# Complementarities between Drink Vending Machines and Food Vending Machines* 

Yun-Ting Yeh ${ }^{\dagger}$

January 2020

This paper looks into consumer behaviours at a place where one drink vending machine and one food vending machine are placed together to investigate whether such an allocation strategy helps achieving higher profits. I estimate the complementarities between drink vending machines and food vending machines using transaction data. I find that these two types of vending machines are substitutes, implying that placing a food vending machine next to a drink vending machine is likely to crowd out the demand for the drink vending machine. Furthermore, an increase in social welfare is estimated in a counterfactual experiment where the food vending machine is removed, implying that the gain from stopping cannibalization outweighs the loss in deduction in choices.

[^0]
[^0]:    *I would like to thank Jumpei Akiyama at CO-OP for giving me access to the sales data and permission to collect transaction data. I am also grateful to Faculty of Engineering at the University of Tokyo for approving my data collection at the building. I thank Professor Wakamori for all the valuable guidance and thank fellow students in the seminar for their advice.
    ${ }^{\dagger}$ Graduate School of Economics, University of Tokyo.

