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SCIENCE DIRECT
Journal of International Money and Finance
24 (2005) 935–943
Journal of International Money and Finance
www.elsevier.com/locate/econbase

Dollarization and trade

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Abstract

A series of papers by Andrew Rose and co-authors showing large and statistically significant effects of a currency union on bilateral trade supports the view that dollarization would promote trade between a country adopting the dollar and the United States. This paper presents results that cast doubt on the trade-enhancing effects of dollarization among those countries most likely to adopt this policy. Currency unions do not significantly promote bilateral trade of Western Hemisphere countries that have experience with dollarization, nor do they affect bilateral United States trade with non-industrial countries or with Western Hemisphere countries.

JEL classification: F15; F33

Keywords: Currency union; Gravity model; Dollarization

1. Introduction

In the ongoing controversy over the appropriate exchange rate regime, events of the 1990s have led some to the "bipolar view" that countries should either allow their

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0261-5606/$ - see front matter
doi:10.1016/j.jimonfin.2005.05.001

currencies to float or opt for a hard peg, like a currency union or dollarization.[1] The hard peg option is seen as having two potential benefits: providing a nominal anchor for macroeconomic stability, and fostering trade integration between an emerging market country and the industrial country to which it links its currency.[2]

The conjecture that currency unions foster trade integration could be supported by reference to a series of papers solely authored and also co-authored by Andrew Rose.[3] Rose and his co-authors demonstrate that membership in a currency union has a large, statistically significant effect on bilateral trade patterns. Using data sets with tens of thousands or even hundreds of thousands of observations on the volume of bilateral trade, and augmenting a gravity model analysis with a dummy variable that indicates membership in a currency union, a typical result is that the coefficient on the currency union dummy variable is highly significant and its value suggests that, *ceteris paribus*, membership in a currency union nearly triples bilateral trade.[4] Based on these results, Rose and van Wincoop (2001) conclude that "Reducing these [trade] barriers through currency unions like EMU or dollarization in the Americas will thus result in increased international trade." Frankel and Rose (2002) offer estimates suggesting that dollarization would raise the trade-to-GDP ratio substantially in many Western Hemisphere countries.[5]

In this paper, we focus on the possible effect of dollarization (with the US dollar) in the Western Hemisphere and among non-industrial countries. This focus is prompted by the fact that each of the six countries that have some experience with dollarization in our data set are non-industrial countries and all but one of these are in the Western Hemisphere. Furthermore, more recent experience with dollarization

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[1] Fischer (2001) offers an overview of this debate. It is worth noting at the outset that a currency union and dollarization are conceptually distinct. A currency union involves the establishment of a new central bank that may be administered by representatives from all countries using the new transnational currency. Dollarization, in contrast, implies the adoption of the currency of another country (typically the US dollar). While "currency unions" between non-industrial countries and the United States are better characterized as cases of dollarization, we will use these terms interchangeably.

[2] For example, Berg and Borensztein (2000) write "Dollarization may also bring other benefits: closer integration with both the United States and the global economy would be promoted by lower transaction costs and an assured stability of prices in dollar terms." Dornbusch (2001) writes "There is a whole range of economies that are doing all right (say, Hungary or Mexico) that would benefit from the immediate introduction of currency boards to deepen economic integration and hence build much better growth prospects." (p. 242). Alesina and Barro (2001) state that Mexico and many Central American should be interested in dollarization, based on, among other factors, their trade with the United States.

[3] These include Rose (2000), Frankel and Rose (2002), Glick and Rose (2002), and Rose and van Wincoop (2001). Other work that revisits the effect on trade of membership in a currency union includes Barro and Tenreyro (2003), Edwards (2001), Nitsch (2002a, 2002b, 2004), Persson (2001), Pakko and Wall (2001), and Thom and Walsh (2002).

[4] For example, Frankel and Rose (2002) present an estimated coefficient on the currency union dummy variable of 1.38 in their Table 1, with an associated standard error of 0.19. This suggests that membership in a currency union triples bilateral trade, *ceteris paribus*, (since $e^{1.38}-1 = 2.97$). This result is cited in Rose and van Wincoop (2001).

[5] See their Table V. Some estimates include an increase in trade-to-GDP of 39 percentage points in Guatemala, 24 percentage points in Chile, 91 percentage points in Costa Rica, 7 percentage points in Brazil and 93 percentage points in Mexico.