Does Regional Integration Promote
the Multilateralization of Trade Flows?:
a Gravity Model Using Panel Data

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Abstract

We will be asking ourselves whether the trading blocs created or renewed since the end of the 1980s favor the multilateralization of trade, and so constitute building or stumbling blocks with regard to trade flows. In a gravity model using panel data, we estimate a set of three regional dummies representative of intra-bloc trade, extra-bloc exports and extra-bloc imports. Taking the resulting three coefficients as a starting point, we propose an original typology of trade creations/diversions and of trading blocs. By applying this to our results, all the groups chosen as well as the Economic and Monetary Union, are shown to be building blocks. No trade diversion is noted, apart from an export diversion brought about by the North American Free Trade Agreement.

- **JEL Classification:** F13, F15, C23
- **Key Words:** Trade Integration, Gravity Model, Trade Creation/Diversion, Building/Stumbling Blocks

I. Introduction

The debate on the relationship between regionalism and multilateralism saw a revival at the end of the 1980s, at a time when the Uruguay Round negotiations had been a long time in coming to fruition and when free trade agreements were on the upturn. R. Fiorentino et al. (2007) register the notification to GATT or the
WTO of more than one hundred and sixty such agreements (currently in force) during the period from 1990 to 2006, as a result of the creation, consolidation or enlargement of zones of regional integration.

In his examination of the effects that regional groups have on the global trading system, J. Bhagwati (1991) coins the terms building and stumbling blocks in reference to whether the groups were open or closed in character. The author considers regionalism to be discriminatory by nature and to be a cause of perverse effects.¹ L. Summers (1991) counters Bhagwati’s vision of things by emphasizing that intra-regional liberalization constitutes a step towards multilateralism and that it induces more trade creations than trade diversions. R. Baldwin (2004) finds that those nations that were the most fervent advocates of GATT were also assimilated into regional blocs, and that the new wave of trade regionalism did not hamper the conclusion of the Uruguay Round agreements.

In Bhagwati’s approach, a regional group constitutes a building block if it is intended to enlarge as well as contributing to the progress of the global trading system. In this article, rather than studying the impact of regionalization on the success of multilateral negotiations process, we will focus on its effects on multilateral trade flows. An agreement will have globalizing effects if it generates not only an internal trade flow but also the movement of trade with the rest of the world. We will be asking ourselves whether the large groups created or renewed since the end of the 1980s have indeed contributed to an upsurge in multilateral trade in goods. If such is the case, we can consider them to be building blocks with regard to the additional multilateral trade flows, and stumbling blocks where this is not true.

The use of a gravity model is particularly well adapted to this objective. Since the initial studies carried out simultaneously by J. Tinbergen (1962) and P. Pöyhönen (1963), and then taken further by H. Linnemann (1966), gravity models have been used more and more by analysts of international trade. They provide a cogent explanation of bilateral trade flows, positively by the size of partner economies, and negatively by the geographical distance separating them, this distance being retained as the proxy for transport costs. Dummy control variables for the effect of regional agreements can be added to the basic equation. In this

¹Not only liable to trigger inter-bloc trade wars, it also favors the domination of the smaller states by the larger ones in each entity (J. Bhagwati, 1995). In addition, the complex, tangled network of preferential and free trade agreements referred to as the spaghetti bowl, engender further costs as a result of the different rules of origin involved in multiple membership (J. Bhagwati, D. Greenaway, A. Panagariya, 1998).