative technology with great potential in revolutionizing almost all industries through efficient mass-customization. Despite the importance of 3DP, there exist few empirical studies of its socio-economic impact. We propose to conduct an event study to investigate the financial and social impact of 3DP adoption in firms. In addition, we further explore how firms' ability and motivation affect the influence of 3DP adoption from the AMO perspective.

**Bio:**

Li Ding is a Ph.D. candidate in the Department of Logistics and Maritime Studies, The Hong Kong Polytechnic University. Her research interest is empirical research in operations and supply chain management, currently using the event study method to investigate the effect of events such as natural disasters and technology innovations.

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**All are welcome!**