Identifying vertical specialisation via trade in value added

Topic: Vertical specialization and outsourcing 2

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The production of goods and services is becoming increasingly complex by the international fragmentation of production processes. Cross-border vertical specialization implies an increasing role of trade in intermediate products. We characterize recent developments in the international structure of production via an analysis of developments in trade in value added. From the GTAP-datasets for 2001, 2004 and 2007 we construct global input-output tables in which 57 industries and 70 countries are distinguished. Using IO-techniques we develop new indicators based on value added trade that enable us to detect vertical specialization at the industry level. Though most bilateral exports of value added are simply absorbed in the importing country, increasing cross-border vertical specialization can be identified for particular industries and countries. We conclude that there have been rapid changes for some industries and countries in the international organization of production. At the industry level we characterize several countries as global hubs. We define a global hub as country-industry pair that redirects a sizable share of value added imports and also takes a large share of value added imports at the sector level that are redirected globally. In addition we identify the main suppliers of intermediates to these hubs as well as the countries that hardly seem to partake in cross-border vertical specialization.