global e-commerce and data localization issues

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commerce has evolved together with the internet. commerce is conducted via the internet, which in turn, changes commerce. electronic commerce (or e-commerce) is the most natural outcome derived from the evolution in the modern digital economy. yet, it may come somewhat as a surprise to discover there are diverse definitions of e-commerce. the simplest possible way to define e-commerce would be "commerce via the internet," in which commerce is the sale or purchase of goods or services. in fact, it took more than a decade for several international organizations, including the wto, oecd, usitc, and un, to reach a common definition of e-commerce.

we often use the term "digital trade" instead of e-commerce. in short, it is perfectly fine to refer to e-commerce as digital trade. in 2013, usitc introduced the term "digital trade," defining this initially as the delivery of digital products such as applications, software, movie, and music over the internet, but then changed its 2013 definition of digital trade by equating it with e-commerce (digital trade in the u.s and global economies part ii by usitc, p. 29, 2014).

whereas global b2b e-commerce accounts for ninety percent of total e-
commerce revenue, global B2C e-commerce appears to be growing at a faster pace, twenty percent per year (UNCTAD 2015). Due to the rapid growth in cross-border B2C e-commerce, policymakers tend to concentrate on the trade of goods through cross-border B2C e-commerce. In the short run it is understandable and necessary to simplify and systemize the customs process. Nonetheless, it is also important for policymakers to recognize that combining manufacturing with services such as data storage and cloud computing may result in further stimulating cross-border e-commerce in services. Also recall that the definition of e-commerce includes services. Thus, such short-run trade policies of e-commerce concentrating on B2C goods tend to be half-baked and need to be supplemented by policies towards services over the internet.

Most of all, data localization issues will be at the heart of future trade policies regarding e-commerce. Many countries including China, Germany, Russia, and Brazil have taken measures or imposed regulations requiring that data is stored and processed within their borders (USITC 2017). Data localization and other similar issues may ignite conflicts among countries which are interdependent via the internet. Key words in this debate are protecting privacy and security versus promoting economic growth. The debate is ongoing and data localization has been one of the most sensitive topics among many countries in many arenas, for example, NAFTA, TiSA, TTIP, the US-led TPP, and the EU Digital Single Market.

Korea is neither immune to, nor ready for this data localization issue. Policymakers agree on the importance of this issue and the need for research on the characteristics of e-commerce at the product/service-level, firm-level, and industry-level to design a better trade policy regarding e-commerce. Unfortunately however, there is only a limited availability of datasets for cross-border and domestic e-commerce available in Korea. Most problematic is the inconsistency in data for cross-border e-commerce between the Statistics Korea and the Korea Customs Service.1 Other hurdles include the lack of data showing trade in services conducted over the internet. All these limitations prevent serious research from investigating the impact of e-commerce on employment, SMEs, growth, and trade in Korea.

It is time to construct a comprehensive panel dataset for e-commerce firms in manufacturing and services industries. Together with studies about the impact of e-commerce using such a dataset, Korea needs to make serious preparations to cope with digital localization issues.

1 It seems that the inconsistency originates largely from different coverage applying to each dataset respectively at the Statistics Korea and the Korea Customs Service.
with a balanced view and find ways to avoid, or at least minimize, harmful and unintended consequences to consumers, firms, employment, and growth with SMEs in the long-run. Better late than never.