

<http://nubs.nju.cn/download.php?filepath=upload/jiaoxue/chanye/%B2%FA%D2%B5%BE%AD%BC%C3%D1%A7%CF%B5%CC%D6%C2%DB%B8%E5No.010%A3%BADOMESTIC%20INDUSTRIAL%20ENVIRONMENTAL%20COST%20AND%20STRATEGIC%20CHOICE%20IN%20DEVELOPING%20COUNTRIES%A1%BE%BB%C6%B5%C2%B4%BA%20%C1%F5%D6%BE%B1%EB%B5%C8%A1%BF.pdf>

<http://www.i-jibe.org/achive/2007fall/4-Huang%20Liu%20Thompson%20&%20Chen.pdf>

Domestic Industrial Environmental Cost and Strategic Choice in Developing Countries

By

Dechun Huang, Zhibiao Liu, Andrew F. Thompson, and Jie Chen

Journal of International Business and Economy (2007) 8(2): 49-67

讨论稿 No.010 Discussion Paper Series

南京大学经济学院产业经济学系

Industrial Economics Department, Nanjing University

Abstract

This paper examines competitive issues related to environmental policies like the European Union directives on Waste Electrical and Electronic Equipment and Restriction on Hazardous Substances implemented in 2006. In order to examine strategic environmental choice implications related to these directives, a vertical market model developed by Stephen F. Hamilton in analyzing competitive choice amongst domestic and foreign, downstream and upstream companies in the presence of environmental constraints was adopted. The main conclusion is that industrial and environmental policies in developing countries should be refocused so as to realize the integration of the environmental cost by internalizing the externalities.

Introduction

With the globalization and securitization of markets, the world's economy has accelerated its pace towards business development across countries and continents. The push to expand economic markets has encouraged aggressive exploration for new resources and the destruction of a great deal of the ecological environment. The developed countries have taken measures to restrict trade under the guise of protecting the environment. In pursuing these policies, some developed nations have restricted the competitive sale of standard, low cost products from developing countries in their markets aimed at protecting national industries and domestic goods. One such example, are two recent directives enacted and implemented by the European Union, through the European Parliament. The Waste Electrical and Electronic Equipment (WEEE) Directive, implemented on August 13, 2005, and the accompanying "Restriction on Hazardous Substances" (ROHS) enacted on July 1, 2006, seeks to impose regulations, costs and tax penalties on the manufacturing of electrical or electronic devices.* And also, the Energy Using Products (EUP) directive is about to be implemented. Developing countries with firms manufacturing products subject to environmental regulations face the question of what to

do in addressing the costs of complying with directives while increasing markets for regulated goods. In the face of these odds, what should developing countries do to expand markets for their manufactured goods while limiting the impact environmental directives may have on their competitiveness?

... Markusen (1985) was the first to propose the idea of the use of environmental policy as a trade strategy. In an international monopoly market, the best unilateral environmental trade policy appears to be an environmental tax that internalizes cost in the external domestic market. A more refined study (Kennedy 1994) extended the study of environmental trade policy to cross-border pollution. Nannerup (1998) examined asymmetric information differences between market participants impacted by environmental trade policy, while other researchers (Ulph 1996, Simpson and Bradford 1996, Carlsson 2000) looked at the marginal effect of investment, research and development in the area of environmental trade restrictions. During the period of these investigations, the European Union has sought to coordinate environmental and trade policies for firms operating in perfect and imperfect markets. **In an effort to protect EU industries, environmental standards and policies were coordinated to strategically promote firms located in EU countries.**†

† For a discussion of the controversy over the use of environmental regulations as a means of restricting market competition, see: “Foreign Trade Standards Often Ignore Science, U.S. Group Says, May 6, 2003,” at http://www.usembassy.it/file2003_05/alia/A3050605.htm (p.51)