## Economic Analysis of Multinationals Firms in the UK after Brexit

Topic: Modelling the effects of Brexit II Author: Gabriela Ortiz Valverde Co-Authors: Maria C. Latorre

Title: Economic Analysis of Multinationals Firms in the UK after Brexit

Research question: this paper provides an impact assessment of Brexit considering the role of foreign multinationals enterprises (MNEs) in the United Kingdom (UK).

The method used: We use a recursive dynamic computable general equilibrium (CGE) model à la Latorre and Hosoe (2016). The model allows estimating the impact on GDP, welfare, wages, and capital remuneration, together with the evolution of aggregate and sectoral output, exports and imports. In addition, in each sector of the UK economy, the model includes the simultaneous presence of a representative firm for national firms and a representative firm for foreign MNEs. The cost structure of MNEs is different than the cost structure of national firms and the output by sector is depicted by a CES aggregation function of the output of national firms and multinationals. In addition, two separate Armington (1969) CET structures for local firms and MNE affiliates are used for the provision of exports.

Data used: We use the latest version of the GTAP Database (GTAP 9, Aguiar et al., 2016) and the Eurostat (2018) data related to the operations of foreign affiliates. The model includes 21 sectors and three regions: the UK, OECD countries and the Rest of the World (ROW).

The novelty of the research: The incorporation of FDI and multinationals' operations in the analysis of Brexit has received scarce attention in the literature (FernÃindez-Pacheco et al, 2018a; FernÃindez-Pacheco et al, 2018b). Only a few CGEs have explicitly modeled both types of firms interacting within sectors (see Tarr, 2013 and Latorre, 2009 for reviews). With this model we can follow the evolution of production and exports by type of firm (i.e., domestic or MNEs), therefore, this study will offer closer results to the potential effects of Brexit.