Taking Account...

BEA study uses novel data to explore export methods

Over the past decade, interest in the industrial organization of international trade has exploded, as new microdata sets have led to the development of heterogeneous firm trade models that link firm characteristics and export participation.

Benjamin R. Bridgman, an economist at the Bureau of Economic Analysis (BEA), has added to the literature with a recent paper that explores export methods for U.S. motion pictures using novel information: internal data for United Artists (UA) from 1928 to 1949, which were available from an archival source. During that period, UA was a major motion picture exporter, with sales to more than 50 countries.

The source data give country-level detail on method of entry, sales, and distribution costs. In addition, the archives include memos and other documents that provide direct insight into the decisions to enter foreign markets.

Exports methods have long been a topic of interest for economists. In the first wave of research built on heterogeneous-firm trade models, economists concentrated on direct exports to foreign markets. As empirical work progressed, however, it became clear that exporting firms rely on a variety of methods.

The question of how firms decide to enter foreign markets is important, in large part because the cost structures of specific methods can be quite different. Therefore, exports may respond to shocks differently, depending on the methods that firms have chosen.

These differences have implications for the measurement of trade elasticities. If an exporter uses a method with higher fixed costs, short-run fluctuations will underestimate the long-run elasticity. In addition, understanding export methods helps in estimating trade-in-service flows in the BEA international transactions accounts, shedding light on when cross-border transactions actually occur. These accounts include cross-border transactions; they do not include sales by affiliates.

In general, data constraints have restricted analyses of firms' decisions when it comes to export methods.

Most data sets that provide information about firms' exports do not link a transaction to a firm unless the firm exports directly. And at best, they link an export transaction to the last domestic firm to handle it. Since it is unclear which firm made the products that intermediaries actually export, it is difficult to examine the methods of export. In addition, there is surprisingly little direct evidence on the magnitude or the nature of the costs that firms face when exporting. Indeed, it appears as though no research papers to date directly measure these costs. Existing estimates rely instead on a structural model to derive these costs.

Bridgman's paper provides an illuminating look at how companies might decide on optimal export methods.

The paper suggests that firms will use a hierarchy of methods, with more intensive methods, such as opening a foreign office, used for larger markets. Large markets are more costly to enter and require larger sales networks mainly because there are more theaters to service. While highly intensive methods require the firm to pay more in distribution costs, they generate more revenue and are more profitable. Less intensive methods are cheaper, but they generate less revenue for a given market size. This finding contrasts with the current literature, which emphasizes sorting of methods by firm characteristics: large, productive firms use foreign direct investment, while small firms use exports.

Bridgman's paper also examines the impact of trade barriers, finding that distance is not as big a barrier as cultural differences. Whether a country speaks English is an important predictor of revenue, while physical distance does not have a significant effect. This finding is surprising given that communications and travel technology were unreliable at long distances during the period studied and given that more recent studies have found distance to be important.

The paper is available on the BEA Web site.