

Trade and the location of industries: Some new results [☆]

Didier Laussel ^a, Thierry Paul ^{b,*}

^a GREQAM-IDEF, Université de la Méditerranée, Château Lafarge, Route des Milles, 13290 Les Milles, France

^b GREQAM-IDEF, Université de la Méditerranée, Centre de la Vieille Charité, 2 rue de la Charité,
13002 Marseille, France

Received 10 July 2002; received in revised form 14 November 2005; accepted 6 June 2006

Abstract

We study a two-country two-sector model with free entry and monopolistic competition where both industries use labour to produce differentiated goods. The two countries are identical except for size. Labour is freely mobile across industries but it cannot move internationally. Transport costs affect both industries. The location of industries and the pattern of trade are the results of the interaction of two effects: the home market effect and the wage differential effect. The main results are: (i) if the two countries are sufficiently close in size and demand elasticities differ across industries (transport costs being equal), a continuous fall in transport costs from a prohibitive level to zero is associated with a reversal in the pattern of trade at some intermediate level. For large transport costs, the large country is a net exporter of the more differentiated good. For lower transport costs, the large country becomes a net exporter of the less differentiated good; (ii) if the two countries are very different in size and demand elasticities differ across industries (transport costs being equal), the larger country is *always* a net exporter of the less differentiated good.

© 2006 Elsevier B.V. All rights reserved.

Keywords: Country size; Differentiated goods; Transport costs; Net inter-industry trade; Pattern of trade

JEL classification: F12; F15; F17

1. Introduction

As nations move toward closer economic integration in recent decades, the role of country size on trade and the location of industries has become an important concern. The ongoing WTO

[☆] We are specially grateful to Michael Gasiorek for extensive and insightful comments on several versions of this paper. We also thank the Editor for his extremely valuable suggestions, Jacques Thisse as well as two anonymous referees.

* Corresponding author.

E-mail addresses: laussel@univ-aix.fr (D. Laussel), tpaul@univ-aix.fr (T. Paul).

negotiations stipulate in their principles that the process of liberalization shall take place “... with due respect for... the size of economies of individual members”¹. An oft-cited example is Canada where many people worry about whether the much larger economy of the United States could de-industrialize their country through growth in trade and investment. Like Canadians, Europeans from small European countries may think that increased economic integration, through the enlargement of the European Union, could result in a move of their national industries toward larger markets. Whether or not these fears are founded still remains a lively debate. In this paper, we address this issue by re-examining the role of country size on trade and the pattern of trade.

The effects of country size differences have been a focus of attention for many years in the “new trade literature” (e.g. Ethier, 1979; Markusen, 1981; Markusen and Melvin, 1981; Krugman, 1980; Helpman and Krugman, 1985) and in the “new economic geography” (e.g. Krugman, 1991; Krugman and Venables, 1995). The most famous result in this area is the so-called “home market effect” (e.g. Helpman and Krugman, 1985): in which differentiated goods produced under increasing returns to scale incur transport costs, firms producing these goods tend to concentrate in the larger market in order to save on transport costs.

Some subsequent articles have tried to assess the robustness of the home market effect and to characterize the influence of this effect on the pattern of trade by using alternative assumptions. For instance, Davis (1998) investigates whether the assumption of zero transport costs for the homogenous good matters for the existence of the home market effect. He shows that the introduction of transport costs for both types of goods in the simple Helpman–Krugman model gives rise to a higher wage in the larger country and may lead to the absence of trade. Another notable contribution is Holmes and Stevens (2005). Holmes and Stevens (2005) depart from the standard Dixit–Stiglitz framework in order to allow for variations in the degree of scale economies across industries. They find that the large country exports the goods with high scale economies and imports the goods with medium scale economies².

The ambition of this paper is to contribute to this literature by analyzing the determinants of the comparative advantages generated by market sizes. More specifically, we would like to answer the following questions: how does a difference in size between two countries affect the equilibrium wages of these countries? What is the impact of transport costs on the wages? Which country will export the more differentiated good? How does this depend on the relative size of the large country? Is complete specialization possible with equal positive transport costs?

Some of these issues are addressed in Amiti (1998). Amiti studies the relationship between country size and the characteristics of the industries such as factor intensities, transport costs and demand elasticities. The author uses a general equilibrium model with two countries, two imperfectly competitive industries and two factors of production. There is capital mobility across countries. The two countries are identical except for size. Transport costs affect both industries. A principal result is that close to free trade and autarky, the large country is a net exporter of ‘high’ elasticity goods, while the small country exports the ‘low’ elasticity goods.

¹ See WTO Guidelines and procedures for the negotiations on trade in services (adopted by the Special Session of the Council for Trade in Services on 28 March 2001).

² The home market effect has also received attention in the empirical literature (e.g. Hanson and Xiang, 2002; Head and Ries, 2002; Head et al., 2002; Davis and Weinstein, 2003).

Download English Version:

<https://daneshyari.com/en/article/962828>

Download Persian Version:

<https://daneshyari.com/article/962828>

[Daneshyari.com](https://daneshyari.com)