

TRADE LIBERALIZATION AND ENVIRONMENTAL STANDARDS

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ABSTRACT

This paper examines trade liberalization and environment nexus both on the theoretical ground and using empirical evidence. The results of the study reveal that there is lack of empirical evidence to conclude that industrial or capital flight is caused mainly by the implementation of lower environmental standards in host countries. Furthermore, it can be argued that the idea to impose uniform environmental standards is unfair, particularly for developing countries.

Key words: trade liberalization, environmental standards, race to the bottom hypothesis, pollution havens

INTRODUCTION

Nowadays, environment is one of the valuable factors in conducting economic activities, including international trading. In the trade liberalization era, there is a dispute, either on a theoretical or an empirical level, about the impact of the free trade on the quality of the environment. The existence of free trade looks like two sides of a coin. On one hand, some economists and environmentalists support free trade because it generates income for a country. On the other hand, some others reject it due to it decreases the quality of the environment. As a consequence, the proposed implementation of uniform environmental standards to preserve environment for both developed and developing countries is still debatable.

CAUSES OF ENVIRONMENTAL PROBLEM

Lloyd (1992:53) recognizes at least two main archetypal environmental problems: upstream-downstream problem; and multiple dischargers and multiple reception areas for pollution. Environmental problems are, basically, caused by negative externalities which occur due to the divergence between private and social marginal cost. Asafu-Adjaye (2000:73) expounds that negative externality exists when an affected person who suffers a loss of utility is uncompensated. Peroni and Wigle (1998) point out two kinds of externalities, local and global externality. The former refers to pollutants whose emission effects are limited to the country where the pollutants are produced and emitted, such as solid waste, smoke, smog and sulfur oxide. The emission effects of pollutants which have world-wide effects, for instance greenhouse effects and ozone layer depletion are examples of global externality

TRADE AND ENVIRONMENT RELATIONSHIP: TWO CENTRAL SCHOOLS OF THOUGHTS

The debate about the role of free trade on environment inspired, to some extent, the emergence of two schools of thoughts: environmental optimists and environmental pessimists. Even, as reported by Anderson and Blackhurst (1992: 25),

some environmentalists view government interventions as necessary to prevent the degradation of the environment. However, both sides have fundamental arguments regarding the impact of free trade on the quality of the environment.

Chai (2000:3) elucidates that environmental pessimists see trade liberalization abating the environment quality because of the existence of the negative composition effect, the scale effects as well as *the race to the bottom hypothesis*, known as *pollution havens*'. According to Wilson (1996:393), *the race to the bottom hypothesis* stems from the fear that in an attempt to survive and gain sufficient investment governments will lower their environmental standards. In this regard, Salvatore (1995:175) believed that lower environmental standards will create a problem for international trade because the lower standards can be used as a tool for attracting polluting firms from overseas and achieving a comparative advantage in 'polluting goods and services'.

In contrast, environmental optimists think that trade liberalization will improve the quality of the environment through positive composition effect and technical effect. Cole et. al (1998:337) point out that the composition effect that refers the fact that trade liberalization will change the composition of industry to be more specialized and will thus enjoy a comparative advantage. Moreover, the technical effect will cause a country to be a greater access to resource efficient production methods. In addition, individuals will demand a cleaner environment as their incomes aggrandize.

DETERMINANT FACTORS OF ENVIRONMENTAL STANDARD FOR A COUNTRY

A country needs to care about not only national income through international trading, but also at the same time needs to improve its environment quality. Therefore, introduction of the environmental standards is a must to protect its environment from damaging affects of various economic activities. According to Salvatore (1995:175), environmental standard refers to the level of pollution which comprises of air, water, thermal pollution, and pollution resulting from garbage disposal permitted by a country. In this regard, Sieberts (1996:183) argues that the environmental policy, involving environmental standards, will determine the optimal quality of public good and establish property rights. This policy will also help in deciding prices, explicit or implicit, for utilizing the environment as a wastebasket.

By referring to GATT, Sieberts (1996: 187) points out that the rule of WTO permits a nation to adopt a variety of environment policies, encompassing emission taxes, permit system as well as schemes for recyclable waste as long as this policy does not discriminate between domestic and foreign products. In other words, a country does not allow to implement tighter environmental standards for domestic than export products. In this respect, it is better to bear in mind what Salvatore (1995:175) worried about using lower environmental standard as resource endowment to attract foreign investment.

Several important factors have to be taken into account in deciding environmental standards. Learning from China's experiences, Chai (2000:12) claims that one of important points in instituting environmental standards is public awareness of the need to implement the best practices in environmental control technology. Meanwhile, Anderson (1992: 436) proposes some main factors to be considered when discussing environmental standards: priorities of a country, resource endowments and income of the people. Besides, he expounds role of the

knowledge in determining environmental policy. This is because knowledge affects ways of thinking of the people in terms how to understand the impact of a certain activity and policy on the environment.

Levinson (1992:436) suggests some critical factors in designing standards: income level of the people; the perception of the citizens in appraising their environment; administrative capability to monitor and enforce the environmental standard regulations, including costs of undertaking the environmental standards. Siebert (1996:188) reminds that a country should understand clearly a dividing line between trade and an environmental policy. As a consequence, trade policy instruments should not be used as a tool for protecting the environment and conversely an environmental policy should not be included in a trade policy.

THE NOTION OF IMPOSING UNIFORM ENVIRONMENTAL STANDARDS ON INDIVIDUAL NATIONS

From the theoretical point of view, it can be proved that the idea of establishing uniform environmental standards is unjust. The following graph supports this statement.

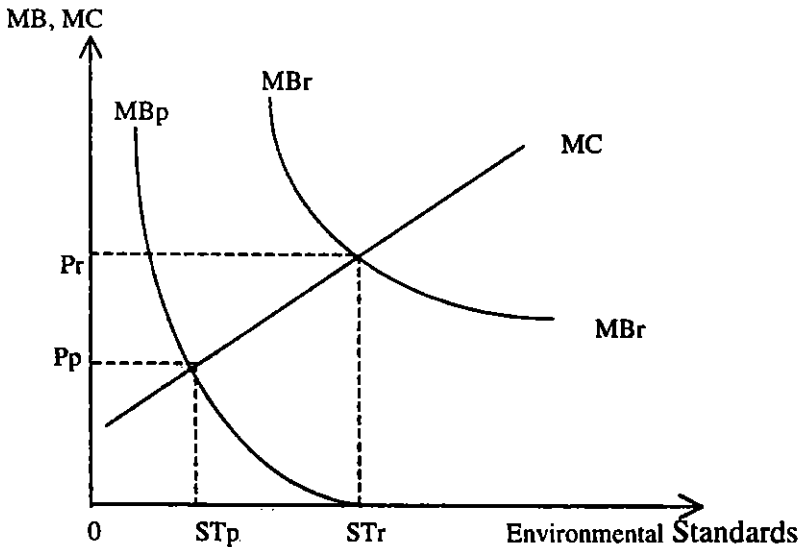


Figure 1. Determining Environmental Standards

Note:

- MB = Marginal Benefit
- MBr = MB curve for rich countries
- MBp = MB curve for poor countries
- MC = Marginal Cost
- STr = Environmental standard for rich countries
- STp = Environmental standard for poor countries
- Pr = MB for rich countries
- Pp = MB for poor countries

The values of MB and MC depend upon the perception of the value of environment by the people in a given country. As a result, different people or countries differ in this MB and, hence, different environmental standard should apply. In this regard, MB for rich countries is higher than MB for poor countries due to different appreciation of the quality of environmental standards they need. Therefore, if we want to enforce uniform environmental standards according to the rich countries perception causes poor countries which have lower environmental standards will suffer. From Figure 1, it can be seen that rich countries will enjoy higher marginal benefit (MB as Pr), and poor countries will enjoy zero marginal benefit (MBp). Therefore, it will be unjust to apply uniform environmental standards.

In an attempt to convince the international public, particularly eco-imperialism, Siebert (1996:185) identified several reasons for supporting a country advocating the need to implement different environmental standards in different countries. First reasons is the difference in environmental capacity to assimilate pollutants among the countries. Second, in different region there may still exist different preferences regarding environmental quality. Third, even if preferences are similar, the incomes may differ. As a result, based on these three central reasons, striving for applying an uniform environmental policy or standards will result in an inefficient allocation of resources. In addition, it will engender reducing gain from trade liberalization.

Salvatore (1995:175) also refuses firmly the idea of uniform environmental standards. He suggests that policy for implementing strong uniform international environmental standards and strong anti-pollution regulations are not justified during the early stages of development, especially in developing countries. It is not efficient to adopt these policies, he argues, due to the fact that different nations have different social priorities and environmental objectives. Furthermore, he believes that as nations grow richer, they will voluntarily adopt more 'environmentally-friendly' policies for economic development. Supporting Salvatore, Anderson (1996:438) expounds that as income per capita in a country increases, the country will adopt a better policy of property rights as well as application of costly domestic pollution abatement policies. Moreover, he explains that the quality of abatement policy, to a certain extent, has a positive correlation with per capita income, population density and the degree of urbanization.

In line with the *race to the bottom hypothesis*, it is important to note that what Cropper and Oates (1992: 695) had to say. They argue that although there was the lack of empirical evidence of *the race to the bottom phenomenon*, this does not negate the possibility that the government, fearing such effects, could decrease standards for environmental quality. Responding Cropper and Oates statement, Levinson (1992) confirms that there is no sufficient evidence to support this hypothesis.

Chai (2000:6) affirms that the cost of prohibition of the degradation of environment due to pollution is only a very small proportion of the total cost of industry. He adds that cost of preventing pollution is only a small proportion of the total cost compared to cost of labor. His argument is supported by the fact that, as reported by Levinson (1996:434) 83 % of the US firms which relocated their industries to Mexico during 1988-1990 did it because of consideration of the cost labor, while 17 % of them considered pollutant control cost as a main reason.

Knogden (1979 in Levinson, 1996:434, 451) surveyed West German companies' investment motives since the Government enforced strict environmental laws in the early 1970s. The findings show that the lower environmental standards was not the most important factor in determining the location of investment for the vast majority of firms. She found that 90% of these firms practiced the same environmental standards in host countries as they did in West Germany.

Chai (2000) concludes in his study that free trade liberalization does not encourage China to specialize in 'dirty industries'. Free trade encourages China to transform its industry based on comparative advantage from 'dirty industries' to labor intensive cleaner industries. Besides, it helps China to adopt best international methods in pollutant control.

One of the survey conducted by the UN Conference on Trade and Development Program on Transnational Corporation, as reported by Levinson (1996:435), concludes that most of transnational corporations implement environmental standard regulations of their home country rather than their regulation of host-country. This survey proves also that no evidence exist to say that environmental regulations cause industrial flight or reallocation of industries to the countries which have lower environmental standards.

CONCLUDING REMARKS

Empirically speaking reallocation of industries or capital mobility does not happen because of lower environmental standards in host-countries or *race to the bottom hypothesis*. Most of industries apply the same environmental standards as they did in home countries.

Several important factors should be taken into account when establishing environmental standards, such as income of the country, priorities of a country, knowledge, public perception of and awareness about desired quality of the environment, resource endowments, as well as administrative capability to monitor and enforce the implementation of the policy.

Due to the diversity among countries, the notion to apply uniform environmental standards is unfair, particularly for developing countries. Furthermore, if this policy will be implemented, there will be an inefficiency in allocation of resources.

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