The unexpected supply shock on tobacco industry and smoking behaviors*

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Abstract

Many countries have already enforced various types of smoking control policies, and numerous studies find that they have certainly reduced the demand for cigarettes. However, since there are many political, economic, and international difficulties in controlling for cigarette supply, only a few studies analyze the impact of the cigarette supply change on smoking behavior. This study uses my original Internet survey for Japanese smokers to examine the effect of sudden supply disruption of domestic brand cigarettes for about four months caused by the Great East Japan Earthquake in March 2011, which destroyed the branches, business offices, and factories of the Japan Tobacco, Inc. in the East Japan. I find that the unexpected sudden supply shock little affects smoker's participation decision but significantly reduces cigarette consumption in holidays and daily nicotine intakes (smoking intensity). I also find that these smoking behaviors do not change after the supply recovery. In addition, smoking intensity in weekdays among moderate nicotine addicts continuously reduce after the supply recovery, while cigarette consumption in weekdays and daily smoking intensity among higher nicotine addicts reascend after the supply recovery. Furthermore, habitual cigarette consumption and smoking intensity especially decrease in the electricity supply areas of the Tokyo Electric Power Company, and there are no significant effects among those without smoking bans in the working place.

Keywords: Supply shock; smoking; cigarette consumption

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