Are exports and FDI complements or substitutes? Firm-level analysis for France

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August 2013

Preliminary version

Abstract

In this paper we revisit empirically the question of whether trade and FDI substitute or complement each other by disentangling the different effects at the firm level. Using a variant of the structural gravity equation we investigate the impact of FDI outflows invested by a French firm on its exports. Having access to a unique dataset of FDI and trade for French firms, we are able go one step further in the disaggregation level (the firm and product) vis-à-vis past analysis done using French data. This allows the attenuation of the so-called aggregation bias which explains in some extent the persistent complementarity found in most analysis. However, given the multiproduct nature of MNEs, even at the firm level this bias might subsist across different products of the firm. Thus, in order to identify the competing trade effects of FDI we match the data with the different hypothesis examined by implementing a comparative analysis between different types of countries, different time horizons of the investment and different types of products. We find that on average even at the firm level there is a persistent complementarity. However, it is higher for non OECD than for OECD countries and the analysis suggests it is explained by a higher substitution effect in richer countries and a higher importance of vertical linkages in non OECD countries. Furthermore, in line with theory, when taking into account the timing of the investment and the different types of products exported, we are able to explicitly identify a substitution (negative) effect for the firms' core products right after the decision of establishing a new affiliate in a rich country.

Keywords: Trade, FDI, Aggregation bias, Gravity equation.

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