

# Inefficient trade patterns: Excessive trade, cross-hauling and dumping<sup>☆</sup>

Benjamin Eden<sup>\*</sup>

*Vanderbilt University and The University of Haifa, United States*

Received 3 January 2006; received in revised form 9 May 2006; accepted 25 November 2006

---

## Abstract

I study an example of a competitive environment in which trade occurs in a sequential manner. In this example, a country with a stable demand may suffer from trade with a country with unstable demand, there may be too much trade, a country may import and export the same good in the same period (cross-hauling) and dumping may occur. The timing of delivery is important. When delivery occurs before trade (delivery to stocks), trade improves welfare, there is dumping but no cross-hauling. When delivery occurs after trade (delivery to order), trade may reduce welfare and cross-hauling may occur.

© 2007 Elsevier B.V. All rights reserved.

*Keywords:* Demand uncertainty; Sequential trade; Cross-hauling; Dumping; Excessive trade

*JEL classification:* F10; L10

---

## 1. Introduction

Uncertainty about demand and supply conditions is an important feature of the environment. Yet the standard formulation of a competitive environment does not offer an explicit description of the resolution of uncertainty about market conditions. Instead we have a Walrasian auctioneer who resolves the uncertainty about supply and demand and announces the market clearing price before the beginning of actual trade.

Monopolistic competition of the type pioneered by Dixit and Stiglitz (1977) is one possible remedy to this well-known problem. It has been widely used in the new Keynesian economics

---

<sup>☆</sup> I would like to thank Rick Bond and Bob Driskill for the very useful comments and discussions.

<sup>\*</sup> Mailing address. Economics, VU station B #351819, 2301 Vanderbilt Place, Nashville, TN 37235-1819, United States.  
*E-mail address:* [ben.eden@vanderbilt.edu](mailto:ben.eden@vanderbilt.edu).

literature and in the international trade literature (see for example, Helpman and Krugman, 1985; Obstfeld and Rogoff, 1996; Woodford, 2003).

But for many problems the price-taking assumption is a useful abstraction. I therefore investigate here the Prescott (1975) “hotels” model, studied by, among others, Bryant (1980), Rotemberg and Summers (1990), Deneckere, Marvel and Peck (1996), Dana (1998, 1999) and Deneckere and Peck (2005). Here I use the flexible price version in Eden (1990, 2005) and Lucas and Woodford (1993). This version offers an explicit description of the resolution of uncertainty about market conditions and at the same time abstracts from monopoly power and strategic behavior.

In the Prescott (1975) model a lower price promises a higher probability of making a sale and sellers are indifferent among all prices in the support of the equilibrium distribution. As a result the model determines the equilibrium price distribution but is silent about individual sellers’ prices.

Here I assume increasing marginal cost and take explicit account of transportation costs. This allows for sharp predictions about individual sellers’ price offers and trade patterns. I focus on the issues of gains from international trade, dumping and cross-hauling. In the example analyzed, a stable demand country suffers from trade with an unstable demand country, there may be too much trade, a country may export and import the same good in the same period (cross-hauling) and a country may export at a price that is lower than the price it charges at home (dumping).

The timing of delivery is important. When delivery occurs ex-ante before the arrival of buyers (delivery to stocks as in food items delivered to supermarkets) trade improves welfare, there is dumping but no cross-hauling. When delivery occurs ex-post (delivery to order as in Internet trading), trade may reduce welfare, cross-hauling may occur but dumping does not occur.

In the delivery to stocks case, goods must be on display before the beginning of trade. Since the probability of making a sale is higher in the stable demand country, the price in the stable demand country is lower than the price in the unstable demand country and exporters from the unstable demand country may be accused of dumping.

In the delivery to order case, buyers are treated symmetrically. In the high demand state some buyers from each country arrive early and buy at a cheap price and some arrive late and buy at a higher price. When sellers in the home country supply at the cheap price there will therefore be some export at the low price and some import at the high price (cross-hauling). Trade may reduce welfare in the stable demand country because in the high demand state buyers from the stable demand country may not be able to buy at the cheap price. In general, increasing the uncertainty about demand is “bad” because it leads to more price dispersion and lower average capacity utilization. A country with a relatively stable demand may therefore suffer from trade if as a result of trade there is more demand uncertainty.

The model has elements in common with Newbery and Stiglitz (1984). In both models trade in a single good arises as a result of uncertainty about demand (or supply) and markets are incomplete. But there are important differences. In Newbery and Stiglitz there is a single market clearing price in each period and capacity is always fully utilized. In their model fluctuations in prices provide insurance to farmers against bad crops and are therefore “good” from the social point of view. Trade in their model may reduce welfare because it smooths prices. In our model price dispersion is “bad” from the social point of view and trade may reduce welfare if it increases the dispersion in prices.

The model is also related to the modern theory of cyclical dumping initiated by Ethier (1982). As in the peak-load-pricing model of Williamson (1966), the competitive price in Ethier’s model is equal to the short run marginal cost when demand is low and capacity is not fully utilized. Ethier demonstrates that firms with high fixed cost due to labor contracts that promise secure employment may sell below average cost in downturns. In his model there is a single price that clears the international market (for steel in his example) and therefore the accusation of dumping will not be supported if the same period home price is used to define the “fair price”. In our model a seller may export at a lower price than the

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات