

Value Added Trade, Quality Upgrading, and Skill Demand in Middle-Income Countries

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Increased global integration is one of the key forces affecting developing economies. The opening up of markets to international trade is believed to be related to rising inequality observed in many countries. One channel through which trade would affect inequality, is rising demand for skilled workers due to the off-shoring of certain production activities by advanced countries' firms (see Feenstra and Hanson, 1996).

In this paper we analyze how global production fragmentation has affected inequality in Brazil, China, India, and Indonesia over the period 1995-2006. We use a unique new world input-output database that allows us to decompose the value of a final product into the value added by various production factors in different countries and regions in the world. Both direct and indirect contributions are taken into account, using the standard approach of Leontief. Furthermore, the database contains detailed and harmonized socio-economic accounts, including the earnings of low, medium, and high-skilled workers.

Preliminary analyses of these data convey that global production fragmentation has increased markedly between 1995 and 2006, with an expanding share of production taking place in middle-income countries. China's value added share in foreign final manufacturing output, for example, grew about 5-fold over this period (Timmer et al., 2011). But at the same time, especially in China and India, foreign value added shares in domestic final manufacturing output have also risen (ibid.). The first question we ask is how these changes have affected the earnings distribution between low-, medium-, and high-skilled workers within the four middle-income countries. Second, we analyze how this fragmentation has changed the position of these countries' different types of workers relative to the different types of workers in other countries. We thus draw a full picture of the effect of global production fragmentation on inequality within Brazil, China, India, and Indonesia, as well as their position in the global earnings distribution.

References:

- Feenstra, R.C. and G.H. Hanson (1996). Foreign Investment, Outsourcing, and Relative Wages. In R.C. Feenstra, G.M. Grossman, and D.A. Irwin (eds.): *Political Economy of Trade Policy: Essays in Honor of Jagdish Bhagwati*. Cambridge, MA: MIT Press, pp. 89-127.
- Timmer, M., A.A. Erumban, B. Los, R. Stehrer, and G. de Vries (2011). Slicing up Global Value Chains. Paper prepared for NBER's Summer Institute NBER/CRIW Workshop, 19 July 2011.