

Selected Price Estimation Work at Other Government Organizations  
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BEA is evaluating the new price index work from other government organizations. BEA will also continue to evaluate new price index work by BLS, the Fed, or other organizations as it becomes available.

Bureau of Labor Statistics—has several new or recent initiatives that BEA is evaluating. These include, first, the work described by Irwin Gerduk.

I. New producer price indexes for security brokers, dealers, and investment banking companies.

(overhead 1) The slide shows the index and its nine components subindexes. The published data begin with June 2000.

6211	Securities brokers, dealers, and investment banking companies
62111	Brokerage services
6211101	Brokerage services, exchange-listed equities
6211102	Brokerage services, all other securities
62112	Dealer transactions
6211201	Dealer transactions, market making in over-the-counter equities
6211202	Dealer transactions, debt securities and all other trading
62113	Investment banking services
62114	Other securities related services including margin lending and mutual fund sales
6211P	Primary services

Several of the component price indexes correspond closely to detailed components of PCE for brokerage charges and investment counseling. For example, the detailed PCE component, trading profits on debt securities appears closely matched to the PPI for dealer transactions, debt securities and all other trading. In addition, the summary index might be used to deflate other PCE components.

(overhead 2) This slide shows the first three quarters of the indexes. The overall index and most of the component indexes have fallen in the first 3 quarters. From 2000-III to 2001-I, the overall index fell at a 14.7 percent annual rate. In the same period, the present PCE price index for brokers fell at a 7.9 percent annual rate. These PPI's are still being evaluated, and the review probably will not be completed before this year's annual NIPA revisions estimates.

## II. Producer price index for investment advice.

Second, BLS continues to work on a price index for investment advice. The index may be designed so that it will fluctuate in ways that reflect changes in stock market index values. Fluctuations in this PPI would be desirable for a deflator to the extent that fluctuations in asset valuations are reflected in current-dollar investment advice fees and are not thought to represent changes in the quality-adjusted volume of service provided. Once published estimates are available, BEA plans to evaluate whether this PPI would be compatible with its methodology for estimating current-dollar PCE for investment advisory services.

## III. Producer price indexes for nonresidential construction and structures.

Third, BLS has begun work on PPI's for nonresidential construction and structures. It plans to produce indexes based on prices for four types of nonresidential structures. The first index, for warehouses, is targeted for publication beginning in 2005. The other types of structures may include office buildings, schools, and light industrial buildings. The full set of estimates is slated for publication beginning in 2008.

At present, nonresidential structures prices in the NIPA's are estimated indirectly. They are largely based on an unweighted average of the Census Bureau's price index for single-family houses and the Turner Construction Company price index for office buildings. BEA has done some preliminary work on estimating nonresidential structures prices based on costs of construction for sample structures available from a private source. If this work goes forward, it will be designed to link up with the PPI's once they are available.

### Board of Governors of the Federal Reserve System: LAN equipment.

Finally, the Federal Reserve Board has incorporated a new price index for local area network equipment into the calculation of its industrial production index. The index is based on price estimates for several types of LAN equipment. These estimates were described in a paper by Doms and Forman presented at a Brookings Workshop in February. In addition, the construction of the index was summarized in a note in the March 2001 Federal Reserve Bulletin. Copies of both of these are available on the table at the rear.

The Fed has made price index estimates for four types of equipment: Routers, LAN switches, hubs and LAN cards. (The presentation shows a simplified schematic of the Fed's LAN system.) LAN switches are quite different from the digital telephone switches for which BEA previously estimated a hedonic price index. However, they perform similar functions; taking messages in through multiple ports and redirecting them to other ports that send the messages toward final destinations. Routers are sophisticated devices that decide where message packets should be sent next, depending on traffic congestion and the packet's final destination. Hubs are simpler devices that allow multiple computers to share a given network line. LAN cards go into personal computers to allow them to connect with the LAN.

(overhead 3) This slide shows average rates of decline in the NIPA price indexes for communications equipment and computers and peripherals, and compares them to the Fed's price indexes for the four types of LAN equipment as well as its summary index. Since the mid nineteen-nineties, the LAN price indexes have experienced average rates of decline that are far greater than the NIPA price index for communications equipment, and approaching the average rate of decline of the NIPA price index for computers and peripherals.

The price indexes for routers and LAN switches are based on hedonic regressions, and the price index for hubs is a price-per-port index. The LAN card index is a chain-weighted matched-model index. The summary index uses domestic production weights from Census data to produce a chain-weighted index. Hubs have much smaller weights than routers and switches, and LAN cards are not included in the Fed's index because these are almost all imported. LAN card prices, however, have been falling at average rates similar to those of the overall index.

BEA is planning to implement the Fed's LAN price index in this year's annual revisions. It is also planning to incorporate it in the estimates of GDP by industry that will be published in November.

*Overhead 1*

Producer Price Indexes for SIC 6211

<u>PPI Code</u>	<u>Industry</u>
6211	Securities brokers, dealers, and investment banking companies
62111	Brokerage services
6211101	Brokerage services, exchange-listed equities
6211102	Brokerage services, all other securities
62112	Dealer transactions
6211201	Dealer transactions, market making in over-the-counter equities
6211202	Dealer transactions, debt securities and all other trading
62113	Investment banking services
62114	Other securities related services including margin lending and mutual fund sales
6211P	Primary services

*Overhead 2*

PPI's for Security brokers, dealers, and investment banking companies:  
Quarterly averages of monthly estimates

June 2000 = 100

<u>PPI Code</u>	<u>2000Q3</u>	<u>2000Q4</u>	<u>2001Q1</u>
6211	100.5	97.5	92.8
62111	99.0	97.9	94.9
6211101	98.3	98.3	96.1
6211102	100.1	94.9	93.1
62112	101.3	96.3	86.7
6211201	98.7	80.3	72.2
6211202	102.8	105.8	98.5
62113	100.0	100.0	100.0
62114	102.0	96.9	90.8
6211P	100.9	97.5	92.7

*Overhead 3*

Average Annual Rates of Decline for Price Indexes

<u>NIPA price indexes</u>	<u>Period</u>	<u>Rate</u>
Communications equipment	1995-2000	-1.8
Computers and peripherals	1995-2000	-22.2
<u>Federal Reserve price indexes</u>		
Routers (hedonic estimates)	1996-2000	-13.6
Switches (hedonic estimates)	1995-1999	-21.9
Hubs (price per port)	1996-2000	-30.1
LAN cards (matched model)	1995-2000	-18.3
LAN equipment	1995-1999	-18.0