Producer Price Indexes for Financial Services

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Overview

- Investment Banking and Securities Dealing  
  NAICS 523110

- Securities Brokerage  
  NAICS 523120

- Portfolio Management  
  NAICS 523920
NAICS 523110 PPI Industry Indexes

523110  Investment banking and securities dealing
5231102  Dealer transactions
523110201  Dealer transactions, equity securities
523110202  Dealer transactions, debt securities and all other trading
5231103  Investment banking services
5231104  Other securities dealing services
Debt Securities Dealing

- In the initial collection period, a specific traded security is selected

- The features of the security are held fixed:
  - Type of issue
  - Credit rating
  - Term to maturity

- Each repricing period, the respondent provides the spread that is quoted for the most similar security with the same credit rating and term to maturity

- One of the most difficult areas for PPI to measure through voluntary direct sampling – currently investigating alternative sources of data
Derivative Securities Dealing

- Currency and commodity derivatives are excluded
  - Classified in NAICS 523130, Commodities Contract Dealing
  - NAICS 523130 is not currently covered by PPI

- Options dealing
  - A put or call option for a specified security with a specified time to expiry and degree of moneyness is selected
    - e.g. third closest out of the money 3 month call on MSFT
  - Each repricing period, the respondent provides the spread that is quoted for the same type of option with the same characteristics

- Similar methods used for forwards, futures, and swaps
  - With forward rate agreements and interest rate swaps, bid-ask rate spreads are applied to escalated notional values
Equity Securities Dealing

- All equity spread data is collected directly from the major stock exchanges

- Prices are average volume-weighted spreads for all equities traded on 3 specified days each month
Equity Securities Dealing

[Graph showing trends in Equity Securities Dealing]
Investment Banking

Prices charged for M&A advisory and underwriting transactions are based on value of deal

- Deals are highly customized and are not repeated
  - PPI escalates the value of the deal in a given transaction to account for changes in the valuation of constant quality equity or debt

Example:

This value is escalated

VALUE OF OFFERING: $5,000,000
FEE PERCENTAGE: 12%
TOTAL FEE: $ 600,000
Investment Banking

- Value of M&A deals and equity underwriting transactions are escalated by Wilshire 5000 index
  - Most comprehensive reflection of how U.S. equities are valued in the market at a given point in time
  - Average deal value data more reflective of changes in the *kinds* of deals occurring in different periods

- Value of debt underwriting transactions are escalated by Barclays Aggregate Bond Index
  - Reflects changes in debt valuations over time
Pricing Example – Investment Banking

Example:

Initial Collection Period – 09/13

VALUE OF M&A DEAL: $20,000,000
FEE %: 1%
TOTAL FEE: $200,000

Future Repricing Period – 09/14

Respondent reports no change in fee, Wilshire 5000 up 10% YOY

VALUE OF M&A DEAL: $22,000,000
FEE %: 1%
TOTAL FEE: $220,000
Other Securities Dealing Services

- Dollar value of interest on securities loans and reverse repurchase agreements
- The principal / collateral in these transactions is escalated by the GDP Chained Price Index
  - Reflects basic changes in time value of money

**Example**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of assets/securities traded</td>
<td>$100,000,000</td>
</tr>
<tr>
<td>Repo interest rate:</td>
<td>2%</td>
</tr>
<tr>
<td>Term (Days/360):</td>
<td>1/360</td>
</tr>
<tr>
<td>Total fee:</td>
<td>$5,555.55</td>
</tr>
</tbody>
</table>
PPI Other Securities Dealing Services vs. Fed Funds Rate
NAICS 523120 PPI Industry Indexes

523120   Securities brokerage
5231201  Brokerage services
523120101 Brokerage services, exchange-listed equities
523120102 Brokerage services, all other securities
5231204  Other securities related services including margin lending and mutual fund sales
NAICS 523120 Pricing Methodology

- Securities brokerage
  - Value based commissions (% of traded value of security)
  - Flat fee per share or per trade

- Other securities related services
  - Margin loans – dollar value of interest
  - Mutual fund sales and distribution - loads and 12b-1 fees
    - % of fund net asset value
Pricing Example - Value Based Commission

- Respondents update current share price and % commission fee

EXAMPLE: Sale of 1,000 Shares of Stock XYZ

- NUMBER OF SHARES: 1,000
- SHARE PRICE: $10
- SUBTOTAL: $10,000
- COMMISSION: 5%
- TOTAL COMMISSION: $500
PPI Brokerage Services Index vs. Indexed DJ Wilshire 5000
NAICS 523920 PPI Industry Indexes

523920   Portfolio management
5239201  Mutual fund and ETF management
5239202  Private portfolio management

Additional detailed indexes by type of funds is currently under review for publication in the future

- Equity funds
- Bond funds
- Money market funds
- Other funds (including balanced & target date funds)

Industry includes only discretionary fund management
NAI CS 523920 Pricing Methodology

- Prices are calculated by multiplying the assets under management (AUM) in a fund by the percentage management fee charged.
- Changes in AUM caused by investment returns are reflected as price changes.
- Changes in AUM caused by capital flows (fund redemptions and contributions) are excluded from the calculation.
Pricing Example

- Respondents submit their rates of return and current management fee rates for each pricing period.

- Example:
  Previous assets under management: $1,000,000
  Submitted rate of return: 5%
  Escalated assets under management: $1,050,000
  Submitted management fee: 10 basis points

  Price: $1,000,000.00 * (1 + 0.05) * 0.001 = $1,050.00

*Note that escalated AUM is not actual AUM (effects of capital flows excluded)
Index Note - Lagged Data

- The index is comprised of respondents that submit data on either a monthly or quarterly schedule (some private portfolio RORs are only calculated and made available quarterly).

- There is a one month lag reflected in all reported prices.

- Example: October PPI index reflects September data for monthly respondents and 3rd quarter data for quarterly respondents.
PPI for Portfolio Management vs. Wilshire 5000 Index

Quarterly Percentage Change 402101 Index vs. Wilshire 5000 Index
Adjusted Timeline (1Q 2009 - 4Q 2013)
# PPI Coverage

## Finance Industries Currently Covered by PPI

<table>
<thead>
<tr>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Banking</td>
</tr>
<tr>
<td>Savings Institutions</td>
</tr>
<tr>
<td>Investment Banking and Securities Dealing</td>
</tr>
<tr>
<td>Securities Brokerage</td>
</tr>
<tr>
<td>Portfolio Management</td>
</tr>
<tr>
<td>Investment Advice</td>
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</tbody>
</table>

## Finance Industries Currently NOT Covered by PPI

<table>
<thead>
<tr>
<th>Industry</th>
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<tbody>
<tr>
<td>Credit Unions</td>
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<tr>
<td>Other Depository Credit Intermediation</td>
</tr>
<tr>
<td>Credit Card Issuing</td>
</tr>
<tr>
<td>Sales Financing</td>
</tr>
<tr>
<td>Other Nondepository Credit Intermediation</td>
</tr>
<tr>
<td>Mortgage and Nonmortgage Loan Brokers</td>
</tr>
<tr>
<td>Financial Transactions Processing, Reserve, and Clearinghouse Activities</td>
</tr>
<tr>
<td>Other Activities Related to Credit Intermediation</td>
</tr>
<tr>
<td>Commodity Contracts Dealing</td>
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<tr>
<td>Commodity Contracts Brokerage</td>
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<tr>
<td>Securities and Commodity Exchanges</td>
</tr>
<tr>
<td>Miscellaneous Intermediation</td>
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<tr>
<td>All Other Financial Investment Activities</td>
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