Domestic MNEs

by

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A question of enduring interest within international economics and international business is to what extent the presence of *foreign* firms can create 'spillovers' that increase the productivity of domestic firms (Caves, 1974; Buckley, Clegg and Wang 2002, 2007; Zhang, Li and Li, 2014). Domestic firms may, for example, imitate and learn from foreign entrants with advanced technology or managerial practices, benefit by hiring employees trained by the foreign firm, or respond to the increased competition pressure of the foreign entrant by innovation and operational efficiencies. There is an emerging consensus based on robust empirical evidence that positive spillovers are found in vertical relationships between foreign affiliates and their domestic suppliers (Javorcik, 2004; Javorcik and Spatareanu, 2011). In contrast, empirical studies on horizontal or intra-industry spillovers (i.e., from foreign firms to domestic competitors) show mixed results. While some show positive spillover effects (Haskel, Pereira and Slaughter, 2007; Zhang, Li, Li and Zhou, 2010), most confirm the absence of positive horizontal spillovers or even negative effects (e.g. Aitkin and Harrison, 1999; Altomonte and Pennings, 2009; Javorcik, 2004; Javorcik and Spartenau, 2008; Girma, Gong, Görg and Lancheros, 2015; Lu, Tao and Zhu, 2017).

Most recently, McGaughey, Raimondos and laCour (2020, *JIBS*) found that, by focussing on direct ownership links, this prior literature has under-estimated the presence of foreign firms. Considering indirect ownership links and a control-based (50%+ foreign ownership) definition of what is a foreign firm – rather than merely influence-based (i.e., 10%+) definition – McGaughey et al. (2020) find that there are many more foreign firms in domestic economies than we typically think, and that these exert (on average) a positive horizontal spillover effect.

This focus on productivity spillovers from *foreign* firms leaves an important question unanswered: To what extent does the presence of *domestic* MNEs exert productivity spillover effects on the productivity of other domestic firms?

This is indeed important as domestic MNEs (e.g. Phillips in Holland) operate as any other MNE in global markets and are thus able to secure productivity enhancements through internal mechanisms (e.g. within-the-firm labour and technology markets). One would expect that being already embedded within the home economy, these domestic MNEs have on average a greater positive spillover effect to the rest of the domestic firms than foreign MNEs. Yet in most prior studies, domestic MNEs are included as part of the domestic firm dataset and thus their effect cannot be distinguished (leave alone that the productivity of the 'pure' domestic firms has consequently been upward biased).

We use the ORBIS dataset of all European firms and their time-variant ownership pattern to create a consistent unbalanced firm-level panel dataset for approximately 575,000 manufacturing firms over 2001-2008 and pay careful attention to how firms are categorized. Specifically, we define 'foreign firms' using both the 10% direct ownership by a single foreign entity definition (i.e., influence-based) and the 50% ultimate owner definition (i.e., control-based) that combines both direct and indirect ownership links. We also separate 'pure' domestic firms from domestic MNEs, defining the latter as firms that ultimately own, and thus control, subsidiaries in other countries.

Our empirical strategy involves estimating total factor productivity (TFP) using the ACF semi-parametric GMM method (see Ackerman, Caves and Frazer, 2006, 2015) and examining how domestic firms' TFP is affected by the presence of foreign firms and of domestic MNEs. Our findings show that both domestic and foreign MNEs exert on average a positive productivity spillover to domestic firms. However, when we focus on the heterogeneity of the spillover effects we uncover an interesting result: whereas the domestic MNEs offer the greatest benefit to the *most* productive domestic firms, the foreign MNEs most benefit the *least* productive domestic firms. The rest of the paper examines the reasons behind this spillover heterogeneity and draws policy conclusions for government FDI attraction policy.