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Regionalism in the nineties: What effect on trade?

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Abstract

We apply a gravity model to 1980–1996 annual nonfuel imports data for 58 countries to quantify the effects of recently created or revamped PTAs on trade. We modify the gravity equation to identify separate effects of PTAs on intrabloc trade, members' total imports and their total exports and to test for significant changes in trade patterns following the creation of trade blocs. We find no indication that 'new regionalism' boosted intrabloc trade significantly and we find trade diversion only for the EU and EFTA. The latter also exhibit 'export diversion', which could indicate their imposing welfare costs on other countries. Latin American trade liberalization in the 1990s had a positive impact on bloc members' imports and, usually, exports. © 2001 Elsevier Science Inc. All rights reserved.

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1. Introduction

During the last 10 years, regionalism has re-emerged as a major issue in the policy agenda. In the Americas, the new Common Market of the South (MERCOSUR, 1991) and the North American Free Trade Association (NAFTA, 1994) were created while old Preferential Trade Agreements (PTAs) like the ANDEAN Pact (ANDEAN) and the Central American Common Market (CACM) started a process of renewal in the late 80's and early 90's. In Africa new

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PTAs were formed on the basis of old ones (e.g., in 1994 the *Union Economique et Monétaire Quest-Africaine*—UEMOA—was created out of the *Communaute Economique de l'Afrique Occidentale*—CEAO; and the Common Market of Eastern and Southern Africa–COMESA–revived and expanded the Preferential Trade Area for Eastern and Southern African States –PTA) and old ones were revamped (e.g., in the early 90's the *Union Duanière et Economique de l'Afrique Centrale*——UDEAC). In Asia, countries in the Association of Southeast Asian Nations (ASEAN) formed the ASEAN Free Trade Area (AFTA) in 1992.

The effect of this 'second wave' of regionalism on trade is still an open question. Do they really increase trade among members? Do they contribute to further trade liberalization with nonmember countries or undermine it? Do they harm nonmember countries? This paper aims to provide answers to some of these questions by exploring the effects of recent and revived PTAs on intra- and on extrabloc trade.

We consider nine PTAs—see Annex 1 for details. Five of them were either created (MERCOSUR, NAFTA) or revamped (ASEAN, CACM, ANDEAN) during the 1990s. One was created in the 1980s (GCC) and another deepened significantly in that decade (EU). The remaining two, EFTA and LAIA, had existed for some time. By using data up to 1996 we can compare blocs' patterns of trade "before and after" this second wave of regionalism and assess—for the first time to our knowledge—the wave's effect on blocs' trade. We use the gravity model to quantify the trade effects, but refine it relative to previous exercises. Existing gravity-model approaches to regional blocs have identified bloc effects on intrabloc trade and on members' extrabloc trade. We go beyond that by identifying separate effects on intrabloc trade, members' total imports and their total exports, the latter being an important determinant of the blocs' effects on the welfare of the Rest of the World (ROW). We also innovate by formally testing the significance of changes in the estimated coefficients before and after blocs' formation.

The paper begins with a statement of the model, continues with a brief description of the data used and recent developments in the PTAs modeled, and then presents the results. The final section summarizes the findings and conclusions.

2. The gravity model

In the basic gravity model, trade between two countries depends on their economic and physical size (GDP, population, land area) and on transaction costs (distance, adjacency, cultural similarities). Its empirical robustness has made it the work-horse for investigations of the geographical patterns of trade. Tinbergen (1962), Pöyhönen (1963) and Linneman (1966) provided initial specifications and estimates of the determinants of trade flows and Aitken (1973) applied it to PTAs. More recently, Anderson (1979), Bergstrand (1985, 1989), Helpman and Krugman (1985), Deardorff (1997) and Anderson and Mercouiller (1999) have provided partial theoretical foundations for the gravity equation, although none of the models generate exactly the equation generally used in empirical work.

In the absence of preferential trade arrangements and ignoring the time dimension and