Economic Statistics for Puerto Rico
Consumer Spending, Business Investment, and Trade in Goods

BEA Advisory Committee Meeting
November 15, 2019
• Prototype estimates of select components of Puerto Rico GDP released on October 15
  o Consumer spending, private fixed investment, and net exports of goods
  o Current-dollar and inflation-adjusted
  o Annual estimates, 2012-2017
Project summary: Approach

• Full development of Puerto Rico GDP and other economic accounts, like what exists for the states, would be a lengthy undertaking

• Would require that Puerto Rico be included in many more of the federal government’s data collection processes
  o Census Bureau’s monthly, quarterly, and annual economic surveys
  o Bureau of Labor Statistics’ price programs

• Using a model that is similar to the approach used for the other 4 U.S. territories:
  o Use existing Federal data
  o Use existing local government data
• Unlike the other 4 territories, the Puerto Rico government already produces its own economic accounts.

• However, the methods the local government uses have not been updated for many years and do not follow the latest international guidelines.

• BEA’s new statistics use different methods from the Puerto Rico government:
  o Improves comparability with other data BEA produces for the nation, states, and other territories.
• Differences in methods include:
  o Chain-type indexes (2012 reference year) vs fixed-weighted indexes (1954 base year)
  o Benchmarking components of consumer spending and business investment to 2012 Economic Census of Island Areas
  o Treating expenditures on intellectual property products as investment
  o Deflation at a much higher level of detail
  o Calendar year estimates vs fiscal year
Puerto Rico PCE: Per Capita (2012)

Per Capita PCE in 2012 for Puerto Rico and the U.S.

- Per capita PCE
- Per capita money income

U.S. Bureau of Economic Analysis; U.S. Census Bureau
<table>
<thead>
<tr>
<th>Percentage of Components in PCE in 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Puerto Rico</strong></td>
</tr>
<tr>
<td>Shares for Puerto Rico:</td>
</tr>
<tr>
<td>– Durable Goods: 10%</td>
</tr>
<tr>
<td>– Nondurable Goods: 33%</td>
</tr>
<tr>
<td>– Services: 60%</td>
</tr>
<tr>
<td>– Net foreign travel (NFT): -3%</td>
</tr>
<tr>
<td><strong>United States, Excluding the Territories</strong></td>
</tr>
<tr>
<td>Shares for U.S.:</td>
</tr>
<tr>
<td>– Durables: 10%</td>
</tr>
<tr>
<td>– Nondurables: 23%</td>
</tr>
<tr>
<td>– Services: 67%</td>
</tr>
</tbody>
</table>

*U.S. Bureau of Economic Analysis*
Puerto Rico Real PCE and Population

U.S. Bureau of Economic Analysis; U.S. Census Bureau, Population Division
• Consists of business spending on structures, equipment, and intellectual property products

• Intellectual property products is a new category of investment for Puerto Rico
  o Primarily consists of spending on software and research and development (R&D)
Puerto Rico Real PFI: Percent Change From Preceding Year, 2013–2017

Total PFI

Structures

Equipment

Intellectual property products

U.S. Bureau of Economic Analysis
Puerto Rico: Trade Balance in Goods

Exports of goods

Imports of goods

Net exports of goods

Billions $

2012 2013 2014 2015 2016 2017

0 25 50 75

U.S. Bureau of Economic Analysis
Puerto Rico: Exports of Goods

Billions $

- Foods, feeds, and beverages
- Pharmaceuticals and organic chemicals
- Consumer goods, except food, automotive, and pharmaceuticals
- Capital goods, including parts
- All other

U.S. Bureau of Economic Analysis
Puerto Rico: Imports of Goods

Billions $

2012 2013 2014 2015 2016 2017

Foods, feeds, and beverages
Pharmaceuticals and organic chemicals
Petroleum and products
All other

U.S. Bureau of Economic Analysis
Puerto Rico Real Exports of Goods:
Percent Change From Preceding Year

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>-4</td>
</tr>
<tr>
<td>2014</td>
<td>0</td>
</tr>
<tr>
<td>2015</td>
<td>-4</td>
</tr>
<tr>
<td>2016</td>
<td>0</td>
</tr>
<tr>
<td>2017</td>
<td>-16</td>
</tr>
</tbody>
</table>
Puerto Rico Real Imports of Goods: Percent Change From Preceding Year

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>-10</td>
</tr>
<tr>
<td>2014</td>
<td>-5</td>
</tr>
<tr>
<td>2015</td>
<td>5</td>
</tr>
<tr>
<td>2016</td>
<td>15</td>
</tr>
<tr>
<td>2017</td>
<td>15</td>
</tr>
</tbody>
</table>

U.S. Bureau of Economic Analysis
Next steps

- **Prototype estimates of total GDP and its components**
  - Remaining components of GDP are:
    - Exports and imports of services
    - Inventory investment
    - Government spending (Federal, central, and municipal)

- **Extend time series to include 2018**

- **Research to develop estimates of GNP**

- **Incorporate feedback from the current prototype release**
  - Federal Register notice