

The border effect in small open economies

Julius Horváth^{*}, Attila Rátfai, Botond Döme

Department of Economics, Central European University, Nador utca 9, 1051 Budapest, Hungary

Received 27 November 2006; received in revised form 27 May 2007; accepted 26 July 2007

Abstract

This paper examines the importance of the national border in relative price variability in two neighboring, small open economies. Using monthly frequency price data of narrowly defined, homogenous consumer products, it finds that the time-series variation in within-country relative prices is about the same in the two countries. After controlling for distance, relative price variation is significantly higher across than within countries. The border is the dominant determinant of relative prices, even after accounting for nominal exchange rate variability and local culture as represented by language spoken. Our estimates of the border effect are largely immune to the bias identified in Gorodnichenko and Tesar [Gorodnichenko, Y., Tesar, L., 2006. Border effect or country effect? Seattle is 110 miles from Vancouver after all. Unpublished manuscript].

© 2007 Elsevier B.V. All rights reserved.

JEL classification: R320; F140

Keywords: Border effect; Pricing analysis

1. Introduction

A key issue in international macroeconomics is the response of relative prices and quantities to fluctuations in exchange rates. As a starting point in many New Open Economy Macroeconomics models, prices are fixed in the producer currency, generating Producer Currency Pricing, so that changes in the nominal exchange rate get fully passed through to local prices inducing relative price adjustment, which in turn turns on the ‘expenditure switching’ effect, making monetary policy effective under floating exchange rates. In this world, international markets are integrated, and the Law of One Price (LOOP) holds even across locations in different countries.

^{*} Corresponding author. Tel.: +36 1 327 3248; fax: +36 1 327 3243.

E-mail address: horvathj@ceu.hu (J. Horváth).

At the same time, while one observes a general decrease in explicit barriers – for most part quantifiable, such as tariffs, quotas, transportation costs and other physical obstacles to travel – to international trade in recent decades, the fact that international markets are more segmented than intra-national ones seems to prevail. In a seminal paper Engel and Rogers (1996) provide evidence not only on the presence of significant market segmentation as reflected in persistent cross-country price differentials of goods belonging to one product category in the US and Canada, with the volatility of price differences depending on geographical distance, but also on the national border serving as an independent source of segmentation. The findings imply that the LOOP fails both within and across countries, but more strongly so in the latter dimension.¹ What is particularly striking in the results of Engel and Rogers, echoed in subsequent work by Parsley and Wei (2001) and Beck and Weber (2003), is the magnitude of the ‘border effect’ in relative price differentials, the latter concept defined as the extra variability in relative prices not explained by distance *per se*. In particular, Engel and Rogers show that crossing the border between the US and Canada, countries with only minor differences in language and culture, is equivalent to traveling a distance of about 75,000 miles.

The purpose of this paper is to quantitatively evaluate the importance of the national border in price setting in two neighboring, small but similar sized economies in Eastern Europe, Hungary and Slovakia.² We focus on time-series properties of the deviations from the LOOP. After describing unconditional volatilities of good-level price differentials in the two countries, we estimate the extent to which barriers to international trade are important in explaining the relative volatility of cross-country price differentials.³ We also explore some key reasons potentially explaining the size of the border effect.

The contributions of the paper are two-fold. First, it investigates the impact of national borders on international price differentials in a novel and unique sample of microeconomic prices. The sample draws on data of actual, monthly frequency transaction prices of 20 very narrowly defined goods and services, observed in a total of 56 locations in two small, neighboring countries over a period of 56 months. Relative to other similar studies seeking to provide evidence of the border effect in microeconomic prices, such as Crucini et al. (2005), Engel and Rogers (1996) and Parsley and Wei (2001), our data is specific in many ways, exhibiting both benefits and drawbacks for the purposes of the investigation. Crucini et al. (2005) study price differentials in a large, balanced, annual frequency panel of prices of 220 goods and 84 services, observed in 122 cities around the globe over an 11-year period. Engel and Rogers (1996) use a monthly and bi-monthly sample of price indices of 14 tradable and non-tradable product categories observed in 23 cities in Canada and the United States between June 1978 and December 1994. Parsley and Wei (2001) study quarterly frequency price observations of 27 tradable products in a total of 96

¹ See also Engel and Rogers (2000) and Gorodnichenko and Tesar (2006).

² The two countries share a border of 680 km.

³ In 1994, both Hungary and Slovakia joined the Central European Free Trade Agreement (CEFTA) directed at a gradual elimination of tariffs and quotas among member countries. In CEFTA, trade in agricultural products was divided into three groups, based on their sensitivity to competition. In the first group (e.g. livestock, flowers, citrus fruits, wheat, vegetable, pastries), no duty was levied on trade within CEFTA. In the second group (e.g. beef, pork, milk, cabbage, lettuce, melons), goods sold on moderately competitive markets were included, with some reduced customs duties. In the third group (e.g. fresh eggs, poultry, cheese, onions, apples, sunflower oil, sugar, chocolate, bread), products particularly exposed to competition were included, on which custom duties and import quotas could be levied through bilateral negotiations; these were in some cases quite large (see Rytko, 2002). Upon these countries joining the European Union (EU), CEFTA regulations were gradually phased out and replaced by EU ones.

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