The Impact of Trade Openness on the Real Exchange Rate and Trade Balance*

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In our paper, we demonstrate that positive country-specific output and money supply shocks depreciate the real exchange rate and improve trade balance when the preferences across countries are home-biased (that is, when the degree of trade openness is low) and relative risk aversion of CRRA utility is greater than the elasticity of substitution across countries (that is assumed 1 in our model) in the NOEM model of inter-temporal CRRA utility optimization. In this setting, we also show that the increase in trade openness reduces the extent of real depreciation and the magnitude of trade surplus. Moreover, we tested aforementioned hypotheses empirically.
on the quarterly data of 19 OECD countries from 1973:Q1 through 2010:Q1 employing panel estimation by seemingly unrelated regression. In the benchmark regression, results for trade balance turned out satisfactory, whereas those for the real exchange rate are not. In the sub-period from 2000:Q1 through 2010:Q1, all the coefficients are in the anticipated direction and statistically significant at 10% significance level. Under floating regimes, all the coefficients except those on output expansion and its interaction term are in the anticipated direction and statistically significant at 10% significance level.

Key words: Trade Openness, Real Exchange Rates, Trade Balance

I. Introduction

In static open economy Macroeconomics, current account (equivalently, trade balance) is defined as savings minus investment from national income accounting identity and national savings definition. In the sense that current account equals savings minus investment, current account is also called the net foreign asset position.1) Since the mid 2000’s, however, this approach has been questioned as follows: “Is the current account an accurate measure of the change in the net foreign asset position?”2) A number of papers have addressed this issue, developing a new literature, namely, ‘valuation effects of external adjustment.’3) In these studies, changes in an economy’s net foreign asset position must be adjusted through separate valuation effects on gross assets and liabilities by incorporating changes in asset prices, returns and exchange rates. Current account that ignores these effects would be an inaccurate measure of the movement of an economy’s net external wealth. In our paper, rather than relating current account and the net foreign asset

1) See Chapter 12, Krugman and Obstfeld (2009).
2) See Devereux and Sutherland (2010).
3) Lane and Milesi-Ferretti (2003, 2008), Pavlova and Rigobon (2007), Ghironi, Lee, and Rebucci (2009), Tille and van Wincoop (2010), and Devereux and Sutherland (2010).