

Lecture 6: Multinational Production Data

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[Natalia Ramondo](#)

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Q: MNC tend to have subsidies and branches in many countries. How big is the problem of misreporting of inputs imported from own subsidiaries abroad or misreporting sales to own subsidiaries abroad? What are the solutions?

A: Thanks for this important question. Misreporting happens when the affiliate charges a price lower to the "normal" price to its own subsidiary. It is hard to measure the importance of this problem with aggregate data. As Natalia explain sometime what we can do is drop the countries where this happens more often given the incentives provided by very low corporate tax rates. I will share shortly some of the studies that have attempt to measure the relevance of this issue using firm level data.

<https://www.aeaweb.org/articles?id=10.1257/pol.20130407>

<https://direct.mit.edu/rest/article-abstract/102/4/766/96789/International-Transfer-Pricing-and-Tax-Avoidance?redirectedFrom=fulltext>

Q: What are the implications of considering Costa Rica as potential tax havens in the conclusions of papers such as Alfaro Urena et al?

A: Alfaro-Urena et al in their paper are very careful to only consider exposure of domestic firms supplying to FDI that is in fact producing in the country. In this sense, the effect of producing FDI in their paper should have strong internal validity. A key issue in my understanding would be to extend their findings to draw conclusions about positive effects for FDI that enters a country purely for tax reasons. Their findings would not necessarily extend to this kind of FDI. In this sense, paying attention to whether financial inflows imply the setting up of economic activity in the host-country should be paid attention to.

A: Using firm level data (as in Alfaro Urena's paper) helps tremendously to deal with this issue. The reason is that they can observe these companies producing goods and services and with high levels of employment. They also have customs data, where they can observe the prices MNCs in CR pay to foreign suppliers and their own subsidiaries abroad. This helps to understand when transfer prices are used to shift profits to CR from foreign locations.

Q: I was wondering how much of the upward trend in FDI to developing countries can be explained by tax havens (maybe it is even larger if tax havens are not developing countries, which is not clear from the list).

A: Depends of the developing country. Although this can be an issue, corporate taxes in many developing countries (outside the list provided in the presentation) are not sufficiently low for this to be a major reason of the most recent trend. Some believe this is due to the many

global political tensions, and other events which have led to major disruptions in the global value chains, which has made MNCs to evaluate their activities and sourcing patterns more in general. But definitely this is possible and worthwhile to study further.

Q: Size of multinationals in the plot refers to employment of the US affiliate only right?

A: If referring to the density graphs that compare domestic, exporters and MNCs companies, in this case Multinationals (right plot) are US companies that also have operation abroad (US MNCs) and foreign affiliates operating in the US (foreign MNCs in the US).

Q: Is there any framework that explains large MNE-large MNE purchases of goods that both firms produce?

A: Thanks for this question. Depends of this MNCs being related to each other (intra-firm trade) among large affiliates that belong to the same corporation, or MNCs sourcing from other unrelated MNCs. The later can be rationalized with a Krugman /Melitz model. A two-way trade within the same MNCs could be rationalized with a model of multinational production with intra-firm trade, with multiple production stages. This type of trade makes a lot of sense in the current world with very complex GVCs, where many affiliates being multi-product firms that engage in different stages (not necessarily consecutive) of the production process.

Q: Is it possible to examine the different types of governance of GVCs (e.g. modular, relational etc.) from interfirm MNC activity? any data source that provides this information?

A: Thanks for this question. Not that I am aware of, at least in a direct way. I wondering if there is a way to classify them, but characterizing their network, stages of production, and transactions, that can tell is something about their governance.

Q: Do the OECD or any other source have the I-O table by size of the firm?

A: Thanks for this question. Some researchers such as Heiwai Tang, have constructed I-O tables based on firm level data. By doing this (construct I-O from the bottom up) several important dimension of heterogeneity (e.g size) can be accounted for. But I am not aware of a I-O table publish by an agency, such as OECD, by size or other characteristics.

Q: Are there any datasets with information on prices of the product imported/exported?

A: For the US Census, there are efforts linking the custom data (with detail information on prices and quantities for the universe of transaction) with firm-level data in the US that distinguishes MNCs from non-MNCs, in the US and in the foreign country. There are few datasets like this. It basically requires to link, Census/survey data in the country, with the trade data (customs) and with a data (such as Orbis for example) which allows you to know whether the firms that engage in the cross-border transaction have common ownership.

Q: Related to the "pollution heaven and pollution halo", I am wondering how much is selection where firms that use "dirty" technologies are the ones self-selecting into being a multinational.

A: This is an interesting subset of a broader question -- how selection operates on the decision of firms to become multinationals.

Q: Slide #30 is a bit confusing to me. I missed some point perhaps. I interpreted the Export bar as indicating that 35% of US exports are within-firm transactions. I thought it was the US parent to US affiliates. However, I'm unsure about the inclusion of US parents. Could you clarify its significance?

A: You are right about the 35%. In the red part, Natalia is highlighting the fraction of trade that despite of being "unrelated", is conducted by US MNCs, but this time with non-related parties abroad.