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Capital flows and real exchange rate fluctuations following Spain's entry into the European Community

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Abstract

Spain's 1986 entry into the European Community was followed by a dismantling of restrictions on international capital flows. Initial trade deficits and real exchange rate appreciation were followed by trade surpluses and real exchange rate depreciation. This paper analyzes Spain's financial liberalization using a dynamic general equilibrium model with a traded and nontraded good where a capital poor country opens itself to its capital rich neighbors. A carefully calibrated model has trouble accounting for the large changes in relative prices observed given the small changes in quantities. Variants of the model with frictions in factor mobility between sectors fare better.

Keywords: Spain; International factor movements; Nontraded goods; Real exchange rate; Adjustment costs

JEL classification: C68; F41

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1. Introduction

On 1 January 1986 Spain entered what was then the European Community and began to dismantle its restrictions on international capital flows. Before 1986 the Spanish government had placed few restrictions on foreign investment, but there were severe restrictions on the repatriation of earnings out of Spain. In addition, there were restrictions on the operations of foreign financial intermediaries that had to be dismantled, at least in the case of financial intermediaries from other EC countries, over a 7 year period, starting in 1986.

Following Spain's entry into the European Community, its economy experienced a consumption boom and an investment boom that lasted until 1992. There were trade deficits that reached a peak of over 3 percent of GDP in 1989–1991. Furthermore, the Spanish peseta appreciated substantially in real terms against the currencies of Spain's major European trading partners. The peseta/deutsche mark real exchange rate, for example, appreciated almost 30 percent by 1991. Starting in 1992, however, the process reversed itself: investment and the trade deficit fell sharply. The real exchange rate depreciated.

This paper investigates the extent to which these events can be explained as the equilibrium outcomes of a dynamic general equilibrium model where a relatively capital poor country opens itself to its relatively capital rich neighbors. The key ingredient that links capital flows to real exchange rate fluctuations is the need for nontraded goods both in consumption and in investment.

The model used in this paper is fairly standard in the literature: Turnovsky (1997) presents a number of variants of this sort of model, which he calls the dependent economy model, and provides a wealth of references. Engel and Kletzer (1989) point out that a dynamic general equilibrium model would predict trade deficits followed by trade surpluses after financial liberalization in a relatively capital poor country. Mendoza and Uribe (1996), Rebelo (1993), and Rebelo and Vegh (1995) apply this sort of model to the analysis of different exchange rate policies.

The paper takes the model, calibrates it carefully to data from the Spanish economy, and asks whether the model is able to produce results that are not wildly inconsistent with the Spanish experience. The Spanish experience is interesting because of its similarities to the experiences of other countries that have undergone financial liberalizations, like Argentina, Brazil, Chile, Mexico, and Portugal. Unlike these other countries, however, whose experiences have been studied by researchers like Rebelo (1993) and Rebelo and Vegh (1995), Spain provides a fresh dataset to be studied. Although the model used in the paper is fairly standard, its application to explaining the Spanish experience is somewhat radical. More conventional explanations, such as that of Ayuso and Escriva (1998), focus on monetary policy and nominal exchange rate policy. These sorts of nominal factors are ignored in this paper.

In Section 2, we look at the data to estimate the total size of capital flows that