Welfare-Enhancing Import Subsidies

John Dutton*
North Carolina State University

Abstract

The concept of "comparative preference" is developed. It is shown using this concept in a model analogous to that of Itoh and Kiyono that a subsidy on imports of a good may be beneficial to the importing country. Two sets of models are developed to demonstrate when and why import subsidies may be welfare-enhancing to the importer. One set includes three goods and two countries and the other includes two goods and three countries. For each set, propositions are illustrated for a simple model with specific functional forms using the phenomenon of comparative preference. Propositions are also presented in more detail with general models. The roles of key parameters are explained and optimal subsidy expressions are derived. Relationships with alternative tariff policies are explained.

I. Introduction

In a recent paper, Itoh and Kiyono used a trade model with three goods and Ricardian production to demonstrate that the home country may exer-

* Department of Business Management, Box 7229, North Carolina State University, Raleigh, North Carolina 27695-7229, U.S.A.; Many thanks are due to John Beghin, Marilyn Dutton, and Tom Grennes for helpful comments. They are of course not responsible for any remaining errors.

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ercise monopsony power by applying an export subsidy to one of the goods. If goods are ranked by degree of comparative advantage, then it may be optimal to subsidize export of the middle, or marginal, good. The present paper uses a three-good model analogous to theirs to demonstrate the possible optimality of an import subsidy on the marginal good. In the spirit of Jones [1961], it also extends the analysis to the case of two goods but three countries. There the home country may benefit from targeting subsidies on imports from one of the other two countries. Both models of the paper incorporate what might be called Ricardian preferences, i.e., preferences with perfect substitutability between goods. The concept of comparative preference (rather than comparative advantage) is developed and used to rank goods for import and export.

Itoh and Kiyono are far from alone in indicating the possible optimality of export subsidies. A recent set of papers which use a model with perfect competition include Abbott, Paarlberg, and Sharples; Feenstra; and Dutton. In addition, papers which use models with imperfect competition to justify export subsidies include Brander and Spencer [1985] and Tower.

The idea of welfare-enhancing import subsidies has also appeared from time to time in the literature. Several papers present analysis of beneficial import subsidies in the presence of imperfect competition. Corden, Brander and Spencer [1984], and Jones [1987] provide cases when there is domestic monopoly in the import-competing industry, and Katrak provides a case in the presence of foreign monopoly of a domestic import. Tower provides a case of bilateral monopoly in which an import subsidy may be beneficial.

There are also papers on subsidies in the case of perfect competition. Graaf, in an early work, discusses the possibilities in a general way. Kemp presents a more formal analysis, with an indication of several situations in which a subsidy might be an optimal policy. One case occurs when a subsidy is a local (rather than a global) optimum. Another occurs in the presence of an international transfer. Gruen and Corden provide an example of supply cross effects which might lead to negative terms of trade effects of a tariff (and implicitly positive effects of a subsidy). Horwell and Pearce supply a formal analysis of optimal tariff policy in an n-good model. They indicate that in a model with n goods, the vector of optimal trade taxes or subsidies is indeterminate without a normalization (the usual normalization is to