

The Business Dynamics of Multinational Corporations and Global Value Chains *Accomplishments in Year 1*

Link BEA and Census Data

This project has developed the data infrastructure to identify multinationals (U.S. parents and U.S. affiliates of foreign parents) and services traders (exporters and importers) in the Census Bureau's Business Register. This is accomplished by linking the following surveys to the Business Register:

- BE-10/BE-11 (Surveys of U.S. Direct Investment Abroad) for the years 2007-2013;
- BE-12/BE-15 (Surveys of Foreign Direct Investment in the United States) for the years 2007-2012; and
- BE-120/125 (Surveys of Transactions in Selected Services and Intellectual Property with Foreign Persons) for the years 2007-2012.

An entity in one of the three BEA surveys mentioned above contains a name, Employer Identification Number (EIN), and/or address. Therefore, an entity in a BEA survey is linked to a firm in the Business Register using a combination of EIN, name, and/or address matching. In addition to implementing computer matching algorithms, we also undertake clerical matching. We perform clerical matching on approximately 500 U.S. multinational parent enterprises (with at least 100 employees) that appear in almost all years between 2007 and 2012 and for which we did not obtain matches using EINs. Table 1 describes the final results of the matching.

BEA Survey	Average Weighted Match Rate	Average Unweighted Match Rate
BE-10/11	99%	96%
BE-12/15	94%	61%
BE-120/125	N/A	94%

Recommendations for new data collections related to factory-less goods producers in the 2017 Economic Census

This project has developed the data infrastructure to assess the responses to the special inquiry about the purchase of contract manufacturing services in the 2012 Economic Census (EC), an establishment level survey, and the Company Organization Survey (COS), an enterprise level survey integrated into business register processing, in order to explore the feasibility of identifying factory-less goods producers (FGPs). The OMB's Economic Classification Policy Committee (ECPC) recommends measuring FGP activity at the establishment level. However, cognitive research by the Census Bureau suggests that company headquarters rather than individual establishments may be the best respondents to answer the special inquiry questions intended to measure FGPs.

No single existing survey contains an ideal set of questions to identify FGPs. Therefore, we have linked the following confidential micro datasets for 2012 sourced from the Census Bureau and the Bureau of Economic Analysis:

- Economic Census (EC)
- Company Organization Survey (COS)
- Linked Firm Trade Transactions Database (LFTTD)

- Longitudinal Business Database (LBD)
- Annual and Benchmark Surveys of US Direct Investment Abroad (BE-10/11)
- Foreign Direct Investment in the United States (BE-12/15)

Preliminary analysis utilizing the above sources of data is currently underway and will enable the most detailed analysis of “factory-less” manufacturing activities to date and pave a path towards offering a feasible way of identifying firms that engage in these activities.

Use linked data sets to construct a supply and use table for 2012 following initial specifications

The project has started creating supply-use tables for 2012 by estimating the components of extended (by firm type) supply-use tables for the “Semiconductor and other electronic component manufacturing,” NAICS 3344 for 2012. Firms are categorized by type of ownership, firm class size, and whether the firm exports. Preliminary results show that most of the gross output in this industry is concentrated in a few permutations of these firm types. By type of ownership, value added as a share of gross output is largest for U.S. MNEs and lowest for foreign MNEs. Also, trade as a share of gross output and labor productivity is larger for MNEs than non-MNEs. This finding is consistent with results from Fetzer and Strassner (2015) on manufacturing. Type of ownership and exporter status seem to better capture heterogeneity than firm class size in this industry. This analysis will help inform the initial specifications used for the supply-use tables for all industries.

References

[Fetzer, James and Strassner, Erich H., Identifying Heterogeneity in the Production Components of Globally Engaged Business Enterprises in the United States \(June 10, 2015\), BEA Working Paper WP2015-13.](#)