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PRESS RELEASE

Concording of EU trade and production data over time

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In recent years there has been a rapid increase in academic research that relies on product-level data to study and compare international trade and production patterns within a single year and over time. However, combining these data raises an important set of methodological issues. First, the product classifications used to record international trade transactions and domestic production activities are different. Specifically, for international trade all EU countries apply the Combined Nomenclature (CN 8-digit) classification, while for domestic production activities the Prodcom classification (PC 8-digit) is used. Second, both the CN and PC classification are subject to yearly changes, in keeping with the evolution of commercial policy, technology, international agreements or statistical requirements. Finally, while both classifications can be applied to all EU countries, the products are not directly comparable on an international level.

This paper addresses these methodological concerns. We start by highlighting the specific characteristics of both the Combined Nomenclature and Prodcom classifications that need to be taken into account when combining international trade and domestic production data at the product level for the EU. We then apply the algorithms developed by Justin R. Pierce and Peter K. Schott for the US to develop a set of concordance procedures that allow researchers relying on the EU classification systems to adequately keep track of changes over time within a classification and to compare EU product-level trade and production data using a common classification system for both. We make all available files and procedures available to researchers who wish to use and compare EU product-level data over time and across classifications. The programs allow the product codes to be tailored to specific countries or years of interest. Finally, we develop programs that allow researchers to express EU trade and production activities using the internationally comparable Harmonized System (HS 6-digit) classification.

To evaluate the economic importance of these methodological concerns (and hence the importance of adequately address them), we examine Belgian export and production data from 1995-2003, both prior to and after concording the data into a consistent classification system over time. Comparing the unconcorded and concorded data shows that the degree of product adding and dropping by firms that continue from one year to the next falls substantially when a consistent product classification is employed (i.e. after concording the data). In particular, years with unusually large changes in the classifications systems are associated with spuriously high amounts of product churning by firms in the unconcorded data, pointing to the importance of developing a consistent product classification over time.