As context for my remarks, I should note that I am not all that familiar with BEA's estimation methodologies, but instead do microdata research that would potentially use the detailed estimates described in this paper.

The paper is motivated by the increasing interest in services imports (a.k.a. offshoring or outsourcing), particularly an interest in industry-level detail for imports of business, professional, and technical (BPT) services. The overarching goal of the paper is to address the lack of detailed data on these imported services.

To address this gap, the paper proceeds in several steps. First, it seeks to explain the treatment of purchased service imports in BEA's International Transaction Accounts (ITAs), National Income and Product Accounts (NIPAs), and the Annual Industry Accounts (AIAs). The paper specifically highlights changes in the AIA methodology that provide more detailed estimates of purchased service imports.

Then, the authors turn to the bulk of the effort in the paper—to use existing data to produce new, more detailed estimates of purchased services by industry, BPT services by industry, imported purchased services by industry, and imported BPT services by industry. The authors also evaluate their estimates using unpublished data. Importantly, along the way the authors identify and illuminate the pitfalls of both the approach taken in this paper and the official AIA estimates for some purposes and identify a number of specific caveats.

The paper is interesting and useful. I would like to draw readers’ attention to three issues regarding the methodology for producing the estimates in the paper and BEA's AIA estimates. The first issue is not directly taken up in the paper, but is important context to understanding the limitations of the estimates developed in the AIAs and in the paper. The issue is the level of detail that is collected in the ITA survey programs. The principal data collection programs for the imports of services estimates are BEA's surveys of U.S. and foreign multinational companies (MNCs) and BEA's surveys of U.S. international transactions between unaffiliated parties. Please see figure 8C.1, which shows a portion of the BE-10B(LF) from the MNCs survey program, and figure 8C.2, which shows a portion of the BE-20 form, which is from the unaffiliated trade-in-services program.

There are two important things to note on the survey forms. First, the categories included on the form are not as detailed as the categories provided in the AIAs. For example, the MNC form collects only eight categories of BPT service imports. The other thing to note is that the level of
detail in the categories does not match across the survey forms. The unaffiliated form has more, and more detailed, categories. Further, neither of the forms has a one-to-one match to the level of industry detailed in the AIAFs. One issue the paper does not discuss, but that is important to understanding the limitations of the estimates produced in both the AIA program and this paper, is how BEA maps information from these two forms to the detailed industry categories for which estimates are produced in the AIA program. Recognizing the nature of the information that is actually collected is very important for understanding the limitations of the estimates produced in the AIAFs and in this paper.

The second issue I would like to highlight is one that is directly addressed in the paper, the issue of noncomparables. Imported services are allocated across commodities and across industries. Certain types of imports are, for the purposes of the AIAFs, classified as noncomparables and aggregated into a “noncomparables” line in the AIAFs. For example, royalties and li-
cense fees are classified as noncomparable. Affiliate trade for unspecified financial, communication, business, professional, and technical services are also classified as noncomparables, while unaffiliated trade in BPT categories are included in comparable trade. As it turns out, the authors report that a significant portion of imported services are assigned to the “noncomparables” line in the AIAIs. For example, 80 percent of business, professional, and technical services are classified as noncomparables in 2004. The large share of imported services, particularly BPT services, that are classified as noncomparables is a potentially important caveat on the estimates produced in the paper.

The third methodological issue I would like to highlight is discussed in some detail in the paper. The issue is how BEA allocates purchased services and imported purchased services across “using” industries. The Bureau of Economic Analysis uses purchased input shares from the AIA input-output tables to allocate overall purchased services across “using” industries. They use the economy-wide share of imports/domestic consumption

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Fig. 8C.2 BEA form BE-20 (partial) for unaffiliated trade

*Other private services* (i.e., service number 32) consist of language translation services, security services, collection services, actuarial services, salvage services, satellite photography services, and toxic waste cleanup services.
to allocate comparable imports of services across industries. Note that this results in no variation in comparables’ import intensity across industries—they all have the economy-wide ratio of imports to domestic purchases for comparable services. For noncomparables, BEA uses unpublished information on a firm’s industry from the BE-10 forms to allocate noncomparables across industries.

Beyond the issue of allocation of comparables and noncomparables across industries, the authors identify another issue with the AIA methodology that could potentially impact the usefulness of the estimates for examining trends in imported services. The BEA uses information from the most recent benchmark Input-Output tables, in this case the 1997 Benchmark I-O tables, as the source for the I-O relationship to allocate purchased services across “using” industries. To the extent that purchased service practices have evolved over time across industries, the AIAs will not capture this variation. If firms in an industry have changed their practices for both domestic outsourcing for service inputs and offshore some of their intermediate services provision since 1997, these changes will not be recognized by the estimation methodology. Because of the seemingly rapid changes in these practices, this potential shortcoming could reduce the utility of the estimates for some purposes.

In conclusion, this is a useful paper. It highlights improvements in BEA’s AIA program. The paper identifies caveats to using the AIA estimates to investigate changes in purchased service imports and provides new, more detailed estimates of imported BPT services by industry. The authors and BEA should be commended for undertaking the project, and encouraged to pursue it further.