L.2. Intra-industry trade

Simultaneous exports and imports within the same industry are generally labelled as intra-industry trade. They typically occur among rich countries with a similar economic structure and level of development that are geographically close. Intra-industry trade often accompanies foreign direct investment, as multinational companies locate affiliates in different countries and trade goods and services between the affiliates and the parent company.

■ From 1997 to 2008, the average index of intraindustry trade in manufactures was relatively high (over 70%) in many OECD countries, as well as in Estonia and in Slovenia. Since 2001, growth in intraindustry trade in manufactures has been strong in Iceland, Turkey, Poland, Portugal, Finland and the Slovak Republic. In several other OECD countries, intra-industry trade in manufacturing remains fairly vibrant but has not increased significantly over the past five years. ■ The relatively high growth rates of India and Indonesia (3.2% and 2.4%, respectively) confirm their increasing production and trade of intermediate goods. China's economy is well integrated and its intra-industry trade in manufactures has grown at the rate of 0.4% on average, over the seven past years.

In some Central and Eastern European countries, the high level and fast growth of intra-industry trade in manufactures likely stems from the large volume of direct investment, notably from Germany.

Source

• OECD STAN Indicators database, January 2010.

For further reading

• OECD (2005), Measuring Globalisation: OECD Handbook on Economic Globalisation Indicators, OECD, Paris.

The measurement of intra-industry trade

Intra-industry trade flows are conventionally defined as the two-way exchange of goods within standard industrial classifications. The extent of intra-industry trade is commonly measured by Grubel-Lloyd indexes based on commodity group transactions. Thus, for any particular product class i, an index of the extent of intra-industry trade in the product class i between countries A and B is given by the following ratio:

$$IIT_{i,AB} = \left(\frac{(X_i + M_i) - |X_i - M_i|}{(X_i + M_i)}\right) \bullet 100$$

$$[1]$$

This index takes the minimum value of zero when there are no products in the same class that are both imported and exported, and the maximum value of 100 when all trade is intra-industry (in this case X_i is equal to M_i). Bilateral indices of intra-industry trade in the product class i between country A and all its trading partners are obtained as a weighted average of the bilateral indices [1] for each partner country B, using as weights the share of total trade of A accounted for by trade with B. Bilateral indices of intra-industry trade between country A and country B for total manufacturing are the weighted average of the indexes in [1] for all product classes i, with weights given by the share of total trade of i over total manufacturing trade:

$$IIT_{AB} = \sum_{i} \left(\frac{(X_{i} + M_{i}) - |X_{i} - M_{i}|}{(X_{i} + M_{i})} \right) \bullet \left(\frac{(X_{i} + M_{i})}{\sum_{i} (X_{i} + M_{i})} \right) \bullet 100$$
[2]

A degree of caution must be used when comparing and interpreting intra-industry indices because their measurement crucially depends on the level of disaggregation chosen for the analysis. In assessing the importance of the division of the production process across countries, it should be recognised that, as well as measuring trade in intermediate goods at various stages of production, much intra-industry trade is trade in similar, but often highly differentiated, finished products.

The limitations of the intra-industry trade indicators are presented in OECD (2005), Chapter 5, Section 5.3.5.

L.2. Intra-industry trade

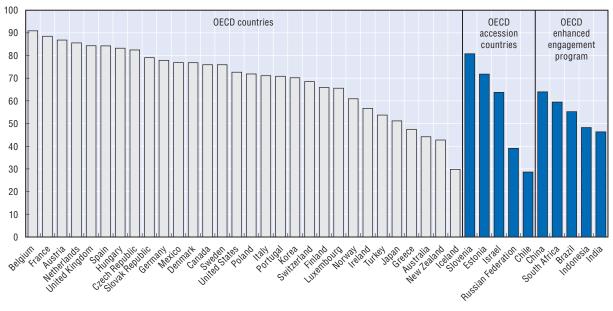


Figure L.2.1. Index of intra-industry trade in manufactures, average 1997-2008¹

1. 2000-08 for South Africa.

StatLink and http://dx.doi.org/10.1787/845820714132

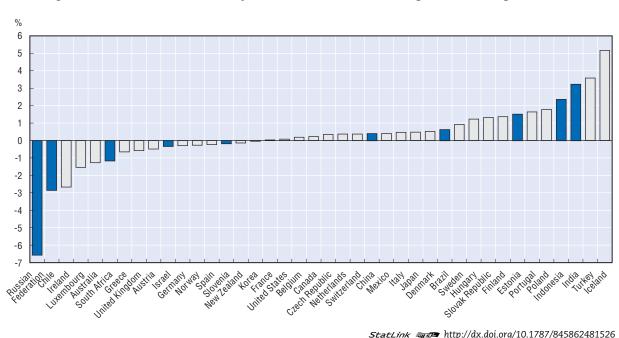


Figure L.2.2. Index of intra-industry trade in manufactures, average annual change 2001-08

StatLink and http://dx.doi.org/10.1787/845862481526

Information on data for Israel: http://dx.doi.org/10.1787/888932315602.



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