Intra-Industry Trade: A Comparison Between Latin America and Some Industrial Countries

By

Renato Baumann

I. Introduction

Latin America presents some of the most clear examples of industrialization led by interventionist policies as well as policy-induced trade diversification towards non-traditional products. Recently, this long-standing interventionist tradition has been replaced in several countries by efforts to foster regional economic integration, and quite intense concerns with the liberalization of international trade and financial flows.

The composition of trade flows that result from these movements as well as their influence on the regional integration processes call for the available evidence of significant intrasectoral trade in several Latin American countries to be taken into account by both analysts and policy makers. One should, moreover, try to identify from the indicators of intra-industry trade to what extent they reflect universal characteristics of international trade in some products as different from regional peculiarities.

This work presents several indexes of intra-industry trade for some Latin American countries, in comparison with the corresponding indicators for selected industrialized countries. The basic hypothesis is that for some industries the international market tends to present a higher degree of specialization and complementarity among producers than in other industries, and this is reflected in the most important international trade flows in some sectors presenting high indexes of intra-industry trade. The diversification of the productive structure

Remark: Comments by an anonymous referee and the managing editor have contributed to improve the presentation. Responsibility for the opinions and the remaining errors are my own.
and the trade flows in some Latin American economies have allowed them to adapt to these major universal features in the 1980s. However, we also show indications that regional specificities have at the same time led to intense intra-sectoral trade unmatched by evidence for other regions.

II. Intra-Industry Trade in Latin American and in Some Industrialized Countries

There is a good deal of evidence indicating that in recent years the process of export diversification – with particular emphasis in industrialized products – coupled to the geographical concentration of the markets of destination for regional products, and presumably also to trade and production strategies of firms in specific sectors, have led to significant levels of intra-industry trade\(^1\) in several trade flows between some Latin American countries and their main trade partners. Figures indicating that this kind of trade accounts for high and increasing shares of sectoral trade even at its most aggregate levels (1-digit sectoral classification) suggest that this has become a new feature of Latin American trade, and one which might have consequences for trade policy as well as for several other domestic variables [see, for instance, UN/ECLAC, 1990, and BID, 1992].

The following presentation of estimates of IIT indexes for some Latin American countries takes into account the diversification of experiences – and hence individual country indexes are presented in respect with each bilateral trade flows with specific regions – as well as the relevance of two-way trade in each of these trade flows, so that the analysis throughout this work is limited to those sectors where a significant share of each bilateral trade flow is of the intra-industry

---

\(^1\) We shall not deal in this work with the discussion about the more appropriate way of measuring intra-industry trade. In what follows the indexes of intra-industry trade refer to the Grubel-Lloyd index, as proposed in Grubel and Lloyd [1975]. This index in its total trade-weighted average version is described as:

\[
ITT = \frac{\sum_i \sum_j \sum_k [(X_{ijk} + M_{ijk}) - |X_{ijk} - M_{ijk}|]}{\sum_i \sum_j \sum_k [X_{ijk} + M_{ijk}]} \times 100 ,
\]

where \(X_{ijk}\) = exports of product \(i\) by country \(j\) to country \(k\) and \(M_{ijk}\) = imports of product \(i\) by country \(j\) from country \(k\). This index is equal to one (i.e., trade is totally of the intra-industry type) in the limit case where \(X_{ijk} = M_{ijk}\) for every \(i, j\) and \(k\), and equals zero (no intra-industry trade) at the opposite situation of no similarity between exports and imports of each product \((X_{ijk} \neq M_{ijk})\).