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United States Producer Price Index (PPI) for Securities Brokerage NAICS 523120 and Investment Advice NAICS 523930
(ISIC 661 Activities Auxiliary to Financial Service Activities, Except Insurance and Pension Funding)

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Introduction

The U.S. Bureau of Labor Statistics currently publishes Producer Price Indexes for the 2012 North American Industry Classification System (NAICS) industries 523120, Securities Brokerage and 523930, Investment Advice. This paper discusses the development and maintenance of these indexes.

1. Definition of the service being priced

Securities Brokerage

The primary output for establishments in NAICS 523120, Securities Brokerage is the provision of assistance with the purchase or sale of securities. Securities brokers act as a go-between in facilitating trades between buyers and sellers of securities. The provision of loans that use the value of securities held in brokerage accounts as collateral, known as margin loans, is also considered a primary service.

Securities brokers act as agents in bringing together buyers and sellers of securities. Clients wishing to buy or sell securities submit orders to brokers who then arrange for the sale or purchase of the securities, often through an exchange (e.g. New York Stock Exchange (NYSE), American Stock Exchange (AMEX), NASDAQ, etc.). Brokers facilitate the trade without taking possession of the securities.

Client orders placed with securities brokers typically take one of two forms: market orders or limit orders. Market orders are orders to buy or sell immediately at the current market prices. Limit orders are orders to buy or sell at designated prices when they are reached in the future. Once orders are placed, brokers transmit them to specialists for particular securities who execute trades. Most of these transmissions are done through electronic trading systems.

Brokers may choose to transmit large quantities of their orders to specific specialists. When this occurs, specialists may reimburse brokers a few cents per share in exchange for delivering a flow of orders. These payments are referred to as payments for order flow.

In some cases, trade orders are fulfilled without being submitted to a specialist on the floor of an exchange or to an over-the-counter market. In these instances, brokers may match a buy order from one customer with a sell order from another customer or with the inventory of another division of the firm. This process is called internalization. Brokers may also match orders from their firm with orders from customers from other brokerage firms without using a specialist on an exchange floor by routing them to an automated system that matches buy and sell orders at specified prices. Brokers choose how to execute trades based on “best execution,” or the route that will execute the trades at the best possible prices for customers.

Brokers assist with the purchase or sale of many different kinds of securities including equities, exchange traded funds (ETFs), closed-end funds, options, and bonds.

Equities are securities that represent ownership interest in a company.

ETFs are securities that track indexes, commodities, or baskets of assets, but trade like stocks on an exchange. Expense ratios for ETFs are typically lower than those for mutual funds. One of the most widely known ETFs is the Spider (SPDR), which is an index ETF that tracks the S&P 500 Index. Other types of ETFs include bond ETFs, currency ETFs, international ETFs (investing in foreign-based securities), and leveraged ETFs (using financial derivatives and debt to amplify the returns of an underlying index).

Closed-end funds are investment vehicles that, like mutual funds and ETFs, pool investors' money into diversified investment portfolios. Unlike mutual funds and ETFs, however, closed-end funds have a set number of shares authorized by the investment management company. Closed-end funds are also similar to ETFs in that they can be traded on an exchange. Closed-end funds differ from ETFs, however, because they are actively managed while ETFs are typically passively managed using an index.

Options are contracts that give the option holder a right, but not an obligation, to buy or sell an underlying asset at a specific price, called the strike price, on or before a certain date. There are two types of options - call options and put options. Calls give the holder the right to purchase an asset at a certain price within a certain period of time. Investors buy call options when they believe the price of the underlying asset will increase. Puts give the holder the right to sell an asset at a certain price within a certain period of time. Investors purchase puts when they believe that the price of the underlying asset will fall before the option expires. If options reach their expiration dates before they are exercised, they are considered null and void.

Investors buy and sell options for a premium. Premiums change constantly based on what buyers are willing to pay and what sellers are willing to accept for an option. Premiums have two parts – an intrinsic value and a time value. The intrinsic value is the amount by which the option is in-the-money. Call options are in-the-money if the current market price of the underlying asset is above the strike price. If the strike price is higher than the market price, call options are considered to be out-of-the-money. Alternatively, put options are in-the-money if the current market price is below the strike price. If the current market price is above the strike price, put options are considered to be out-of-the-money. The time value of an option is greater when there is more time for an option to increase its moneyness, the amount by which it is in-the-money, before the option expires.

Complex options transactions may also be offered by securities brokerage firms. These transactions allow investors to simultaneously buy or sell multiple options that would traditionally require separate orders. These multiple options transactions combined into a single complex order are often referred to as legs. Investors may place multi-leg options orders when exercising various strategies such as straddling or strangling. Straddling is purchasing a call and a put option on the same asset at the same strike price with the same expiration date. Strangling is purchasing out-of-the-money call and put options on the same asset at different strike prices but with the same expiration date.

Bonds, also referred to as fixed-income securities, are debt instruments through which investors lend money to corporate or government entities for a defined period of time at a designated interest rate. Types of bonds include: corporate bonds, treasury bonds, municipal bonds, asset-backed bonds, and Yankee bonds.

Other securities related services primary to the securities brokerage industry include margin lending and mutual fund sales. Margin lending allows investors to borrow money from a securities brokerage firm in order to purchase securities. The securities held in the investor's brokerage account serve as collateral. If the value of the securities in the brokerage account falls below the minimum amount required, the investor must meet a margin call by depositing additional cash or securities into the account. If the investor cannot meet the margin call, the brokerage firm may liquidate the securities held in the account.

Securities brokerage firms also earn revenue by assisting clients in purchasing mutual fund shares. All services related to the sale and ongoing client servicing of mutual funds are primary to this industry. Investors in front-end load mutual funds pay a sales commission, calculated as a percentage of the value of the purchase, to brokers at the time of the initial purchase. Investors in back-end load funds pay a sales commission at the time of redemption. Investors do not pay a sales commission on no-load mutual funds.

Some securities brokerage firms may also charge flat fees for additional brokerage-related services. These services can include: returning checks for insufficient funds, processing worthless securities, providing paper statements, sending overnight mail, executing account transfers, providing copies of checks, and providing stock certificates.

Investment Advice

The primary output for establishments in NAICS 523930, Investment Advice is the provision of investment advisory services, including financial planning and portfolio analysis services, on a fee basis. Of note are financial advisory services transacted with a fee charged periodically as a percentage of the total value of the client's assets, which are commonly referred to as "wrap accounts" or "wrap fee programs." The Securities and Exchange Commission (SEC), a government commission created by U.S. Congress with goals of protecting investors, maintaining fair and orderly functioning of securities markets, and facilitating capital formation, defines a wrap fee program as "a program under which any client is charged a specified fee or fees not based directly upon transactions in a client's account for investment advisory services (which may include portfolio management or advice concerning the selection of other investment advisers) and execution of client transactions." Please note that this definition does not explicitly state that the investment adviser actually executes security trades; upon consulting with the client (in the case of a non-discretionary account; see below), the adviser may place a security trade on the client's behalf with a broker-dealer. In a wrap fee program, clients receive both investment advisory services and trade execution in exchange for a program fee. Clients in these programs generally pay a single annualized fee for participation in the program where the program fee is prorated and charged quarterly, in advance, based upon the average-month end balance of the assets under management during the previous quarter. A wrap fee program compensates the investment professional for the advice they provide, not for the number of transactions generated.

Generally, wrap accounts are referred to as discretionary or non-discretionary. In a discretionary account, the investment adviser has the authority to make changes to the account's composition of assets without consulting the client. In a non-discretionary account, the adviser suggests changes to the securities holdings within the account to the client, but the client has the final say whether or not the allocation of security holdings will be adjusted. Non-discretionary wrap accounts are considered primary to NAICS 523930 because the primary service in such a wrap fee program is the provision of advice by the investment professional and adjustments to the security holdings in the account are transacted only after obtaining the client's permission. Fees charged for participation in discretionary wrap accounts, however, are not primary to NAICS 523930. Instead, they are classified in Portfolio Management, NAICS 523920.

According to the Certified Financial Planner Board of Standards (CFP Board), which is the organization responsible for granting individuals with the CFP certification, the financial planning process consists of the following six steps:

1. **Establishing and defining the client-planner relationship.** The financial planner should clearly explain or document the services to be provided to the client and define both the planner's and client's responsibilities. The planner should explain fully how he/she will be paid and by whom. The client and the planner should agree on how long the professional relationship should last and on how decisions will be made.

2. **Gathering client data, including goals.** The financial planner should ask for information about the client's financial situation. The client and the planner should mutually define the client's personal and financial goals, understand the client's time frame for results and discuss, if relevant, how the client feels about risk. The financial planner should gather all the necessary documents before giving the client the advice they need.

3. **Analyzing and evaluating the client's financial status.** The financial planner should analyze the client's information to assess the client's current situation and determine what the client must do to meet their goals. Depending on what services the client has asked for, this could include analyzing the client's assets, liabilities and cash flow, current insurance coverage, investments or tax strategies.

4. **Developing and presenting financial planning recommendations and/or alternatives**. The financial planner should offer financial planning recommendations that address the client's goals, based on the information the client provides. The planner should go over the recommendations with the client to help the client understand them so that the client can make informed decisions. The planner should also listen to the client's concerns and revise the recommendations as appropriate.

5. **Implementing the financial planning recommendations**. The client and the planner should agree on how the recommendations will be carried out. The planner may carry out the recommendations or serve as the client's "coach," coordinating the whole process with the client and other professionals such as attorneys or stockbrokers.

6. **Monitoring the financial planning recommendations.** The client and the planner should agree on who will monitor the client's progress towards their goals. If the planner is in charge of the process, he/she should report to the client periodically to review the client's situation and adjust the recommendations, if needed, as the client's life changes.

Oftentimes, an Investment Policy Statement (IPS) will be included for individuals, and the drafting of an IPS is required by law for investment professionals who advise pension plans, foundations, and other institutional accounts. An IPS is a document drafted between an investment manager and client that identifies the investment goals and objectives of the client and describes the strategies that the manager will employ to meet those objectives.

2. Pricing unit of measure

Securities Brokerage

The most common units of measure for securities brokerage transactions are per trade or per traded share. In some instances, a securities broker may charge a flat fee for all trades made during a set period of time. In these cases, the unit of measure is per month, per quarter, or per year.

Other securities related services provided by securities brokers include mutual fund sales and margin lending. When securities brokers earn revenue for assisting with the purchase or sale of mutual funds, the unit of measure is per mutual fund transaction. The unit of measure for margin lending by a securities broker is per loan.

Investment Advice

A customized financial plan is the typical primary unit of measure for financial planning services. Other services provided by investment advisers are managing clients' assets in a non-discretionary program or "wrap account". In these cases the unit of measure is per month, per quarter or per year.

3. Market conditions and constraints

a. Size of industry

The following table provides size statistics for the U.S. securities brokerage and investment advice industries based on the 2012 U.S. Economic Census.

NAICS Code	Industry	Number of establishments	Turnover ($1,000)
523120	Securities Brokerage	42,066	$119,852,598
523930	Investment Advice	15,537	$32,862,700

Based on 2012 turnover figures, NAICS 523120, Securities Brokerage, and NAICS 523930, Investment Advice, comprise approximately 23 percent and 6 percent of NAICS 523, Securities, Commodity Contracts, and Other Financial Investments and Related Activities, respectively. NAICS 523 also includes investment banking and securities dealing, commodity contracts dealing, commodity contracts brokerage, and portfolio management.

As shown in the following table, within the U.S. securities brokerage industry, the top four firms earn almost 34 percent of total industry turnover based on the 2012 U.S. Economic Census. The top 50 firms earn almost 84 percent of industry turnover.

	Turnover ($1000)	**Percent of Total Turnover in NAICS 523120**
4 Largest Firms in NAICS 523120	40,803,570	33.9%
8 Largest Firms in NAICS 523120	59,725,638	49.6%
20 Largest Firms in NAICS 523120	85,494,096	71.0%
50 Largest Firms in NAICS 523120	100,911,916	83.8%

As shown in the following table, within the U.S. investment advice industry, the top four firms earn over 29 percent of total industry turnover based on the 2012 U.S. Economic Census. The top 50 firms earn 56 percent of industry turnover.

	Turnover ($1000)	**Percent of Total Turnover in NAICS 523120**
4 Largest Firms in NAICS 523120	9,397,055	29.2%
8 Largest Firms in NAICS 523120	11,550,024	35.8%
20 Largest Firms in NAICS 523120	14,882,404	46.2%
50 Largest Firms in NAICS 523120	18,082,806	56.1%

b. Special conditions or restrictions

The Investment Advisers Act of 1940 was instituted to monitor those who, for a fee, advise individuals, pension funds, and institutions on investment matters. This law originally required all investment advisers to register with the SEC and conform to regulations designed to protect investors by imposing a duty on investment advisers to act as fiduciaries in dealings with their clients. By being bound to a fiduciary standard, investment advisers must hold the client's best interest above their own in all matters. In contrast, broker-dealers are obligated to fulfill a less stringent suitability standard, which requires them to make recommendations to clients that are broadly consistent with the client's best interest, but does not require the broker-dealer to hold the client's interest above their own. In 1996, the Investment Advisers Act was amended to generally require only advisers who have at least $25 million of assets under management to register with the SEC. In 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act raised the asset under management threshold for registration with the SEC from $25 million to $100 million. Investment advisers with under $100 million in client assets must register with their state securities agencies.

There have also been legal changes to the fee-based accounts that brokers and dealers and investment advisers can legally maintain due to differing standards of conduct in their dealings with investors. Fee-based brokerage accounts were originally developed by brokers to give clients the opportunity to consult with an investment professional, receive advice on security selection, and/or portfolio construction, and then buy the securities without paying commissions for the trades. Fee-based investing in these accounts compensates the investment professional on the advice they provide, not for the number of transactions they generate. In 2007, the Financial Planning Association challenged the SEC over whether a broker can call themselves an investment adviser but not be held to the fiduciary standard. The United States Court of Appeals for the District of Columbia in *Financial Planning Association v. Securities and Exchange Commission* held that firms offering fee-based brokerage accounts (wrap accounts/programs) must be held to fiduciary standards consistent with the Investment Company Act of 1940. In general terms, since brokers and dealers are held to a suitability standard and investment advisers are held to a fiduciary standard, the mandate banned brokers and dealers from offering fee-based brokerage accounts (wrap accounts/programs) if they were not registered investment advisers. The court ruling forced brokerage firms to move about $300 billion of assets in fee-based accounts and find new places for about one million customers, mostly into registered investment advisers' fee-based accounts or into traditional commission-based accounts.

c. Record keeping practices

While larger securities brokerage and investment advice firms may operate multiple local branch offices, pricing data can typically be obtained at company headquarters. As a result, the U.S. sampling strategy is to collect consolidated price information for all of a company's local operations at the headquarters. Because many of the large firms provide services primary to multiple financial industries, a reporting unit is identified as only the securities brokerage or only the investment advice operations of a firm.

4. Standard classification structure and detail related to the area

NAICS Definition

NAICS 523120, Securities Brokerage, comprises establishments primarily engaged in acting as agents (i.e. brokers) between buyers and sellers in buying and selling securities on a commission or transaction fee basis.

NAICS 523930, Investment Advice, comprises establishments primarily engaged in providing customized investment advice to clients on a fee basis, but do not have the authority to execute trades. Primary activities performed by establishments in this industry are providing financial planning advice and investment counseling to meet the goals and needs of specific clients.

Comparison to ISIC Rev.4 Definition

NAICS 523120 and NAICS 523930 are part of ISIC 661, Activities Auxiliary to Financial Service Activities, Except Insurance and Pension Funding, which includes the furnishing of physical or electronic marketplaces for the purpose of facilitating the buying and selling of stocks, stock options, bonds or commodity contracts.

North American Product Classification System

The following table provides the securities brokerage services as defined by the North American Product Classification System. The services listed are those for which there is trilateral agreement between the United States, Canada, and Mexico.

Industry	NAPCS Code	Title
52	1	Financial products
52	1.2	Brokering and dealing services
52	1.2.1	Brokering and dealing services for debt instruments
52	1.2.1.1	Brokering and dealing services for money market instruments
52	1.2.1.1.1	Brokering and dealing services for negotiable certificates of deposit
52	1.2.1.1.2	Brokering and dealing services for commercial paper issued by financial institutions
52	1.2.1.1.3	Brokering and dealing services for commercial paper issued by non-financial institutions
52	1.2.1.1.4	Brokering and dealing services for bankers' acceptances
52	1.2.1.1.5	Brokering and dealing services for treasury bills
52	1.2.1.1.9	Brokering and dealing services for other money market instruments
52	1.2.1.2	Brokering and dealing services for other debt instruments
52	1.2.1.2.1	Brokering and dealing services for corporate and trust notes and bonds
52	1.2.1.2.2	Brokering and dealing services for national government notes and bonds
52	1.2.1.2.3	Brokering and dealing services for state, provincial and local government notes and bonds
52	1.2.1.2.4	Brokering and dealing services for foreign government notes and bonds
52	1.2.2	Brokering and dealing services for equities
52	1.2.3	Brokering and dealing services for derivatives contracts
52	1.2.3.1	Brokering and dealing services for derivatives contracts, exchange-traded
52	1.2.3.1.1	Brokering and dealing services for futures contracts, exchange-traded
52	1.2.3.1.2	Brokering and dealing services for option contracts, exchange-traded
52	1.2.5	Brokering and dealing services for investment company securities
52	1.2.6	Brokering and dealing services for other financial instruments
52	1.2.7	Brokerage correspondent services
52	1.3	Financing related to securities
52	1.3.1	Securities lending
52	1.3.2	Repurchase agreements
52	1.3.9	Other financing related to securities
52	1.4	Trading securities and commodity contracts on own account
52	1.4.1	Trading debt instruments on own account
52	1.4.2	Trading equities on own account
52	1.4.3	Trading derivatives contracts on own account
52	1.4.4	Trading foreign currency (wholesale) on own account
52	1.4.9	Trading other securities and commodity contracts on own account
52	1.6.2.2	Trade execution, clearing, and settlement services for security and commodity contracts

The following table provides the investment advice services as defined by the North American Product Classification System. The services listed are those for which there is trilateral agreement between the United States, Canada, and Mexico.

Industry	NAPCS Code	Title
52	1.6.4	Financial planning and investment management services
52	1.6.4.1	Financial management consulting services (for business and government)
52	1.6.4.3	Personal financial planning and investment management services
52	1.6.4.3.1	Personal financial planning and advice services

Comparison to CPC Ver.2.1

The following table maps the NAPCS product codes to the CPC Ver.2.1 structure for classes 71521 and 71591.

CPC Code	Title	NAPCS Code
71521	Securities brokerage services	1.2 (52)
71591	Financial consultancy services	1.6.4 (52)

The CPC Ver.2.1 product classification structure does not provide the same level of detail that the NAPCS structure provides.

5. Evaluation of standard vs. definition and market conditions

Below is the U.S. PPI publication structure for the securities brokerage industry.

Index code	Index title
523120	Securities brokerage
523120P	Primary services
5231201	Brokerage services
523120101	Brokerage services, equities and ETFs
523120102	Brokerage services, all other securities
5231204	Other securities related services including margin lending and mutual fund sales
561510SM	Other receipts

Below is the U.S. PPI publication structure for the investment advice industry.

Index code	Index title
523930	Investment advice
523930P	Primary services
5239301	Investment advisory services
561510SM	Other receipts

The U.S. PPIs for securities brokerage and investment advice closely follow the NAPCS structure, although the NAPCS structure includes more detail in several areas.

6. National accounts concepts and measurement issues for the area related to GDP measurement

The Bureau of Economic Analysis (BEA) publishes GDP-by-industry and input-output data at the NAICS three-digit level, 523, encompassing Securities and Commodity Contracts Intermediation and Brokerage, Securities and Commodity Exchanges, and Other Financial Investment Activities. BEA publishes input-output data at the NAICS four-digit level – 5231, Securities and Commodity Contracts Intermediation and Brokerage and 5239, Other Financial Investment Activities.

Industry Estimates of GDP

The equity securities brokerage and all other securities brokerage PPIs are used by BEA as deflators for securities commissions to determine real output in the industry account.

BEA does not use the PPI Investment advice index in their industry output calculations because the Census Bureau does not provide a product code that is granular enough to deflate the industry. BEA do not use the specific PPI cell index for Other securities related services including margin lending and mutual fund sales specifically but, instead, they use the aggregate for the primary products of the industry, which includes margin lending and mutual funds sales, to deflate other detailed data for securities related indexes.

Personal Consumption Expenditures

The Personal Consumption Expenditures team, part of the National Income Product Account department at BEA, also uses our data to derive GDP. The National Economic Accounts (NEA) directorate uses PPI data in the estimates of Personal Consumption Expenditures (PCE) for services. For reference, the following link provides a Frequently Asked Questions document describing how PCE prices are derived:

http://bea.gov/faq/index.cfm?faq_id=521

PCE Services uses several PPIs in the financial services estimates:

PCE Series	PPI Index Code and Title
Exchange-listed equities	523120101- Brokerage services, equities and ETFs

Other direct commissions	523120102- Brokerage services, all other securities
Over-the-counter equity securities	523110201*- Dealer transactions, equity securities
Other imputed commissions	523110202*- Dealer transactions, debt securities and all other trading
Portfolio management and investment advice services (fixed weighted average of these two industry PPIs)	523920- Portfolio management
	523930- Investment advice

*These index codes are published in the Investment banking and securities dealing industry, NAICS 523110.

7. Pricing method(s) and criteria for choosing various pricing methods

Securities Brokerage

Types of prices used in the securities brokerage industry include flat fees, value-based commissions, loads, 12b-1 fees, interest payments, and other fees.

Flat Fees

Over the past several years, there has been a shift toward charging flat fees in the securities brokerage industry. Flat fees are typically charged per share transacted or per trade. Some firms charge different flat fees based on certain requirements (e.g., method used to place order, client's trade volume, value of brokerage account).

Brokerage firms often have their flat fees specified on price lists. An example of a typical flat fee is as follows: Firm A charges $9.99 per trade for the first 150 trades made during a quarter and $7.99 per additional trade.

For some security trades, additional fees may also apply. For options trades, a fee per contract may be added to the per trade fee. An example of a typical flat fee for an options trade would be: Firm A charges $9.99 per trade plus $0.75 per contract.

Trades made by institutional clients, such as banks and investment management firms, are also typically priced using flat fees. These flat fees are typically charged on a cents per share basis. If trade volume is not a price determining characteristic of a firm's institutional trading fee, the per traded share fee is collected. If trade volume is a price determining characteristic, the fee for a typical number of traded shares is collected.

Payment for order flow, a rebate paid to a broker by a securities dealer or specialist in exchange for delivering a flow of orders, is also typically assessed on a per traded share basis.

Value-based Commissions

Value-based commissions are charged as a percentage of the total value of an individual trade. For example, if a customer wants to purchase 100 shares of stock at $20 per share, and the broker's commission is 5 percent, the total fee is (100 x $20) x .05 or $100. For all value-based securities brokerage commissions, an estimated transaction price is collected. During the initial data collection, a typical transaction is selected. In subsequent months, respondents estimate the price that would be charged if they were to broker the sale of the same security to a similar buyer in the current period.

Characteristics of typical value-based bond transactions include the issuer of the bond, the face value of the bond, and the term to maturity. An estimated transaction price is also collected for value-based bond transactions.

When determining value-based commissions for options trades the following characteristics are held constant: underlying asset, number of contracts, type of option (e.g., call, put), time to expiry, whether the option is in-the-money or out-of-the-money, and the degree of moneyness (difference between the strike price and the current market or at-the-money price).

For all value-based options trades, an estimated transaction price is collected. During initial data collection, a typical call or put option is selected along with a typical number of contracts traded and time to expiry (e.g., 1 month to expiry, 3 months to expiry). The selected option is the one at the strike price with the greatest open interest (the number of contracts currently trading) at the time of initial collection.

For example, if the option with the greatest open interest has the third closest out-of-the-money strike price, the position of the option will be held constant at out-of-the-money and the degree of moneyness will be held constant at the third closest strike price to at-the-money (the current market price of the underlying equity).

The following page provides an example of how to determine the commission for a value-based options transaction. During the initial data collection, the respondent selects the underlying asset, the type of option (call or put), and the time to expiry. Using this information, the respondent uses his or her company's database to determine the option with the greatest open interest and its corresponding strike price, the option's degree of moneyness, and the option's premium. This example illustrates selection of the option premium to be referenced when providing prices using publicly available information.

Current Share Price (at-the-money) = $27.96

Current month: Jan 2012

(3) 3 months to expiry: Apr 2012

(2) Type of option

(1) Underlying asset

(4) Current share price: $27.96

(6) Corresponding strike price: $30.00

(5) Greatest open interest: 36,646

(7) Premium: $0.40

View By Expiration: Jan 12 | Feb 12 | Mar 12 | **Apr 12** | Jul 12 | Oct 12 | Jan 13 | Jan 14

Call Options — Expire at close Friday, April 20, 2012

Strike	Symbol	Last	Chg	Bid	Ask	Vol	Open Int
14.00	MSFT120421C00014000	13.70	0.00	12.80	14.65	4	20
15.00	MSFT120421C00015000	12.10	0.00	11.30	14.55	1	8
16.00	MSFT120421C00016000	9.70	0.00	10.55	13.20	10	10
18.00	MSFT120421C00018000	9.75	0.00	9.95	10.05	4	69
19.00	MSFT120421C00019000	8.70	0.00	8.95	9.05	4	21
20.00	MSFT120421C00020000	7.95	0.00	8.00	8.05	120	955
21.00	MSFT120421C00021000	6.75	0.00	7.00	7.05	4	581
22.00	MSFT120421C00022000	6.04	0.00	6.00	6.10	22	925
23.00	MSFT120421C00023000	4.90	0.00	5.05	5.10	15	875
24.00	MSFT120421C00024000	3.90	0.00	4.10	4.20	83	1,506
25.00	MSFT120421C00025000	3.25	0.00	3.25	3.30	18	11,007
26.00	MSFT120421C00026000	2.45	↓0.03	2.45	2.47	95	16,089
27.00	MSFT120421C00027000	1.71	↓0.05	1.73	1.76	156	19,886
28.00	MSFT120421C00028000	1.15	↓0.03	1.15	1.17	238	21,663
29.00	MSFT120421C00029000	0.70	↓0.01	0.71	0.73	240	31,571
30.00	MSFT120421C00030000	0.40	0.00	0.40	0.42	121	36,646
31.00	MSFT120421C00031000	0.20	↓0.02	0.22	0.23	145	17,878
32.00	MSFT120421C00032000	0.11	0.00	0.11	0.12	967	5,669
33.00	MSFT120421C00033000	0.08	0.00	0.04	0.07	50	859
34.00	MSFT120421C00034000	0.03	0.00	0.02	0.04	18	1,388
35.00	MSFT120421C00035000	0.01	0.00	N/A	0.02	2	1,619
38.00	MSFT120421C00038000	0.03	0.00	N/A	0.01	20	22
40.00	MSFT120421C00040000	0.01	0.00	N/A	0.01	50	864

Source: Yahoo Finance

Step 1: The respondent selects a call or put option for the underlying security. In this example, the underlying security is a share of Microsoft Corporation with a current market price of $27.96, and the respondent selects a call option that expires in 3 months.

- (1) Underlying Asset: Microsoft Corporation
- (2) Type of Option: Call
- (3) Time to Expiry: 3 months
- (4) Current Share Price (at-the-money)

Step 2: Find the option and its corresponding strike price with the greatest open interest. In this example, the option with the greatest open interest has a strike price of $30. The fact that the strike price ($30) is greater than the current share price ($27.96) indicates that the option will be out of the money and that its degree of moneyness will be the third closest out of the money.

- (5) Greatest Open Interest: 36,646
- (6) Corresponding Strike Price: $30.00
  - Position: Out of the money
  - Degree of Moneyness: Third closest out of the money
    - In subsequent pricing periods, the position and degree of moneyness is held constant. The strike price will not be held constant.

Step 3: Find the premium for the specific option selected in Step 2.

- (7) Premium: $0.40

Step 4: The respondent provides a typical number of contracts traded and the commission rate in order to calculate the total commission:

Premium:	$ 0.40
Number of Contracts:	100
Total Value of Trade:	$ 40.00
Commission Rate:	1.50%
Total Commission:	**$ 0.60**

Mutual Funds – Loads, 12b-1 Fees

Mutual fund sales loads are value-based percentage fees charged for the purchase or redemption of shares in a mutual fund. Investors pay front-end loads at the initial purchase of fund shares or back-end loads when they redeem their shares.

An estimated transaction price is collected for mutual fund transactions. During initial data collection, the following characteristics are collected for a typical mutual fund transaction: the name of the fund, the type of load (if any), the total investment in the fund, the net asset value per share, and the percentage fee charged for the load. The number of shares is calculated by dividing the total amount invested by the net asset value per share. In subsequent periods, the respondent updates both the net asset value per share and the percentage fee charged for the load.

Some back-end load mutual funds have contingent deferred sales loads. The load for these funds diminishes the longer an investor holds it. For these funds, the number of years the investor has held the fund is held constant. If the load fee changes for the selected number of years held, it will constitute a price change.

Securities brokers may also receive a 12b-1 fee from a mutual fund company for marketing and distributing a particular fund. The SEC allows mutual funds to use a percentage of fund assets to pay these distribution fees as long as the percentage fee is laid out in the fund's prospectus.

An estimated transaction price is collected for 12b-1 fees. During initial data collection, the following characteristics for a typical mutual fund are collected: the name of the fund, the number of shares traded, and the net asset value per share. The 12b-1 fee is then applied to the total value of the transaction (number of shares x net asset value per share). In subsequent periods, the respondent updates the net asset value per share and the 12b-1 percentage fee.

Load transactions and 12b-1 transactions are treated as separate transactions.

Margin Lending – Interest Payments

When providing margin lending services, brokers loan clients funds to purchase securities, in exchange for interest payments. The interest rate charged often depends on the value of the client's brokerage account. An estimated transaction price is also collected for margin loans.

Other Fees

Some securities brokerage firms charge flat fees for other services related to their brokerage activities. The following are some examples of other services and possible fees:

Service	**Fee**
Check returned for Non-sufficient Funds	$25.00
Electronic Transfer Returned for Non-sufficient Funds	$25.00
Worthless Securities Processing	$5.00
Paper Statement Fee	$2.00
Overnight Mail	$20.00
Account Transfers - Partial (Outgoing)	$25.00
Account Transfers - Full (Outgoing)	$60.00
Check Copy	$15.00
Stock Certificate Request	$75.00
Foreign Stock Certificate Request	$250.00

Other examples include annual fees for individual retirement accounts (IRAs) and Education Savings Accounts (ESAs).

Investment Advice

Types of prices used in the investment advice industry include flat fees, hourly fees, retainer fees, and fees based on assets under management in wrap fee programs.

Flat fees, hourly, and retainer fees

Hourly fees – Financial advisers typically have regular hourly rates that they charge for the provision of advice.

Flat fees – This type of price refers to cases in which a set price is charged for the entire advisory service or for a delivered plan.

Flat and Hourly fee – This combination pricing system is very common in the industry. This is often offered in cases in which the investment adviser charges an hourly rate for the initial review of the client's situation, and/or the post plan review and revision stage, while still charging a flat fee for the delivered plan.

Retainer fee – Some financial planning firms charge clients a retainer fee. In this case, the financial planner earns a regular periodic payment in exchange for being available to advise the client at virtually all times. Firms may sometimes set retainer prices based on a fixed rate or a percentage of the client's income.

Fees based on assets under management in a wrap fee program

For wrap fee programs or wrap fee accounts in which fees are billed as a percentage of non-discretionary assets under management, the advisory client typically pays an annualized fee for participation in the program. The fee is generally prorated and charged quarterly, in advance, based on the average-month end balance of the assets under management during the previous quarter. The fees generally range from 0.5 percent to 2.50 percent depending on the market value of the assets under management and the type of advisory services rendered.

The <u>assets under management</u> (AUM) are determined by four factors:

1. The amount of money initially deposited in the account.
2. The amount of additional money that is placed into the account over time (inflows).
3. The amount of money that is withdrawn from the account over time (outflows).
4. The rate of return earned on the investments in the account.

The initial price is set simply as the management percentage fee multiplied by the amount of assets under management in the account in the reference period.

In subsequent months, respondents provide two pieces of information:

1. The management fee.
2. The rate of return earned on the account during the most recently completed time period.

The assets under management from the previous time period are adjusted by the rate of return reported by the respondent; if the reporter is providing prices on a monthly schedule then the reporter provides the monthly rate of return. If the reporter provides prices on a quarterly schedule then the reporter provides the quarterly rate of return. After adjusting the prior period assets under management by the reported rate of return, the updated AUM figure is multiplied by the most recent management fee to calculate the price.

This formula for calculating the price takes into account the rate of return earned by the adviser but is not affected by inflows and outflows to the account. Changes in inflows and outflows are reflective of changes in the quantity of service being performed but are not reflective of changes in price. The earned rate of return, however, is a function of the service provided by the adviser and, therefore, is factored into the price calculation.

The management fee is sometimes expressed in terms of basis points. A basis point is equal to one one-hundredth of a percent. For example, if an investment adviser charges 10 basis points as their management fee, then the manager charges one tenth of one percent (or .001) of the assets under management in the portfolio as their fee.

The preferred type of price for all transactions in this industry is an estimated transaction price. Since each advisory service is highly customized and unique to the individual client, it is necessary for respondents to estimate a price that they would charge for a fixed level of service. This typically includes holding the type and complexity of planning provided and the characteristics of the client constant.

8. Quality adjustment methodology

Quality adjustments are applied if a broker or adviser changes the way a particular service is provided. For example, a securities broker may conduct equities brokerage services by speaking with clients on the phone, collecting information on their trade and then conducting the trade. If the firm then switches to only offering its clients a website to enter trades through, the brokerage service is considered to be changed and quality adjustment is applied. Respondents are asked to estimate the costs associated with the change in the service, and this value is used as the basis of quality adjustment. These types of substitutions requiring quality adjustments are rarely observed in practice.

9. Evaluation of comparability with turnover/output measures

Every five years, the U.S. Census Bureau calculates and publishes turnover data for the securities brokerage and investment advice industries in the Economic Census.

The Census Bureau also publishes quarterly turnover data for securities and commodity contracts intermediation and brokerage and other financial investment activities.

The concept of output for the financial sector is harmonious between U.S. PPI, Census Bureau and Bureau of Economic Analysis.

10. Summary

While pricing methodologies for financial service activities can be complex, defining and classifying the firms from which prices are collected can also be challenging. Many of the large financial institutions are comprised of multiple operating units providing services in many closely related NAICS industries, including securities brokerage, investment advice, investment banking and securities dealing, and portfolio management. These large firms also represent significant amounts of revenue in multiple industries, making it difficult to classify each of these firms into a single NAICS industry as PPI methodology instructs. This would mean that each of the large financial firms would only be represented in a single industry index and would be excluded from the rest.

In order to address this challenge, the largest firms are divided into multiple sample units based either on operating unit within the firm or primary service being collected. For instance, when collecting prices for the securities brokerage industry, a sample unit may be defined as only referring to the securities brokerage unit within the firm or only the securities brokerage activities of the firm, rather than the firm in its entirety. This allows services classified into multiple NAICS industries to be collected from a single firm as they would be if an index were based on NAPCS product lines.