

# Pollution Haven and Dirty Secret in a Dual Regulation Economy with an Environmental Tax Evasion\*

Yoshihiro Hamaguchi<sup>†</sup>

16 January 2018

## Abstract

We investigate the effect of environmental policies on polluting and bribing firms' location choices, foreign direct investment (FDI), pollution, and corruption in an R&D-based growth model with endogenous location choices. We consider a dual regulation between an emissions permit trading and an environmental tax with a tax evasion. In a symmetry efficiency tax rate, we find that rising an environmental tax rate brings together *pollution haven effect* and reduces welfare. In an asymmetry efficiency tax rate, decreasing trade cost via trade liberalization rebounds not only pollution but also corruption from North to South, which implies *dirty secret*.

*Keywords:* agglomeration; permit allocation rent; environmental tax evasion; corruption; pollution haven.

*JEL Classifications:* H26; Q56; R11.

---

\*The author is responsible for all of the errors in this article.

<sup>†</sup>Faculty of Management, Department of Management, Osaka Seikei University, 3-10-62, Aikawa, Higashiyodogawa, Osaka, TEL: +81-6-6829-2600, FAX: +81-6-6829-2597, 533-0007, Japan, E-mail address: hamaguchi-y@osaka-seikei.ac.jp, prestidigitateur@gmail.com