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Trade in services, intangible capital, and the profit-shifting hypothesis

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The rising relevance of intangible capital in the balance sheets of multinational corporations has led to a worldwide surge of trade in services related to intellectual property (IPP services). Some studies have claimed that intangible assets can be strategically relocated in fiscally favourable jurisdictions (so called tax havens) by MNEs, so that IPP services imports (i.e. the flows remunerating those intangible assets) can be used as a tool to shift profits to tax havens.
This paper investigates the empirical plausibility of this hypothesis. The analysis is based on a representative sample of 2,600 Italian firms over a five-year time span (2013-2017). The sample was extracted from the survey data collected by the Bank of Italy for the purpose of compilation of the national balance of payments, and it includes detailed information on firms' exports and imports of services, together with balance sheet data.
Our analysis proceeds in three steps. First, we report descriptive statistics about trade in IPP services, in order to assess whether their structural features leave the door open to the hypothesis of them being used as a tool for profit shifting. We document that trade in IPP services shows indeed quite peculiar features: almost 50% of IPP services are imported from tax havens, compared to less than 30% in the case of the other services. Trade in IPP services is highly concentrated across firms, with foreign firms accounting for two-thirds of IPP imports. Moreover, imports of IPP services are made not only by service companies, but also by firms active in many other sectors (including manufacturing). This might indicate either that IPP services are a production input for several sectors of the economy, or that their use as a profit-shifting tool is widespread in many different sectors.
As a second step, we estimate the amount of profits shifted to tax havens by foreign firms. To this end, we apply to our sample of resident firms the methodology proposed by Tørsløv et al. (2018), which is based on comparing profitability ratios of foreign-owned and domestic-owned firms. We find that estimates of profit-shifting vary between 15% and 30% of total profits (i.e. the sum of declared and shifted profits), depending on whether the methodology is applied on a sector-by-sector level or on all the firms as a whole.
Finally, we look at whether our estimates of profit-shifting are consistent with the size of imports of IPP and headquarter (HQ) services by Italian firms, under the hypothesis that these two kinds of services may be exploited by MNEs to relocate their profits to tax havens. If we take into account imports from tax havens only, their size is almost equivalent to our best (and most conservative) estimate of shifted profits. Clearly, this would imply that all IPP and HQ imports from tax-haven countries are made only for strategic transfer pricing transactions, which is a quite strong (and presumably unrealistic) claim. This aggregate evidence is complemented by a correlation analysis at the firm-level, which points to a positive relation between firms' IPP services and profit shifting. Remarkably, only imports from tax-haven countries are

correlated with profit-shifting, corroborating the hypothesis that such imports are motivated to a large extent by tax avoidance strategies.