Cross-Border Free Flow of Data

Data Needs Roundtable U.S. Department of Commerce May 9, 2016

Working Towards Better Data to Measure the Economic Impact of Cross-Border Data Flows

The Department of Commerce (Commerce) recognizes that worldwide data flows between countries are growing and becoming an increasingly important component of international trade. Data is also key to communication between individuals and businesses worldwide. It is generally accepted that cross-border data flows increase economic opportunity and restrictions to these flows are economically detrimental. However, there is relatively little supporting data or evidence.

Commerce's Digital Economy Leadership Team (DELT) is convening a roundtable, "Measuring Cross-Border Data Flows: Unmet Data Needs," to identify gaps in measuring cross-border data flows and the economic impact of restrictions to the free-flow of data. This is the first step in improving the information that is available to data users and other stakeholders. The information below offers some considerations for the discussion. Additionally, the forthcoming "Measuring Cross-Border Data Flows: Data, Literature, and Considerations" will include more details on the existing data and literature, as well as their limitations.

Cross-Border Data Flows and the Domestic Macro-Economy

Commerce currently collects data that informs our understanding of cross-border data flows, but this

data is imprecise. The statistics were not developed with cross-border data flows in mind and informing

decisions about the digital economy is not their primary purpose. For example, BEA's trade in services data is used to estimate services that have the potential to be delivered digitally. However, we do not know the extent to which these services are actually delivered digitally. Additionally, some services trade, such as that which relies on nontraditional business models, might not be captured at all in the official trade statistics. In the case of the Census Bureau's e-commerce statistics, the data indicate the value of retail, wholesale, manufacturing, and service sector digital sales, but do not provide information on which sales are domestic and which cross borders through international trade. What are the official statistics failing to capture about crossborder data flows? What data do we need to inform our macro-level economic indicators?

Outside of Commerce, numerous point-in-time studies and statistical models have been developed that attempt to quantify how restrictions to cross-border data flows impact GDP, employment, and trade. These sources rely on data from Commerce and other government agencies, as well as private industry. In some cases, these glimpses at cross-border data flows may be sufficient to inform decisions or policy, but in other cases, recurring and current information will be needed. When might one-off studies be sufficient, and when do we need more official statistics? What data is needed to create better and more accurate models?

Cross-Border Data Flows and Domestic Firms

Businesses of all sizes and in almost all sectors of the economy rely on the free flow of cross-border information in some capacity. Each day, businesses send billions of emails and transfer data to other businesses or internally that do not directly result in monetary transactions. However, these data flows serve numerous business functions. Intra-firm data transfers—containing information about production processes or human resources or something else—enable multinational firms to communicate internally with their overseas affiliates. What do we need to know about commercial data and services that have \$0 market price, but are critical for business operations?

Many small and large firms rely on the Internet to deliver services to and collect payments from overseas customers. Some small businesses have built their success on exports, facilitated by the ability to market their goods and services online. What do we need to know about the impacts on businesses of all sizes of proposed policies and legislation that limits or cuts off the flow of data across borders?

To be able to fully appreciate the importance of data flows to business operations, and how restrictions to these flows can harm businesses, we need to better understand how businesses are using cross-border data flows. Are these questions best answered by case studies, statistical models, or is there some large-scale data collection that can help inform decision-makers on these issues?

Cross-Border Data Flows and Foreign Economies

Just as there is a need to understand how cross-

border data flows affect different facets of the domestic economy, there is a need to understand how these flows and the restrictions to them impact other countries. To effectively negotiate trade agreements and deter foreign governments from enacting policies that block the flow of data, the U.S. government needs data and quantitative analyses on how the free flow of information benefits other countries' economies.

Although Commerce's role in collecting data on other countries is limited, the statistics on international trade, <u>direct investment statistics</u>, and <u>activities of multinational enterprises</u> are Commerce datasets that help measure the impact of data-related policies on foreign economies. Additionally, Commerce and other U.S. government organizations might also participate in international working groups, to promote the collection of data on the digital economy and cross-border data flows.

What data is needed for analyzing how a trading partner's proposed policies that restrict the flow of data will affect their exports to the United States, the presence or performance of U.S. multinational firms' affiliates in their country, or some other aspect of their economy?

Measuring Bits and Bytes

It is impossible to talk about the measurement of cross-border data flows without talking about bits and bytes. Private organizations appear to be best equipped to measure the amount of data flowing across borders, and the path the data take to reach its ultimate destination. From an economic perspective, what do we need to know about the amount, content, and routes of cross-border data flows?