1. **Prioritizing Sectors for Research:** Last year, BEA launched an initiative to conduct research to improve the deflators used in the national accounts, particularly those for digital goods and services. In FY2017, BEA identified the following sectors as priority areas and purchased datasets to explore alternative price indexes: software, medical equipment, and residential communication services (including cellular devices). These choices were guided by considering the size of the sector (software and residential communication services are large), the likely extent of bias (medical equipment and cell phones, though small, are characterized by rapid product innovation), and the availability of data.\(^1\)

**Question:** What sectors should BEA target for future research? What criteria should one use to choose the high-priority sectors?

2. **Adjustments to price indexes in the accounts:** There are now several studies that assess the potential biases in the price deflators that we use in the national accounts. These studies are in the spirit of the seminal paper by Lebow and Rudd\(^2\) that reviews the available literature to make an assessment of the size of the bias in price measures like the CPI. Recent work by Byrne and Corrado\(^3\) and Byrne, Fernald and Reinsdorf\(^4\) takes this a step further by assessing the potential biases over different time periods. The suggestion has been made that BEA should use estimates like these to make adjustments to the price deflators in the accounts.

**Question:** Under what conditions should BEA consider making adjustments to price indexes used in the accounts based on results from research studies? Two immediate issues to consider are (i) potential discontinuities in the data and (ii) assessing the reliability of the results.

- a. With regard to discontinuities, when BEA introduces a deflator that it plans to maintain going forward, it can use that opportunity to fold in any adjustments over history so as to avoid any discontinuity introduced by the new index. Conversely, introducing an adjustment over history without changing methods for generating current indexes going forward will generate a discontinuity.

- b. More generally, the lack of consensus on the magnitude of these biases and differences in reported results often makes it difficult to defend such adjustments. For example, one

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\(^1\) Moreover, care was taken to avoid any duplication of effort by steering clear of areas where research by external parties was already underway (PCs, tablets and laptops, e.g.).


\(^4\) “Does the United States have a productivity slowdown or a measurement problem?” *Brookings Papers on Economic Activity*, Spring 2016. [https://www.brookings.edu/bpea-articles/does-the-united-states-have-a-productivity-slowdown-or-a-measurement-problem/](https://www.brookings.edu/bpea-articles/does-the-united-states-have-a-productivity-slowdown-or-a-measurement-problem/)
research paper might conclude that the bias in some index is X% and another study two years later might argue, based on different data, that the bias is really X/2%.

3. **Collaboration with the BLS**: We have forged a partnership with BLS, where staff from both agencies work to assess the potential usefulness of new data sources for price measurement. We feel there is a natural division of labor in this collaboration. Because BLS does not revise its indexes over history, their focus has been on developing methods that exploit new data sources to improve quality adjustment going forward. BEA’s inherent interest in long run trends makes it necessary to improve these indexes back over history as well so our focus has been on identifying data sources that would allow us to construct historical price indexes. In that sense, the work is complementary though we assess the potential usefulness of these new data sources from our unique perspective.

**Question: Does this division of labor make sense?**