United States Producer Price Index for Banking
NAICS 522110 and 522120

Roslyn Swick
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Producer Price Index
Pricing Methodology

User cost approach

The user cost for a financial product is the difference between its revenue and the sum of the implicit and explicit costs.
Alternative Methodologies

Earning assets (or assets) approach

- Banks are considered *intermediaries* between holders of liabilities and those receiving funds
- Loans and other bank assets are considered output while deposits are inputs
- Banks provide substantial services to depositors that are excluded under this approach
- Output measured by earned interest for loan services and fees for all other banking outputs
Alternative Methodologies

Value added (or cost of funds) approach

- All assets and liabilities have some characteristics of output
- No mutually exclusive distinction between inputs and outputs
- Explicitly uses operating costs to measure output as the difference between the interest earned on loans and the interest paid on deposits
## Issues

### Turnover data

<table>
<thead>
<tr>
<th>NAICS 522110</th>
<th>2002 PPI*</th>
<th>2002 Census*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary services</td>
<td>407,060,708</td>
<td>407,060,708</td>
</tr>
<tr>
<td>Loans</td>
<td>176,461,060</td>
<td>337,390,755</td>
</tr>
<tr>
<td>Deposits</td>
<td>192,670,978</td>
<td>31,741,283</td>
</tr>
<tr>
<td>Trusts</td>
<td>14,754,637</td>
<td>14,754,637</td>
</tr>
<tr>
<td>Other banking services</td>
<td>23,174,033</td>
<td>23,174,033</td>
</tr>
</tbody>
</table>

* Excludes non-employer data
Issues

Time value of money

- Loans and deposits - adjusted once a year by the annual change in the gross domestic purchases price index calculated by Bureau of Economic Analysis

- Trust services - adjusted by the rate of return earned on the fixed assets
**Issues**

**Negative prices**

- Service having a ‘price’ that is always a negative is not considered to be output, but rather an input to the production process.

- If a price is occasionally negative, it is not used in index calculation for the month in which it is negative.

- Industry-specific reference rate is primary cause of occasional negative prices.
Issues

Average prices

- Variation in the number of days in a month contributes to some price volatility
- In longer months, banks have additional time to collect/pay interest and fees
- Balances can also change, but the impact is unclear
Issues

National Accounts use of PPI banking indices

- Currently, unable to use because:
  - More detailed deposit indices required
  - Require separate deflator for fees and interest

- Revision of banking PPI starts next year
  - May be able to provide more detail in the deposit indices
  - May be able to calculate special indices for fees only
    (interest only indices could be imputed from PPI banking industry indices and corresponding fees special indices)
Contact Information

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