



ELSEVIER

Journal of International Economics 64 (2004) 29–63

Journal of
INTERNATIONAL
ECONOMICS

www.elsevier.com/locate/econbase

Economic determinants of free trade agreements

Scott L. Baier^{a,b}, Jeffrey H. Bergstrand^{c,*}

^aJohn E. Walker Department of Economics, Clemson University, Clemson, SC 29634, USA

^bResearch Department, Federal Reserve Bank of Atlanta, Atlanta, GA 30309, USA

^cDepartment of Finance and Business Economics, Mendoza College of Business,
Kellogg Institute for International Studies, University of Notre Dame, Notre Dame, IN 46556, USA

Received 29 June 2001; received in revised form 27 June 2002; accepted 4 December 2002

Abstract

The purpose of this study is to provide the first systematic empirical analysis of the economic determinants of the formation of free trade agreements (FTAs) and of the likelihood of FTAs between pairs of countries using a qualitative choice model. We develop this econometric model based upon a general equilibrium model of world trade with two factors of production, two monopolistically-competitive product markets, and explicit intercontinental and intracontinental transportation costs among multiple countries on multiple continents. The empirical model correctly predicts, based solely upon economic characteristics, 85% of the 286 FTAs existing in 1996 among 1431 pairs of countries and 97% of the remaining 1145 pairs with no FTAs.

© 2003 Elsevier B.V. All rights reserved.

Keywords: Free trade agreements; International trade; Qualitative choice models

JEL classification: F11; F12; F15

1. Introduction

Free trade areas may well be an endogenous variable—that is, a response to, rather than a source of, large trade flows. . . Presumably, (governments) are more likely to form free trade areas, (if) the benefits outweigh the costs. (Lawrence, 1998, p. 59)

Ever since Viner (1950), international economists have debated whether or not free trade agreements (FTAs)—on net—enhance or reduce economic agents' welfare. While

* Corresponding author. Tel.: +1-574-631-6761; fax: +1-574-631-5255.

E-mail address: bergstrand.1@nd.edu (J.H. Bergstrand).

most of the literature has focused on theoretical welfare gains or losses from FTAs for member (and nonmember) countries, there is no study in the literature that has tried to explain—or predict—FTAs between pairs of countries. As the quote above notes, FTAs may well be an endogenous variable. Lawrence's remark should come as no surprise to trade economists as there is a large literature in international economics on endogenous trade policy. While a large literature exists explaining empirically tariff and nontariff barriers cross-sectionally, no study has analyzed econometrically cross-sectional determinants of FTAs—much less one based upon a formal economic model.

The goal of this paper is to determine key economic factors influencing the likelihood of pairs of countries forming an FTA in a given year, based upon a qualitative choice methodology. We hope to provide an empirical benchmark for the determinants of FTAs, upon which strategic and political factors can be embedded subsequently. Qualitative choice models were designed to provide economists with the ability to evaluate decision behavior when choices are discrete (e.g. voting 'yes' or 'no') and characteristics of the population are unobservable (e.g. utility gain or loss from a policy decision). The decision to form an FTA is essentially a binary choice by a pair of countries' governments since, according to the GATT's Article XXIV, only complete (no partial) FTAs can be formed between a pair of countries. Qualitative choice models provide a framework to estimate the probability that a pair of governments are making a decision as if maximizing their respective agents' utilities.

What economic factors should influence the likelihood of an FTA? In his seminal survey of the theory of customs unions, [Lipsey \(1960\)](#) stated: "If one wishes to predict the welfare effects of a customs union it is necessary to predict the relative strengths of the forces causing trade creation and trade diversion (p. 498)". For the impatient reader, we find that trade-creating and trade-diverting economic characteristics matter considerably in explaining the probability of an FTA. Pairs of countries with FTAs tend to have the particular economic characteristics that the theory suggests should enhance the two countries' net trade creation and welfare (though possibly reducing nonmembers' net welfare). We find strong evidence that pairs of countries' governments tend to form FTAs: (i) the closer are two countries in distance; (ii) the more remote a pair of continental trading partners is from the rest of the world (ROW); (iii) the larger and more similar in economic size are two trading partners; (iv) the greater the difference of capital–labor ratios between two partners; and (v) the smaller the difference of the members' capital–labor ratios with respect to the ROW's capital–labor ratio. In the case of our framework, these 'pure economic' characteristics can predict accurately 85% of the 286 FTAs existing among 1431 country pairs in 1996 for which data were available and 97% of the remaining 1145 country pairs with no FTAs.

The remainder of the paper is as follows. Section 2 motivates the analysis. Section 3 presents the theoretical model. Section 4 discusses the econometric methodology and data requirements. Section 5 discusses simulations demonstrating theoretical relationships between the utility changes from an FTA and intercontinental and intracontinental transport costs, countries' real GDPs, and relative factor endowments, and presents empirical results on 'testable' hypotheses. Section 6 presents an evaluation of the robustness of the empirical results. Section 7 presents estimates of quantitative effects

متن کامل مقاله

دریافت فوری ←

ISIArticles

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