A Guide to Understanding
I/B/E/S Terms and Conventions

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The I/B/E/S Glossary 2000

I/B/E/S International Inc.

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Contents

Introduction

About I/B/E/S

The Quality Source for Institutional Investors

For three decades, I/B/E/S® has been the quality source for institutional analyst estimates, research reports, tools and applied intelligence. Investment decision-makers around the globe trust I/B/E/S for innovative solutions, data of the highest caliber, reliable platforms and excellent supporting services. With so much to offer as one quality provider, I/B/E/S gives you the power you need to realize your potential and exceed expectations.

Unmatched Global Coverage

To meet the needs of our evolving marketplace, we have renewed our commitment to driving the global consensus earnings estimate industry—an industry that we created in the 1970's. Currently, I/B/E/S provides quality and timely analyst information on over 18,000 companies in 60 countries—more than any other source. And our database continues to grow daily as we add new data items, companies and contributors. In fact, our impressive list of contributors now includes more than 7,000 financial analysts from over 1,000 institutions. Forecast measures go beyond earnings per share to include 15 additional important data items, such as revenue, net income, EBITDA and pre-tax profit.

Commitment to Quality and Accuracy

As William Sharpe, Nobel Laureate says in his classic text *Investments:*

> "While I/B/E/S is not the only company collecting earnings expectations data...it was the first and it remains the leader in the field….
>
> "The systematic collection of earnings estimates is an excellent example of the forces that have been increasing the efficiency of security markets. Before I/B/E/S collected such data, consensus earnings estimates were difficult to obtain and highly ambiguous. Now these estimates are rigorously quantified and widely distributed, decreasing the likelihood of investors acting on incomplete or erroneous information."

We intend to keep our leadership position as the quality source. To that end, we have redoubled our efforts to ensure that everything that we do—data, technology and support—is of the highest quality possible. This includes having a trained staff of 75 research professionals dedicated to ensuring that our data is accurate and comparable.

Broad Product Set

At I/B/E/S we constantly seek new opportunities to add even more value to your business. Often, the answer lies in our technologically advanced platforms, products and services.

I/B/E/S Active Express®: the first fully integrated equity workstation, joining I/B/E/S quality analyst estimates with real-time notes, broker research, company fundamentals, your own data and much more, all on one easy-to-use platform. Active Express is designed to give you the information and tools you need to make superior investment and allocation decisions.

I/B/E/S Trapeze® and trapeze.net™: provide real-time commingled electronic access to the full-text research and morning notes from over 500 brokerage firms worldwide. Equipped with powerful navigation and management tools, Trapeze and trapeze.net get you behind the numbers—helping you to make the more informed, and therefore better, investment decision.

I/B/E/S Online: the most comprehensive site of live quality earnings expectations and research from over 850 brokers on 18,000 companies in 60 countries—more than any other service available. I/B/E/S Online (www.ibes.com) offers quality earnings forecasts, analysts' recommendations, stock charts, portfolio alerts, stock selection tools and more.

I/B/E/S Global Aggregates: provides the power of earnings expectation information aggregated for use in asset allocation, cross-border valuation, and index investing. Buying the right country at the right time may be more important than picking individual stocks, and Global Aggregates—available at the country, sector and industry levels—is ideal for effective market selection.

I/B/E/S Rewind: combines the world's most comprehensive earnings expectations database with flexible, easy-to-use software. The database contains annual EPS projections and actual results since January 1976, long term growth projections since 1981 and quarterly data since 1984. The database is free from survivorship bias, including all companies ever covered in the I/B/E/S database.

I/B/E/S ESP Model®: will improve investors' chances of anticipating positive surprises and avoiding unpleasant negative surprises. The model was designed in conjunction with Larry Brown and Jerry Han, two well-known academics. The model has been back-tested extensively and shows impressive predictive capabilities. Equally important to the model's forecasting ability is its ability to improve the returns of investors.

Comments – International, US and Canadian: provide in-depth observations on outlooks for equity markets, earnings growth and revisions data in monthly publications.

Electronic Delivery: All I/B/E/S data are available via 50 electronic sources, including Active Express and other I/B/E/S platforms, as well as the following redistributors:

> Bloomberg, Bridge, Data Downlink, Datastream/ICV, Disclosure, Dow Jones Markets, FactSet, Nasdaq, Reuters and Standard & Poor's.

About This Glossary

This Glossary has been prepared to aid your understanding of the financial and statistical data items, included or derived, in the I/B/E/S database. The Glossary consists of the following three sections:

- **I/B/E/S Conventions** - Detailed explanations of important terms to help you interpret the data item definitions in the Company and Aggregate sections.
- **Company Section** - Definitions of data items on the company level.
- **Aggregate Section** - Definitions of data items on the aggregate level.

We appreciate your feedback and suggestions. Please feel free to contact your I/B/E/S Account Executive in New York (+1-212-437-8200), in London (+44-20-7562-7000), in Tokyo (+81-3-5218-6566), or in Hong Kong (+852-2377-1469).

I/B/E/S Conventions

Please review the following I/B/E/S conventions, as they will aid in your understanding of the data item definitions in the Company and Aggregate sections.

Adding a Company to the I/B/E/S Database

To add a company to the I/B/E/S universe two criteria must be met. First there must be at least one analyst making forecasts on the company. Second, ample ancillary data (prices, dividends, etc.) must be available for the company. Once these conditions are met, the company is added to the database.

Defining Fiscal Periods

I/B/E/S Express contains estimate data for up to three Annual Fiscal Periods, four Quarter Fiscal Periods and Long Term Growth. (Analysts typically do not make forecasts for periods beyond the third fiscal year and fourth quarter.) Because not all companies have the same fiscal year end, we use the familiar FY1, FY2... convention to identify estimates for each unique period. The following is a description of how this labeling technique works:

The most recently reported earnings number is denoted as time slot **0 (** can be FY, Q, or SAN). A company's last reported annual earnings is referred to as FY0[1], the most recently reported quarter is Q0 and the most recent semiannual reported earnings is SAN0. Using these periods as a base, the period end dates for all estimated periods are easily found. If FY0 corresponds to the December 1997 year-end, the FY1 mean estimate is for December 1998 and the FY2 mean estimate is for the period ended December 1999. The same holds true for the interim periods. If Q0 refers to the period ended March 1998 (the last reported quarter), then the Q1 estimate is for the June quarter. A frequent misunderstanding is that Q1 refers to the *first fiscal quarter* instead of the *first estimated quarter.*

Clients that receive I/B/E/S data in raw database format (Q370, Q380, Summary History, Detail History etc.) must be familiar with a different convention. Instead of the FY1 and FY2 convention mentioned above, the raw data files use a *fiscal period indicator (sometimes called the forecast period number.*) The Fiscal Period Indicator is a one-byte alphanumeric code that carries the same meaning as FY1, Q1 etc. The principle reason a single character is used, is that on large data sets such as the I/B/E/S history files, a single byte saves considerable space and time for the end user and is easier to program against.

The following lists each Fiscal Period Indicator and the fiscal period to which it refers:

1=FY1	2=FY2	3=FY3
4=FY4	5=FY5	6=QTR1
7=QTR2	8=QTR3	9=QTR4

[1] There is one exception to this convention regarding FY0 values. In calanderized reports all companies are shifted simultaneously regardless of whether the company has actually announced earnings to the marketplace. In this instance the value for FY0 may still be an estimate and is subject to revision.

0=LTG	A=SAN1	B=SAN2
C=SAN3	D=SAN4	E=FY6
F=FY7	G=FY8	H=FY9
I=FY10	N=Q5	O=Q6
P=Q7	Q=Q8	

Shares Outstanding

Shares outstanding for the US is reasonably straightforward. Generally, the vast majority of contributing analysts provides forecasts for a single class of common shares. If two classes of shares exist, I/B/E/S uses the class of shares that is generally available to investors. In non-US markets however, this issue is somewhat less direct as there are often multiple classes of shares. Here the I/B/E/S convention is to include the class that the majority of analysts are covering. Secondary considerations are which class of shares has the highest public float and whether a given class of shares is available to non-nationals.

Basic vs. Diluted

Dilution occurs when a company issues securities that are convertible into common equity. Such issues can take the form of convertible bonds, rights, warrants or other instruments. When I/B/E/S refers to "fully diluted" earnings estimates it means that the forecasts assume that all eligible shares are converted. Fully diluted earnings per share are, by definition, less than basic EPS (which is based solely on common shares outstanding). I/B/E/S does not force analysts into forecasting on one basis or the other but rather lets the majority rule. In cases where an analyst follows a company on a basis that is different from the consensus, I/B/E/S adjusts his/her estimates to conform with the majority of analysts. To do this I/B/E/S stores a dilution factor for each company. This factor is calculated off of the company's last annual report. If an individual analyst follows a company on a fully diluted basis versus a majority of analysts with basic EPS forecasts his/her estimates are multiplied by the dilution factor. In the reverse scenario (individual analyst-basic vs. diluted consensus) the analyst's estimates are divided by the dilution factor.

Please refer to the following example:

Company XYZ is followed on a fully diluted basis by eight of the nine analysts making forecasts. The I/B/E/S consensus estimate for FY1 is $1.00 (fully diluted) and the dilution factor is 1.045. Analyst J. Smith is the sole analyst making forecasts on a Basic basis. His estimate for FY1 is $1.08. In the I/B/E/S database this estimate will be adjusted to $1.03 ($1.08/1.045) so that it appears on the same basis as the other eight analysts' estimates.

I/B/E/S Production Cycles

There are several ways to refer to the I/B/E/S monthly cycle dates, all of which refer to the same date. The most frequent definitions of the I/B/E/S run date are:

1. The Thursday that falls between the 14th and 20th of each month.
2. The Thursday before the third Friday of the month.
3. The Thursday of the week in which options expire.

The rationale for this mid-month date dates back to earlier days when most brokerage research was released by US Mail on the first of the month. The two-week lead-time was necessary to process, print and ship the data to clients. Today, of course, we process information overnight and deliver by the start of the next business day.

The I/B/E/S weekly cycle ends on the Thursday of each week.

Estimates to Actuals

I/B/E/S strives to report actual earnings as soon as they are released into the market place. For the US & Canada, earnings reports are culled directly from the newswires, adjusted for comparability with estimates and reported to subscribers via the Intra Day Surprise Report, which is delivered five times each trading day. In non-North American markets, where interim data is not prevalent, I/B/E/S receives reported earnings data from a variety of sources, which include: newswires (Bloomberg, Reuters, etc.), newspapers (Financial Times, regional financial press, etc.) and the contributing brokers themselves.

A frequent misconception among users of financial estimate data is that the day after a company's fiscal year ends, (based upon the calendar) FY1 estimates shift to the new calendar year. In the I/B/E/S database, an estimate remains on the database as an estimate until the company actually reports earnings to the marketplace. In the US this can be as long as 90 days after the end of a fiscal year period. For many non-US markets this period can be even longer, ranging up to 6 months after the close of a business period. Whatever the grace period, the FY1 estimate will remain until the company reports earnings.

Pricing Data

Updating Frequency – In our daily products, the previous day's closing price will be provided for all companies which have had a change in stock price greater than 0.5% on the previous day and/or an estimate revision. For all other products, US prices are updated each Wednesday and international prices are updated each Tuesday.

Source – I/B/E/S receives daily price changes from Extel for all geographic regions with the exception of Brazil, for which prices are received from Economatica.

One Month Ago Data & Calculations

A number of I/B/E/S measures are calculated by comparing current data to data as it existed "one month ago" (for example, one month % change in mean EPS, number of estimates raised or lowered over the past month, etc.). In non-historical products (daily and weekly products) all such data items are calculated using a rolling 4-week time frame.

In historical products, "One Month Ago" refers to the last I/B/E/S monthly cycle. The I/B/E/S monthly cycle always occurs on the Thursday before the third Friday each month and as a result, "One Month Ago" data can either be as of four weeks ago or five weeks ago, dependent on the month.

Non-historical product is produced on either a weekly or daily basis and the "One Month Ago" data rules are necessarily different.

The I/B/E/S weekly cycle takes place on every Thursday. At that point, all one month ago values shift to reflect the state of the database as it existed on the Thursday exactly four weeks prior. One-month % change values for **weekly products** are then calculated by comparing the current data to this base number. For **daily products** (such as I/B/E/S Active Express), even though the current number may change as daily updates are

received, the base comparison number will remain the same until the next weekly run, when it will shift one week forward. For example, if EPS revisions for a company are received on a Monday, the one-month percent change in the mean is calculated by comparing the current mean and the mean as it existed four weeks AND two days prior. If additional revisions were received on Tuesday, the period would be 4 weeks and three days. Hence, if daily revisions are made on a company, the time period used in the one-month % change calculations may be greater than 4 weeks. However, since the base period is re-set every Thursday, it will never reach 5 weeks.

Sector Industry Group Classification

I/B/E/S currently uses a proprietary classification scheme to categorize companies into homogenous groups according to business lines. In the United States a scheme similar to the S&P 500 Industry groupings is followed. The principle differences between the two are the result of new grouping being added to I/B/E/S in an effort to accommodate a larger, more diverse universe. For non-US companies a system loosely based on the Morgan Stanley Capital International Industry Classifications is used. Once again, the fact that the I/B/E/S universe is considerably larger than the MSCI index necessitates additional industry groups.

Net Income vs. Continuing Operations

With very few exceptions analysts make their earnings forecasts on a continuing operations basis. This means that I/B/E/S receives an analyst's forecast after discontinued operations, extra-ordinary charges, and other non-operating items have been backed out. While this is far and away the best method for valuing a company, it often causes a discrepancy when a company reports earnings. I/B/E/S adjusts reported earnings to match analysts' forecasts on both an annual and quarterly basis. This is why I/B/E/S actuals may not agree with other published actuals; i.e. Compustat.

A related issue is the restatement of earnings from a prior period. Occasionally a company will alter its treatment of an item on its income statement, which will result in the restatement of prior period's EPS numbers. At I/B/E/S, *reported earnings are not restated.* The reason for this is the preservation of the historical relationship between analysts' forecasts and reported earnings, based on the information that was known at that time. Consequently, reported earnings on the I/B/E/S database may not exactly match earnings that appear in a company's earnings releases.

Dealing with Mergers and Acquisitions

When two companies that are both represented in the I/B/E/S universe merge, one of them is considered the buyer and the other is considered as having been purchased. This is done to preserve a historical timeline for the new company. The new company will likely change CUSIP/SEDOL, Name, Official Ticker as well as any other identifiers with the exception of I/B/E/S ticker, which will be that of the purchasing company. In the I/B/E/S historical databases, all data relating to the purchased company will cease as of the purchase date.

Top Down vs. Bottom Up

Top-Down and Bottom-Up refers to earnings forecasts for market indices. Top-Down estimates are made by market strategists who treat an index as though it were an individual entity. On the other hand, Bottom-Up forecasts for an index are created by

I/B/E/S. They are a weighted average of the EPS forecasts for all of the companies comprising the index. There are several differences between Top-Down and Bottom-Up forecasts:

Top Down	Bottom Up
Forecast made by Market Strategists	Forecast is a compilation of thousands of analyst's earnings estimates
Include Write-offs	Earnings estimated on a "continuing operations" basis
Reported earnings are as reported by the index	Aggregate of I/B/E/S actuals
Actuals reflect historical composition of the index	Actuals reflect current composition of the index

Accounting Standards

The various accounting standards employed by Investment Analysts around the world are a complex lot. If you have specific questions regarding accounting standards for any of the markets represented in the I/B/E/S database please call our Data Center in New York at 800-438-4237 or +1 212-437-8200, in London at +44-20-7562-7000 or in Hong Kong at +852-2377-1469. You will be placed in contact with the I/B/E/S research analyst most qualified to answer your questions, or we will gladly mail you *I/B/E/S Accounting for Estimates,* a printed synopsis of analysts' treatment of accounting issues around the world.

Non-Numeric Data Codes

NA Not available (data necessary for the calculation are not available)

NM Not meaningful (the calculation results in a figure that is not meaningful, such as P/E where the EPS figure is less than or equal to 0.

VL Very large positive values

–VL Very large negative values

In growth and estimate percent change calculations:

–+ Value has gone from negative to positive, or negative to 0, or 0 to positive

N+ Value has gone from negative to less negative

N– Value has gone from negative to more negative, or 0 to negative

0 No change (this applies to 0 as well as negative numbers, e.g. 0 to 0, -10 to -10, etc.)

Company Data Section

Actual EPS, CPS or DPS

The reported annual earnings, cash flow or dividends per share for a company for the fiscal year indicated.

Actual EPS, CPS or DPS – Last Four Quarters or Two Semi-Annuals

For companies that report on a quarterly basis, this field will contain the sum of the actual earnings, cash flow or dividends for the previous four quarters. For companies that report semi-annually, the field will contain the sum of the previous two semi-annual actuals.

American Depository Receipt (ADR) Indicator

American Depository Receipts (or ADRs) are financial assets issued by US banks that represent indirect ownership of a certain number of shares of a specific foreign firm. ADRs are held on deposit in a bank in the firm's home country. A "Y" is used (in this field) to indicate that a company is an ADR.

Analyst

The name of the individual or department at the research organization providing forecast data to I/B/E/S.

Announcement Date

The date on which the company reported their earnings for the fiscal period indicated.

Basic/Diluted Indicator

Indicates the basis in which the estimates (including EPS, Dividends, Actuals) are represented.

See Also:
I/B/E/S Conventions (Basic vs. Diluted)

Beta

A measure of the sensitivity of a stock's price to the movement of an index (S&P 500). In I/B/E/S, the Beta factor is the slope of a straight line fitted to 156 observations of weekly relative price changes. These observations are equal to the ratio of the weekly percent price change in a particular stock to the weekly percent change of the S&P 500 (Note not all countries use the S&P 500 as their benchmark. Please see the chart below for more information). The slope is calculated using the least squares approach for a straight line and is equal to "b" in the following equation:

$$y = a + b*x$$

The slope is the rate of change of y with respect to x.

Country	Index
Argentina	Argentine Merval Index
Australia	Australia All Ordinary
Austria	ATX Index
Belgium	BEL 20
Brazil	Bovespa Stock Exchange
Canada	TSE 300
China	Shanghai Stock Exchange Index
Colombia	Bogota Stock Exchange Index
Czech Republic	Prague PX 50
Denmark	KFX
Finland	Helsinki Stock Exchange General Index
France	CAC 40
Germany	DAX
Greece	Athens Stock Exchange
Hungary	BUX-Hungary
Indonesia	Jakarta Composite Index
Ireland	ISEQ Overall
Italy	Milan MIB 30
Japan	TOPIX
Malaysia	Kuala Lumpur Composite Index
Norway	OBX Total Stock Exchange
Pakistan	Pakistan Stock Exchange
Peru	Lima Stock Exchange
Philippines	PSE All Share
Poland	WIG
Portugal	PSI 20
Russia	RTSI
Singapore	DBS 50
Slovak Republic	SAX
South Africa	JSE Overall Index
Spain	IBEX 35
Sri Lanka	Colombo All Share
Sweden	AFV General Index
Switzerland	Swiss Market Index
Taiwan	Taipei WTD Prices
Thailand	Bangkok SET Index
United Kingdom	FT All Share
United States	S&P 500
Venezuela	Caracas Stock Exchange

Cash Flow Per Share (CPS)

A corporation's cash flow from operations, before investing and financing activities, divided by the weighted average number of common shares outstanding for the year. Investing includes the sale or purchase of land, factories, buildings etc. Financing includes dividend payments, loan proceeds and sale of stock. I/B/E/S provides both expected and actual CPS data (where available).

Note: Interest payments are an operating activity.

See Also: *I/B/E/S Conventions (Shares Outstanding)*

Coefficient of Variation

The standard deviation of the estimates, for the period indicated, expressed as a percent of the mean estimate. This is a measure of the relative dispersion of estimates around the mean estimate. A small CV indicates a tight consensus (or, much agreement among the analysts.) A large CV indicates that analysts disagree on the company's future.

The Coefficient of Variation is calculated as follows:

$$\text{Coefficient of Variation (CV)} = \left(\frac{S}{\overline{X}} \right) * 100$$

where :

S = *Standard Deviation*

$\overline{X}$ = *Mean*

Coefficient of Variation (CV) – Industry Relative (Share Weighted)

The coefficient of variation of a company for the fiscal period indicated, relative to that of its industry coefficient of variation for the fiscal period indicated, share weighted. The coefficient of variation is defined as the standard deviation of the estimates expressed as a percent of the mean estimate. This is a measure of the relative scatter, or dispersion, around the mean estimate. A small CV indicates a tight consensus (or, much agreement among the analysts.) A large CV indicates that analysts disagree on the company's future.

The Share Weighted industry relative CV is calculated as follows where n is the companies in the industry:

Industry Relative CV FYX =

$$\frac{\text{12 Month Forward Standard Deviation}}{\text{12 Month Forward Mean}} \Bigg/ \frac{\sum_{i=1}^{n} \text{shares}_i * \text{12 Month Forward Standard Deviation}_i}{\sum_{i=1}^{n} \text{shares}_i * \text{12 Month Forward Mean}_i}$$

Coefficient of Variation, One Month Ago

The standard deviation of the estimates expressed as a percent of the mean estimate for the fiscal period indicated, as of 1 month ago. I/B/E/S calculates "one month ago" values on a four week rolling basis.

See Also:

I/B/E/S Conventions (Defining Fiscal Periods)

Coefficient of Variation, One-Month Percent Change

The difference expressed as a percentage, between the current coefficient of variation and the coefficient of variation one-month ago. I/B/E/S calculates "one month ago" values on a four week rolling basis.

The Coefficient of Variation, One-Month Percent Change is calculated as follows:

$$\left[\frac{(CV_m - CV_{m-1})}{CV_{m-1}}\right] * 100$$

where :

CV_m = *Current coefficient of variation*

CV_{m-1} = *Coefficient of variation one month ago*

See Also:

I/B/E/S Conventions (Defining Fiscal Periods)
I/B/E/S Conventions (One Month Ago Data & Calculations)

Company Estimate

Japanese companies are required by law to provide financial forecasts on their own companies. I/B/E/S displays company estimates in the same section (and in the same format) as the analyst detail estimates for the company. The company estimate, however, is not included in the calculation of the consensus forecast (i.e. mean).

Company Name

The full or abbreviated name most commonly used by analysts.

Contributor

The name of the research organization providing data to I/B/E/S.

Currency Code

An abbreviation of the currency name. For example, the currency code for US dollars is USD.

Currency Name

The full name of the currency (e.g. US dollars).

Current Estimate

The most recent forecast received from the contributor for the company and fiscal period indicated.

Current Estimate Date

The date the current forecast was entered into the I/B/E/S database.

CUSIP/SEDOL

The **CUSIP** is an 8-digit alphanumeric code assigned by the Standard and Poor's Corporation for US securities (including ADRs) as well as Canadian securities.

The **SEDOL** is a 6-digit numeric code assigned by the London Stock Exchange. I/B/E/S attaches the **Exchange Country Code** as a prefix to assist country identification.

Dilution Factor

A measure of the difference between basic and fully diluted earnings per share. Dilution occurs when a company has securities outstanding which can be converted into common stock (such as warrants, convertible debt, stock options, etc.). The dilution factor is based upon the ratio of a company's last reported actual basic EPS to its last reported diluted EPS.

See Also:

I/B/E/S Conventions (Basic vs. Diluted)

Dividends Per Share (DPS)

A corporation's common stock dividends on an annualized basis, divided by the weighted average number of common shares outstanding for the year. In the US dividend per share is calculated before withholding taxes (though for some non-US companies DPS is calculated after withholding taxes). I/B/E/S provides both expected and actual DPS data (where available).

Earnings Before Goodwill (EBG)

EBG measures a company's per share earnings before the amortization of goodwill. In some countries (France, for example) goodwill is treated as a part of ordinary income for companies and the amortized component of goodwill is added back to yield earnings *before goodwill amortization.* This is distinguished from the EPS measure, which is earnings per share that always deducts the goodwill amount and is thus an expression of per share earnings *after goodwill amortization.* EBG is thus a corporation's net income from continuing operations before goodwill amortization divided by the weighted average number of shares outstanding. I/B/E/S provides both expected and actual EBG data (where available).

Earnings Per Share (EPS)

A corporation's net income from continuing operations divided by the weighted average number of shares outstanding for the year. I/B/E/S provides both expected and actual EPS data.

See Also:

I/B/E/S Conventions (Net Income vs. Continuing Operations)
I/B/E/S Conventions (Shares Outstanding)
I/B/E/S Conventions (Basic vs. Diluted)

EBIT (Earnings Before Interest and Taxes)

Represents the earnings of a company before interest expense and income taxes paid. As such, EBIT is a gauge of corporate earnings before any debt servicing to creditors (including bondholders) and the payment of corporate taxes. It is calculated in general form by taking the pretax corporate income of a company, adding back interest expense on debt, and subtracting any interest capitalized. I/B/E/S provides both expected and actual EBIT data (where available).

Displayed in whole number terms (millions).

EBITDA (Earnings Before Interest, Taxes, Depreciation, and Amortization)

EBITDA gauges the raw earnings power of a company before debt servicing, corporate taxes, and any allowances made for depreciation and amortization costs the company faces. It is calculated in general form by taking the pretax corporate income of a company, adding back any depreciation and amortization costs charged, plus any interest expense on debt (subtracting any capitalized interest). I/B/E/S provides both expected and actual EBITDA data (where available).

Displayed in whole number terms (millions).

End Date

The calendar month and year-end corresponding to the fiscal period indicated. For example, FY1 (12/98) where FY1 is the fiscal period and 12/98 is the end date of that period.

See Also:
I/B/E/S Conventions (Defining Fiscal Periods)

Exchange

The name of the primary exchange on which the stock is traded.

Exchange Code

An alpha identifier corresponding to the name of the primary exchange on which the stock is traded. For example, the exchange code for the Toronto Stock Exchange in Canada is "J."

Exchange Country Code

The two character ISO (International Standards Organization) country identifier which indicates the country of the exchange where the stock is primarily traded. If a stock, for example, trades on the London Main Market, the exchange country code would be "GB."

Exchange Country Local Interest Rate

The local interest rate (or bond rate) in the country where the primary exchange on which the stock is traded is domiciled. For example, if a stock is primarily traded on the New York Stock Exchange (which is domiciled in the United States), this field will contain the current interest rate in the United States.

Exchange Country Local Interest Rate – Long Description

The complete name of the instrument used to determine the exchange country local interest rate. For example, if the stock is traded in the United States, the field would display "United States Government Bond - 10 Year."

Exchange Country Local Interest Rate – Short Description

An abbreviated description of the instrument used to determine the exchange country local interest rate. For example, if the long description of the instrument is the United States 10 year Government Bond, this field would display "US 10yr Gvt Bond."

Exchange Country Local Interest Rate Date

The date that the local interest rate (see "Exchange Country Local Interest Rate") was entered into the I/B/E/S system.

Exchange Rate Applied

The exchange rate between the currency a company reports in and the displayed currency selected by the user. For example, a company may report in Euro, but the user may wish to view the data in British Pence. The exchange rate between British Pence and Euro is the "Exchange Rate Applied."

Five Year Historical EPS Growth

The average annualized earnings per share growth for a company over the past five years. The average annualized growth in EPS for the past five years is calculated by measuring the slope of a least squares curve fit to the logarithm of the reported earnings (a log-linear curve) and is expressed as a percent. If quarterly data are available, the line is fit to the last 21 observations (minimum of 11 observations) of rolling four quarter EPS. The resultant slope is multiplied by four and exponentialized to obtain an annualized growth factor. If semi-annual data are available, the curve is fit to the last 11 (minimum of 6) observations of these semi-annual data. The resultant slope is multiplied by two and exponentialized to obtain an annualized growth factor. If only annual observations are available, the curve is fit to the last 6 annual (minimum of 3) observations (5 time periods) and the exponentiated slope is used to represent the growth factor. Zero and negative observations are excluded from the calculations.

Five Year Historical EPS Stability

Five-year earnings per share stability measures the consistency of earnings per share growth over the past five years. The lower the number, the more uniform growth has been. Combined with earnings growth data, the stability figure provides a multi-dimensional view of earnings growth over the past five years. Earnings stability is calculated as the mean absolute percentage difference between actual reported earnings per share and a five year historical EPS growth trend line, expressed as a percentage of trend line earnings per share.

The Five-Year Historical EPS Stability is calculated as follows:

$$\text{Stability} = \frac{\sum_{i=1}^{n}\left(\frac{\text{Earnings}(x_i) - \text{Trend}(x_i)}{\text{Trend}(x_i)}\right)}{n}$$

where:

$Earnings(x_i)$ = *Actual reported earnings for occurences*

$Trend(x_i)$ = *Calculated earnings per trend line* $= a * e^{b * x_i}$ (*trend point for* i^{th} *period*)

n = *Number of observations*

Five Year Historical EPS Growth, Industry Relative (Share Weighted)

A comparison of the historical average annual earnings per share growth for a company, to the aggregate earnings per share growth for the industry in which the company is classified. The value is calculated simply by dividing the historical growth rate for the company by the historical growth rate for the industry, which is a log-linear regression of the net income for the industry over the past twenty one quarters.

If the value is > 1, earnings growth for the company has exceeded that of the industry.

If the value is < 1, earnings growth for the industry has exceeded that of the company.

If the value is = 1, earnings growth for the company has been in line with that of the industry.

Flash Mean

The arithmetic average of **only** those estimates that have been received over the past four weeks, for the fiscal period indicated.

See Also:

Company Section (Mean)
I/B/E/S Conventions (One Month Ago Data & Calculations)

Flash Mean, Number of Estimates

The number of estimates that have been received over the past four weeks, for the fiscal period indicated. The arithmetic average of these estimates is the "Flash Mean."

Funds From Operations (FFO)

A measure used by real estate and other investment trusts to define the cash flow from trust operations. It is earnings with depreciation and amortization added back. A similar term increasingly used is Funds Available for Distribution (FAD), which is FFO less capital investments in trust property and the amortization of mortgages. I/B/E/S provides both expected and actual FFO data (where available).

Growth, FY1/FY0

A simple measure of one year earnings (cash flow or dividends) per share growth from the prior fiscal year (FY0) to the current fiscal year (FY1). Growth is expressed as a percent.

FY1/FY0 Growth is calculated as follows:

$$\text{FY 1/FY 0 EPS Growth} = \left[\frac{(\text{EPS}(t_1) - \text{EPS}(t_0))}{\text{EPS}(t_0)} \right] * 100$$

where :

$\text{EPS}(t_1) = \textit{Mean Earnings per share estimate for fiscal year } 1$

$\text{EPS}(t_0) = \textit{Actual reported earnings per share for fiscal year } 0$

See Also:

I/B/E/S Conventions (Defining Fiscal Periods)

Growth, FY2/FY1

A simple measure of one year earnings (cash flow or dividends) per share growth, measured from the current fiscal year (FY1) to the following fiscal year (FY2). Growth is expressed as a percent.

FY2/FY1 Growth is calculated as follows:

$$\text{FY2/FY1 EPS Growth} = \left[\frac{\left(\text{EPS}(t_2) - \text{EPS}(t_1)\right)}{\text{EPS}(t_1)}\right] * 100$$

where :

$\text{EPS}(t_2)$ = *The mean earnings per share estimate for fiscal year 2*

$\text{EPS}(t_1)$ = *The mean earnings per share estimate for fiscal year 1*

See Also:

I/B/E/S Conventions (Defining Fiscal Periods)

Growth, FY3/FY2

A simple measure of one year earnings (cash flow or dividends) per share growth, from fiscal year two (FY2) to the following fiscal year (FY3). Growth is expressed as a percent.

FY3/FY2 Growth is calculated as follows:

$$\text{FY3/FY2 EPS Growth} = \left[\frac{\left(\text{EPS}(t_3) - \text{EPS}(t_2)\right)}{\text{EPS}(t_2)}\right] * 100$$

where :

$\text{EPS}(t_3)$ = *The mean earnings per share estimate for fiscal year 3*

$\text{EPS}(t_2)$ = *The mean earnings per share estimate for fiscal year 2*

See Also:

I/B/E/S Conventions (Defining Fiscal Periods)

Growth, Industry Relative, FY1/FY0

A comparison of the projected earnings (cash flow or dividends) per share growth for a company for the current fiscal year, to the aggregate growth for the industry in which the company is classified.

FY1/FY0 Industry Relative Growth is calculated as follows:

$$\text{FY 1/FY 0 Industry Relative Growth} = \frac{100 - (\text{FY 1/FY 0 Growth for Company})}{100 - (\text{FY 1/FY 0 Growth for Industry})}$$

The industry aggregate is calculated on a bottom-up basis and is share weighted

If the value is > 1, projected earnings growth for the company exceeds that of the industry.

If the value is < 1, projected earnings growth for the industry exceeds that of the company.

If the value is = 1, projected earnings growth for the company is in line with that of the industry.

See Also:
Growth, FY1/FY0

Growth, Industry Relative, FY2/FY1

A comparison of the projected earnings (cash flow or dividends) per share growth for a company looking one year ahead, to the aggregate growth for the industry in which the company is classified.

FY2/FY1 Industry Relative Growth is calculated as follows:

$$\text{FY 2/FY 1 Industry Relative Growth} = \frac{100 - (\text{FY 2/FY 1 Growth for Company})}{100 - (\text{FY 2/FY 1 Growth for Industry})}$$

If the value is > 1, projected earnings growth for the company exceeds that of the industry.

If the value is < 1, projected earnings growth for the industry exceeds that of the company.

If the value is = 1, projected earnings growth

See Also:
Growth, FY2/FY1

Growth, Industry Relative, FY3/FY2

A comparison of the projected earnings (cash flow or dividends) per share growth for a company looking two years ahead, to the aggregate growth for the industry in which the company is classified.

FY3/FY2 Industry Relative Growth is calculated as follows:

$$\text{FY 3/FY 2 Industry Relative Growth} = \frac{100 - (\text{FY 3/FY 2 Growth for Company})}{100 - (\text{FY 3/FY 2 Growth for Industry})}$$

If the value is > 1, projected earnings growth for the company exceeds that of the industry.

If the value is < 1, projected earnings growth for the industry exceeds that of the company.

If the value is = 1, projected earnings growth for the company is in line with that of the industry.

See Also:
Growth, FY3/FY2

High Estimate

The greatest value in a set of estimates for a company, for the fiscal period indicated.

Home Country Code

The full name of the country where the company is domiciled. Note this can be different than the country of the exchange in which the security trades primarily.

I/B/E/S Country Code

The two-character country identifier assigned by I/B/E/S, which indicates the country where the company is domiciled.

Note: This can be different than the country in which the stock trades primarily.

I/B/E/S uses our own unique coding scheme, which is based on major geographic regions. However, you may prefer to use the ISO code, an international standard you may be more familiar with. As an example, the ISO Country Code for Germany is "DE" while the I/B/E/S Country Code is "ED."

Index, One-Month Percent Change

The percent change in the price of the primary local index (for the country a company is domiciled in) over the past four weeks.

See Also:

I/B/E/S Conventions (Defining Fiscal Periods)
I/B/E/S Conventions (One Month Ago Data & Calculations)

Indicated Annual Dividend

For US stocks, the Indicated Annual Dividend is four times the most recently paid quarterly dividend, after adjusting for splits. For non-US stocks, there is considerable variance across markets with regard to the frequency of dividend payments. Dividends may be paid quarterly, semiannually, or annually. I/B/E/S receives forecast dividend data from Extel, an independent vendor of financial information.

Industry Name

A secondary description of the homogeneous group of companies with similar business lines. I/B/E/S maintains its own proprietary classification system, which segregates companies at three different levels (Sector, Industry, Group). Sectors are subdivided into Industries, which are in turn subdivided into Groups. The US Industries are loosely based on the S&P 500 industry classifications and the classification system for non-US companies is similar to the Morgan Stanley Capital Index. In addition, I/B/E/S provides several reports that are based on "specialty" classification schemes such as the Toronto Stock Exchange 300 and the Dow Jones Equity Index.

See Also:

I/B/E/S Conventions (Sector Industry Group Classifications)

Interim Period Indicator

Indicates the periodicity of interim data. A "Q" indicates forecast and reported interim data is quarterly and an "S" indicates that the data is Semi-Annual. The majority of quarterly forecasts are provided in the US, Canada and Mexico while the majority of semiannual forecasts are available in Japan.

Interest Rate

The current yield of the government long-term bond (7-10 years) for the country in which the company is domiciled.

ISO Display Country Code

A two character ISO (International Standards Organization) country identifier which indicates where a company is domiciled.

Local Government Interest Rate

The current government long term bond yield in a company's home market. I/B/E/S uses a generic 10-year Bond yield calculated by Bloomberg. One current exception is Singapore where the generic yield calculation is based on a 7-year bond.

Local Government Interest Rate Date

The date the local government interest rate was updated on the database. Where available updates occur on a weekly basis with refreshed data available on Friday mornings.

Local Identifier

The identifier (official ticker or home market code) assigned by the primary exchange on which a stock trades in its home market. In the US the first four characters of the ticker are provided (many Nasdaq companies have five or six character tickers). For most non-US markets Bloomberg codes are provided as the Local Identifier.

Local Interest Rate – Short Description

An abbreviated description of the instrument used to determine the long-term bond rate. For example, Japan 10-Year Government Bonds are represented as "JPN 10yr Gvt Bnd".

Local Interest Rate – Long Description

The complete name of the instrument used to determine the long-term bond rate. For example, Japan Government Bonds - 10 Year.

Long Term Growth Forecast (LTG)

Long Term Growth Forecasts are received directly from contributing analysts, they are not calculated by I/B/E/S. While different analysts apply different methodologies, the Long Term Growth Forecast generally represents an expected **annual** increase in operating earnings over the company's next full business cycle. In general, these forecasts refer to a period of between three to five years. Due to the variance in methodologies for Long Term Growth calculations, I/B/E/S recommends (and uses as its default display) the median value for Long Term Growth Forecast as opposed to the mean value. The median value (defined as the middle value in a defined set of values) is less affected by outlier forecasts.

Low Estimate

The smallest value in a set of estimates for a company, for the fiscal period indicated.

Market Capital Per Analyst

The market capitalization of the company (price per share multiplied by shares outstanding) divided by the number of analysts covering the stock for the fiscal period indicated.

Market Capital Per Analyst is calculated as follows:

$$\text{Market Capital Analyst} = \frac{\text{Shares} * \text{Price}}{\#\,\text{Ests}}$$

Market Capitalization

The Market Capitalization (Market Cap) represents the total value (in local currency) of a company's outstanding equity. It is calculated by multiplying the number of shares outstanding by the latest closing price in the I/B/E/S database. The shares outstanding used for this calculation include only those shares underlying analysts' current earnings forecasts and may not include all classes of shares.

Market Capitalization is calculated as follows:

$$\text{Market Capitilization} = \text{Shares Outstanding} * \text{Closing Price}$$

Mean

The arithmetic average of estimates for the fiscal period indicated.

The Mean is calculated as follows:

$$\text{Mean} = \frac{\sum_{i=1}^{n} x_i}{n}$$

where :

x = *Individual Analysts' Forecast*

n = *Number of estimates*

Mean, One Month Ago

The arithmetic average of estimates as of one month ago, for the fiscal period indicated (inferred by one month is four weekly run cycles). This means that the one-month ago calculations can vary in the time span they cover.

The Mean, One-Month Ago is calculated as follows:

$$\text{Mean, One Month Ago} = \frac{\sum_{i=1}^{n} (x_{m-1})_i}{n}$$

where :

$(x_{m-1})_i$ = *Individual Analyst estimates as of one month ago*

n = *Number of estimates*

See Also:

I/B/E/S Conventions (Defining Fiscal Periods)
I/B/E/S Conventions (I/B/E/S Production Cycles)

Mean, One-Month Difference

The difference, expressed in local currency, between the current mean estimate and the mean estimate based upon a rolling 4-week monthly cycle.

The Mean, One-Month Difference is calculated as follows:

$$\text{Mean, One Month Difference} = M_c - M_{m-1}$$

where:

M_c = *Current Mean Estimate*

M_{m-1} = *Mean Estimate from prior month*

See Also:

I/B/E/S Conventions (Defining Fiscal Periods)
I/B/E/S Conventions (I/B/E/S Production Cycles)

Mean, One-Month Percent Change

The difference expressed as a percentage, between the current mean estimate and the mean estimate based upon a rolling 4-week monthly cycle.

The Mean, One-Month Percent Change is calculated as follows:

$$\text{Mean, One Month Percent Change} = \left[\frac{(M_c - M_{m-1})}{M_{m-1}}\right] * 100$$

where:

M_c = *Current Mean Estimate*

M_{m-1} = *Mean Estimate from prior month*

See Also:

I/B/E/S Conventions (Defining Fiscal Periods)
I/B/E/S Conventions (I/B/E/S Production Cycles)

Mean, One Week Ago

The arithmetic average of estimates as of the last weekly data refresh.

The Mean, One-Week Ago is calculated as follows:

$$\text{Mean, One Week Ago} = \frac{\sum_{i=1}^{n} (x_{w-1})_i}{n}$$

where:

$(x_{w-1})_i$ = *Individual Analysts' Estimate as of one week ago*

n = *Number of Estimates*

See Also:

I/B/E/S Conventions (Defining Fiscal Periods)
I/B/E/S Conventions (I/B/E/S Production Cycles)

Mean, One-Week Difference

The difference, expressed in local currency terms, between the current mean and the mean calculated on the most recent weekly refresh of the database.

The Mean, One-Week Difference is calculated as follows:

$$\text{Mean, One Week Difference} = M_c - M_{w-1}$$

where :

M_c = *Current Mean Estimate*

M_{w-1} = *Mean Estimate from prior week*

See Also:

I/B/E/S Conventions (Defining Fiscal Periods)
I/B/E/S Conventions (I/B/E/S Production Cycles)

Mean, One-Week Percent Change

The percentage difference between the current mean and the mean as of the most recent weekly refresh of the database. This calculation is not always a true "weekly" change calculation. While the current mean is updated each day, the period to which it is compared is static as of the previous Friday morning. As such, the window of change can range from 1 business day (Monday's data) to 5 business days (Thursday's data). Regardless of the day the calculation is made as follows:

The Mean, One-Week Percent Change is calculated as follows:

$$\text{Mean, One Week Percent Change} = \left[\frac{(M_c - M_{w-1})}{M_{w-1}}\right] * 100$$

where :

M_c = *Current Mean Estimate*

M_{w-1} = *Mean Estimate from prior week*

See Also:

I/B/E/S Conventions (Defining Fiscal Periods)
I/B/E/S Conventions (I/B/E/S Production Cycles)

Mean, Three Months Ago

The mean estimate based upon the data that appeared in the database three monthly data cycles ago.

The Mean, Three Months Ago is calculated as follows:

$$\text{Mean, Three Months Ago} = \frac{\sum_{i=1}^{n} (x_{m-3})_i}{n}$$

where :

(x_{m-3}) = *Individual Analysts' Estimate as of three months ago*

n = *number of estimates*

See Also:

I/B/E/S Conventions (Defining Fiscal Periods)
I/B/E/S Conventions (I/B/E/S Production Cycles)

Mean, Three-Month Difference

The difference, expressed in local currency terms, between the current mean estimate and the mean estimate calculated as of three monthly cycles ago.

The Mean, Three-Month Difference is calculated as follows:

$$\text{Mean, Three Month Difference} = M_c - M_{m-3}$$

where :

M_c = *Current Mean*

M_{m-3} = *Mean Estimate from three months ago*

See Also:

I/B/E/S Conventions (Defining Fiscal Periods)
I/B/E/S Conventions (I/B/E/S Production Cycles)

Mean, Three-Month Percent Change

The difference, expressed as a percentage, between the current mean estimate and the mean estimate calculated as of three monthly cycles ago.

The Mean, Three-Month Percent Change is calculated as follows:

$$\text{Mean, Three Month Percent Change} = \left[\frac{(M_c - M_{m-3})}{M_{m-3}}\right] * 100$$

where :

M_c = *Current Mean*

M_{m-3} = *Mean Estimate from three months ago*

See Also:

I/B/E/S Conventions (Defining Fiscal Periods)
I/B/E/S Conventions (I/B/E/S Production Cycles)

Median

That estimate which falls in the middle of the defined range of estimates, when arranged in ascending order. That is, the estimate within the sample that has an equal number of estimates both greater and less than itself.

i.e. In the range (5.0, 27.0, 28.0, 30.0, 39.0) the Median estimate is 28.0.

If the sample contains an even number of estimates, the Median is calculated as the average of the two middle estimates:

i.e. In the range (3.0, 6.0, 7.0, 8.0) the Median estimate is 6.5.

Median, One Month Ago

The median long-term growth estimate based upon a rolling 4-week monthly cycle. Because the monthly run remains static the actual duration for this calculation can vary somewhat.

See Also:

I/B/E/S Conventions (Defining Fiscal Periods)
I/B/E/S Conventions (I/B/E/S Production Cycles)

Morgan Stanley Capital International Perspective Flag

Indicates whether a company is included in the Morgan Stanley Capital International Perspective (MSCIP).

The indicators are as follows:

0 – The company is not included in the MSCIP.

1 – The company is included in the MSCIP and I/B/E/S is using the last reported annual actual earnings value from Morgan Stanley Capital International.

9 – The company is included in the MSCIP but I/B/E/S is **not** using the last reported annual actual earnings value from Morgan Stanley Capital International.

Note: This flag only indicates whether a company is followed by Morgan Stanley Capital International, and does **not** indicate whether the company is included in any of the MSCI indices.

Net Asset Value (NAV)

Net Asset Value is the total book value of a company's securities. It is calculated in general form by taking the total assets of a company and subtracting the value of the company's intangible assets (goodwill, patents, etc.) minus current and long-term liabilities. NAV is helpful in determining underpriced equities by indicating the ultimate value of a company's securities in the event of their liquidation. I/B/E/S provides both expected and actual NAV data (where available).

Displayed in whole number terms (millions).

Net Income (NET)

Net income is defined as a corporation's after-tax income. This item varies significantly from market to market as regards the inclusion or exclusion of non-recurring items. In most markets, non-recurring items are backed out of net income and this measure is restricted to income from continuing operations only (also referred to as normalized income). Some markets (Japan, for example) apply reported net income, including any and all extraordinary items. Recent accounting changes in still other markets (particularly Southeast Asia) have resulted in a reclassification of extraordinary versus exceptional items, bringing many formerly extraneous items above the net income line. I/B/E/S provides both expected and actual NET data (where available).

Number of Estimates

The number of estimates for a company, for the fiscal period indicated.

Number of Estimates, Industry Relative

The current number of estimates of a company for the fiscal period indicated, relative to that of the industry average current number of estimates for the fiscal period indicated.

The Number of Estimates, Industry Relative is calculated as follows:

$$\text{Average \# of Estimatesfor FYX} = \frac{\text{\# of FYX Estimates}}{\dfrac{\sum_{i=1}^{n} \text{\# of cal FYX Estimates}_i}{n}}$$

Number of Estimates Lowered

For non-historical products (such as Express) this value is calculated as follows:

The number of estimates that have been lowered (from their immediate previous values) over the last four weeks. New estimates and multiple estimate changes are not counted in this sum. For example, if during this four-week period, an analyst raises his/her estimate from 1.50 to 1.90, and then lowers that estimate from 1.90 to 1.75, it is counted as **one** estimate lowered, because only the immediate prior estimate is used in the calculation (from 1.90 to 1.75).

For historical products this value is calculated as follows:

The number of estimates that have been lowered (from the value as of the last monthly run) since the last monthly cycle. Once again, new estimates and multiple estimate changes are not counted in this sum. For example, if since the last monthly cycle, an analyst lowers his/her estimate from 1.80 (value as of last monthly run) to 1.70, and then revises that estimate from 1.70 to 1.75, it is counted as **one** estimate lowered, because only the estimate as of the last monthly run is used in the calculation (from 1.80 to 1.75).

See Also:
I/B/E/S Conventions (One Month Ago Data & Calculations)

Number of Estimates Raised

For non-historical products (such as Express) this value is calculated as follows:

The number of estimates that have been increased (from their immediate previous values) over the last four weeks. New estimates and multiple estimate changes are not counted in this sum. For example, if during this four-week period, an analyst lowers his/her estimate from 2.50 to 2.10 and then revises that estimate from 2.10 to 2.30, it is counted as **one** estimate raised, because only the immediate prior estimate is used in the calculation (from 2.10 to 2.30).

For historical products this value is calculated as follows:

The number of estimates that have been increased (from the value as of the last monthly run) since the last rolling 4-week monthly cycle. Once again, new estimates and multiple estimate changes are not counted in this sum. For example, if since the last monthly cycle, an analyst raises his/her estimate from 2.30 (value as of last monthly run) to 2.50 and then revises that estimate from 2.50 to 2.40, it is counted as **one** estimate raised, because only the estimate as of the last monthly run is used in the calculation (from 2.30 to 2.40).

See Also:
I/B/E/S Conventions (One Month Ago Data & Calculations)

Number of Estimates, One Month Ago

The number of estimates as of four weeks ago.

Number of Estimates, One-Month Percent Change

The percent change in the number of estimates over the last four weeks.

Number of Estimates, Three Months Ago

The number of estimates as of three monthly data cycles ago.

Number of Estimates, Three-Month Percent Change

The percent change in the number of estimates over the past three monthly data cycles.

Operating Profit (OPR)

Operating Profit is the difference between a company's revenues and its costs and expenditures arising directly out of a company's regular operations. Operating Profit is calculated before any deductions in income owing to non-operating activities (generally such items as interest expense, corporate tax payments, material gains or losses arising from changes in accounting policy, and the like) and excludes any income derived from outside the firm's regular activities. I/B/E/S provides both expected and actual OPR data (where available).

Displayed in whole number terms (millions).

P/E Ratio – Actual

The price/earnings ratio for the company based on the most recent closing price in the I/B/E/S database and the last reported annual earnings per share.

The P/E Ratio, Actual is calculated as follows:

$$\text{P/E Ratio} = \frac{\text{Latest Closing Price}}{\text{Reported EPS}}$$

P/E Ratio – Estimate

The price/earnings ratio for the company based on most recent closing price in the I/B/E/S database and the I/B/E/S annual mean expected earnings for the fiscal period selected. For example, a company's FY1 P/E ratio would be calculated by dividing the latest closing price by the mean FY1 EPS forecast.

The P/E Ratio, Estimate is calculated as follows:

$$\text{P/E Ratio} = \frac{\text{Latest Closing Price}}{\text{Mean EPS}}$$

P/E, Industry Relative (Share Weighted)

The company's expected price/earnings ratio for the fiscal period indicated, share weighted, relative to that of its industry.

The Share Weighted Industry Relative P/E Ratio is calculated as follows:

$$\text{Industry Relative P/E Ratio} = \frac{\text{price}}{\text{cal FYX EPS}} \Big/ \frac{\sum_{i=1}^{n} \text{shares}_i * \text{price}_i}{\sum_{i=1}^{n} \text{shares}_i * \text{cal FYX EPS}_i}$$

P/E/Growth Ratio (PEG)

The price/earnings to growth ratio for the company for the fiscal period selected. The numerator in the equation, is the P/E ratio for the fiscal period selected (see P/E Ratio – Estimate). The denominator is the appropriate growth rate for the fiscal period (as described below).

FY1 PEG:	(FY1 P/E) / (FY1/FY0 Growth)
FY2 PEG:	(FY2 P/E) / (FY2/FY1 Growth)
FY3 PEG:	(FY3 P/E) / (FY3/FY2 Growth)
12-Month-Forward PEG:	(12-Month-Forward P/E) / (Long Term Growth Median)
12-Month-Forward PEG*:	(12-Month-Forward P/E) / (12-Month-Forward Growth)
24-Month-Forward PEG:	(24-Month-Forward P/E) / (Long Term Growth Median)
24-Month-Forward PEG*:	(24-Month-Forward P/E) / (24-Month-Forward Growth)

* **Note:** Alternate formula used for I/B/E/S Active Express data.

Parent/Consolidated Indicator

Indicates whether the company is carried (by I/B/E/S) on a parent or consolidated basis.

If the company is carried on a Parent basis, earnings per share is calculated as the net income from operations of the parent company plus dividends, interest, royalties, etc. received from subsidiaries.

If the company is carried on a Consolidated basis, the operating income of the parent company, as well as the operating income of all subsidiaries in which the parent holds a 20% stake or more are included in earnings per share. The way a company appears on the database is based on the majority of the earnings estimates received.

Profit Before Taxes

Net Income before tax expense. Where applicable, extraordinary items and non-recurring charges are also backed out of net income.

Previous Estimate

The prior forecast received from the contributor for the company and fiscal period selected.

Previous Estimate Date

The date the prior forecast was entered into the I/B/E/S database.

Price Date

The trading date upon which the most recent closing price (in the I/B/E/S database) is based.

See Also:
I/B/E/S Conventions (Pricing)

Price, Fifty-Two Week High

The highest closing per share price of the stock over the past fifty-two weeks.

See Also: I/B/E/S Conventions (Pricing)

Price, Fifty-Two Week Low

The lowest closing per share price of the stock over the past fifty-two weeks.

See Also:
I/B/E/S Conventions (Pricing)

Price Latest

The latest per share closing price of the stock in the I/B/E/S database.

Note: For shares that trade infrequently, this is the price as of the last trading date.

See Also:
I/B/E/S Conventions (Pricing)

Price, One Month Ago

The per share price of the stock since the last rolling 4-week monthly cycle.

See Also:
I/B/E/S Conventions (Pricing)
I/B/E/S Conventions (I/B/E/S Production Cycles

Price, One-Month Percent Change

The percent change in the stock price since the last rolling 4-week monthly cycle.

The Price, One-Month Percent Change is calculated as follows:

$$\text{Price, One Month Percent Change} = \left[\frac{(P_c - P_{m-1})}{P_{m-1}}\right] * 100$$

where:

P_c = *Current Price*

P_{m-1} = *Price one month ago*

See Also:
I/B/E/S Conventions (Pricing)
I/B/E/S Conventions (I/B/E/S Production Cycles)

Price, Three Months Ago

The per share price of the stock as of three monthly data cycles ago.

See Also:
I/B/E/S Conventions (Pricing)
I/B/E/S Conventions (I/B/E/S Production Cycles)

Price, Three-Month Percent Change

The percent change in the stock price since the monthly run, three monthly data cycles ago.

The Price, Three-Month Percent Change is calculated as follows:

$$\text{Price, Three Month Percent Change} = \left[\frac{\left(P_c - P_{m-3}\right)}{P_{m-3}}\right] * 100$$

where :

P_c = *Current Price*

P_{m-3} = *Price three months ago*

See Also:

I/B/E/S Conventions (Pricing)
I/B/E/S Conventions (I/B/E/S Production Cycles)

Rank (#)

The relative position of the company in the universe displayed, based on the current sort.

Recommendations

The analysts' rating for a particular company. I/B/E/S maintains these ratings in the following two formats:

A. Broker Text - The actual recommendation received from the contributor, in their text.

B. I/B/E/S Text - As many brokers have different ratings, I/B/E/S maintains a standard set of recommendations, each with an assigned numeric value:

1. Strong Buy
2. Buy
3. Hold
4. Underperform
5. Sell

Each recommendation received from the contributors is mapped to one of the I/B/E/S standard ratings. Assigning a numeric value to the broker text enables I/B/E/S to calculate a consensus recommendation.

Consensus Recommendation - The consensus recommendation appears as the mean of the assigned values as well as text. The consensus text is determined by rounding the mean value (calculated to 7 decimal places) to the nearest integer and matching it to the corresponding I/B/E/S text. Some examples are as follows:

Mean Value	Rounded Value	Text
1.3445623	1	Strong Buy
3.567234	4	Underperform
4.7723114	5	Sell
2.8942115	3	Hold
1.8945452	2	Buy

Return on Assets (ROA)

Return on Assets is a profitability ratio and as such gauges the return on investment of a company. Specifically, ROA measures a company's operating efficiency regardless of its financial structure (in particular, without regard to the degree of leverage a company uses) and is calculated by dividing a company's net income prior to financing costs. I/B/E/S provides both expected and actual ROA data (where available).

$$\text{ROA (Return on Assets)} = \frac{\text{EBIT}}{\text{Average Total Assets}}$$

where :

EBIT = Earnings Before Interest and Taxes

ROA is displayed as a percentage.

Return on Equity (ROE)

Return on Equity is another profitability ratio which gauges return on investment by measuring how effectually stockholder money is being employed by the company. ROE is calculated by dividing a company's net income by average total equity. Unlike ROA, ROE does consider the degree to which a company uses leveraging, as interest expense paid to creditors is generally deducted from earnings to arrive at Net Income. I/B/E/S provides both expected and actual ROE data (where available).

$$\text{ROE (Return on Total Equity)} = \frac{\text{Net Income}}{\text{Average Total Equity}}$$

ROE is displayed as a percentage.

Review Date

The date that the most recent forecast was last confirmed by the I/B/E/S research staff with the contributor.

Sales (SAL)

The Sales measure is a corporation's net revenue, generally derived from core business activities. For non-financial companies, the calculation of net revenue (or net turnover) in most markets generally involves subtracting transportation and related operational costs from gross revenue/sales. Revenue recognition practices vary significantly from market to market, though generally the recording of revenue is based upon sales invoices issued (or anticipated for forecast purposes) during the accounting period.

For banks, revenue is generally defined as net interest income plus net non-interest income. Net interest income is defined as interest income minus interest expenses. Net interest income components generally include net interest earned on loans, reserve deposits and deposits with other banks, and net interest earned from interbank money market operations (IMMO) and marketable securities. Net non-interest income components generally include net income from fees and commissions, net gains from capital market and foreign exchange operations, and net income earned from participations.

For insurance companies, revenue is generally defined as net technical income plus net financial income. Net technical income is generally defined as technical income minus technical expenses. Technical income components generally include income from

premiums and commissions received, reinsurer's share of claims paid, transferred net technical reserves, and reinsurer's share of technical reserves. Net financial income is generally defined as financial income minus financial expenses. Net financial income components generally include net interest income, net dividend income, and net foreign exchange gains.

I/B/E/S provides both expected and actual SAL data (where available).

Sector Name

The primary description of a homogeneous group of industries that make up a major subset of the market. Both the US and non-US databases are comprised of 11 sectors. I/B/E/S also provides a specialty report for Canadian companies based on the sector breakdown of the Toronto Stock Exchange 300, which has 14 Sectors.

See Also:

I/B/E/S Conventions (Sector Industry Group Classifications)

Shares Outstanding

A measure of the amount of common stock that can be publicly traded. The number of shares outstanding is given in millions of shares. *This number includes only the class of shares on which estimates are being made.*

Standard Deviation

The statistical measure of dispersion of estimates for the fiscal period indicated. The standard deviation is the average variance from the mean expressed in local currency.

The Standard Deviation is calculated as follows:

$$\text{Standard Deviation} = \sqrt{\frac{\sum_{i=1}^{n}\left(x_i - \bar{x}\right)^2}{n-1}}$$

where:

x = *individual analysts' estimates*

$\bar{x}$ = *mean forecast*

n = *number of estimates*

Standard Deviation, One Month Ago

The statistical measure of dispersion of estimates as of the most rolling 4-week monthly data cycle.

The Standard Deviation, One-Month Ago is calculated as follows:

$$\text{Standard Deviation, One Month Ago} = \sqrt{\frac{\sum_{i=1}^{n}\left(x_{(m-1)_i} - \bar{x}_{(m-1)}\right)^2}{n-1}}$$

where:

x_{m-1} = *individual analysts' estimates as of one month ago*

$\bar{x}_{m-1}$ = *mean forecast as of one month ago*

n = *number of estimates*

Standard Deviation, One Week Ago

The statistical measure of dispersion of estimates as of one week ago, for the fiscal period indicated.

The Standard Deviation, One-Week Ago is calculated as follows:

$$\sqrt{\frac{\sum_{i=1}^{n}\left(x_{(w-1)_i} - \bar{x}_{(w-1)}\right)^2}{n-1}}$$

where

$x_{w\text{-}1}$ = *individual analysts estimates as of one week ago*

$\bar{x}_{w\text{-}1}$ = *the mean forecast as of one week ago*

n = *number of estimates*

Standard Deviation, Three Months Ago

The statistical measure of dispersion of estimates as of three months ago, for the fiscal period indicated.

The Standard Deviation, Three Months Ago is calculated as follows:

$$\text{Standard Deviation, Three Month Ago} = \sqrt{\frac{\sum_{i=1}^{n}\left(x_{(m-3)_i} - \bar{x}_{(m-3)}\right)^2}{n-1}}$$

where:

x_{m-3} = *individual analysts' estimates as of three months ago*

$\bar{x}_{m-3}$ = *mean forecast as of three months ago*

n = *number of estimates*

SUE

The SUE (Standardized Unanticipated Earnings) Score, measures the number of standard deviations the actual (reported) earnings differ from the I/B/E/S Surprise mean estimates for a company, for the fiscal period indicated.

The SUE Score is calculated as follows:

$$\text{SUE} = \frac{\text{Actual EPS} - \text{Surprise Mean}}{\text{Standard Deviation}}$$

If all EPS estimates for a company are exactly the same, the SUE score cannot be calculated. In such a case one of the following codes will appear:

=NC, If the reported EPS is equal to the Surprise mean.

–NC, If the reported EPS is below the Surprise mean.

+NC, If the reported EPS is above the Surprise mean.

Surprise Mean

The arithmetic average of estimates at the release of earnings to the marketplace, for the fiscal period indicated.

Surprise, Percent

The difference, expressed as a percent, between the actual (reported) earnings and the I/B/E/S Surprise mean EPS estimate for a company, for the fiscal period indicated.

The Surprise, Percent is calculated as follows:

$$\text{Surprise Percent} = \frac{\text{Actual EPS} - \text{Surprise Mean EPS}}{\text{Surprise Mean EPS}} * 100$$

Surprise Number of Estimates

The number of estimates for a given interim period at the announcement.

Surprise Price

The closing price of a stock one day prior to the earnings announcement.

Surprise Standard Deviation

The statistical measure of dispersion of estimates comprising the surprise mean on the announcement date.

The Surprise Standard Deviation is calculated as follows:

$$\sqrt{\frac{n\sum x^2 - \left(\sum x^{-2}\right)}{n(n-1)}}$$

where :

x = *individual analysts' estimate*

n = *number of estimates*

Twelve-Month-Forward Growth Rate

The projected growth in a company's EPS over the next 12 months. Twelve-Month-Forward Growth is calculated on a constant 12-month pro-rated basis. For example, if the current date is May, the twelve-month-forward calculation will sum 7/12 of the FY1 forecast and 5/12 of the FY2 forecast; in June the calculation will sum 6/12 of the FY1 forecast and 6/12 of the FY2 forecast.

Twelve-Month-Forward Growth, One-Month Change

The change in the Twelve-Month-Forward Growth Rate expressed as a percentage since the most recent monthly run.

The Twelve-Month-Forward Growth Rate, One-Month Change is calculated as follows:

$$12\ \text{Month Fwd Growth}_{m-1} - 12\ \text{Month Fwd Growth}$$

where :

$12\ \textit{Month Fwd Growth} = \textit{Expected earnings growth rate for next}\ 12\ \textit{months}$

$12\ \textit{Month Fwd Growth}_{m-1} = \textit{Expected earnings growth for the}\ 12\ \textit{months forward commencing}\ 1\ \textit{month ago}$

See Also:

I/B/E/S Conventions (I/B/E/S Production Cycles)

Twelve-Month-Forward Growth, Three-Month Change

The change in the Twelve-Month-Forward Growth Rate over the past three monthly data cycles.

$$12\ \text{Month Fwd Growth}_{m-3} - 12\ \text{Month Fwd Growth}$$

where :

$\textit{12 Month Fwd Growth} = \textit{Expected earnings growth rate the for next 12 months}$

$\textit{12 Month Fwd Growth}_{m-3} = \textit{Expected earnings growth for the 12 months forward commencing 3 months ago}$

See Also:

I/B/E/S Conventions (I/B/E/S Production Cycles)

Yield

The indicated annual or consensus dividend forecast as a percentage of the current price.

The Yield is calculated as follows:

$$\text{Yield} = \left(\frac{\text{IAD}}{\text{Current Price}} \right) * 100$$

Aggregate Section

In addition to the consensus data on the company level, I/B/E/S also calculates aggregates on the country, sector and industry level. In order gain a better understanding of how these aggregates are calculated, it is important to understand how data on the company level is manipulated prior to aggregation.

Calendarization

All company level data are calendarized prior to aggregation.

I/B/E/S follows the Compustat rule when sorting fiscal year data into calendar years.

Data for fiscal years ending between January and May of the current calendar year are included in the aggregate for the prior calendar year. Data for fiscal years ending between June and December of the current calendar year are included in the current calendar year aggregate. As May is the cut-off month, we say that a May "roll-back" is applied.

For example: Data for a company with a fiscal year ending 1/98 is included in the 1997 aggregate. Data for a company with a fiscal year ending 8/98 are included in the 1998 aggregate.

The table below shows the fiscal year-end dates for 10 companies:

Company	FY0 End Date	FY1 End Date	FY2 End Date
AT&T CORPORATION	9712	9812	9912
ABBOTT LABS	9712	9812	9912
ADC TELECOM	9710	9810	9910
ADELPHIA COMM CORPORATION	9803	9903	0003
ALUMINUM COMPANY OF AMERICA	9712	9812	9912
AMERICA ONLINE INC DEL	9706	9806	9906
AMERICAN MED RESPONSE INC	9712	9812	9912
AMERICAN PACIFIC CORP	9709	9809	9909
AMERICAN STORES CO	9801	9901	0001

The following table shows the fiscal year-end dates for the same 10 companies sorted into calendar years:

Company	1997	1998	1999
AT&T CORPORATION	9712	9812	9912
ABBOTT LABS	9712	9812	9912
ADC TELECOM	9710	9810	9910
ADELPHIA COMM CORPORATION	9803	9903	0003
ALUMINUM COMPANY OF AMERICA	9712	9812	9912
AMERICA ONLINE INC DEL	9706	9806	9906
AMERICAN MED RESPONSE INC	9712	9812	9912
AMERICAN PACIFIC CORP	9709	9809	9909
AMERICAN STORES CO	9801	9901	0001
AMETEK INCORPORATED	9712	9812	9912

Aggregates are generally calendarized to a December calendar year. The exceptions to this rule are aggregates for Japan, Australia and New Zealand. Japanese aggregates are

calendarized to a March calendar year as the majority of companies in Japan have fiscal years ending in March. Australian and New Zealand aggregates are calendarized to a June calendar year as the majority of companies in Australia and New Zealand have fiscal years ending in June.

For Japan, I/B/E/S applies an August "roll-back" when calendarizing the data.

For Australia and New Zealand, I/B/E/S applies a November "roll-back" when calendarizing the data.

Same Sample Set

All calculations which span more than one fiscal year (i.e. a calendarized FY1 growth calculation) or which involve two separate time periods (as with month-to-month growth calculations) are preformed using the same sample set. This means that companies with no FY2 forecast data are excluded from the aggregate FY2 growth calculation. Similarly, companies with no one-month-ago data are excluded in month-to-month change calculations.

Calendar Year Roll-Over

Aggregate data for specific calendar years is presented as calendarized fiscal year data – CAL FY0, CAL FY1, CAL FY2 and CAL FY3.

The calendar year of FY1 is based on the present date. When a calendar year comes to an end (December) and a new calendar year begins (January), one would expect the calendarized data for FY1 to shift, or "roll-over" from the year that has just ended to the new year.

I/B/E/S however lags the shift by one month, as the earnings for the prior calendar year are still estimates. Thus, it is not until February that the current calendar year is considered calendar FY1. As February is the cut-off, we say that a February "roll-over" is applied.

For Japan, I/B/E/S applies a May "roll-over" when shifting calendar years.

For Australia and New Zealand, I/B/E/S applies an August "roll-over" when shifting calendar years.

In the Data Item Definitions, you will see *CAL* before several fields used in the calculations. This indicates that the company level data has been calendarized. Both the roll-back and the roll-over have been applied.

Coefficient of Variation (CV) (Equal Weighted)

The average coefficient of variation for the calendar year, equally weighted. The coefficient of variation is defined as the standard deviation of the estimates expressed as a percent of the mean estimate. This is a measure of the relative dispersion of forecasts around the mean estimate. A low CV indicates a tight consensus (or, a high level of agreement among analysts). A high CV indicates that analysts disagree on the company's future.

The Equal Weighted CV is calculated as follows:

$$\text{CV FYX} = \left[\frac{\text{cal FYX Standard Deviation}}{\text{cal FYX Mean}} - 1 \right] * 100$$

Coefficient of Variation (CV) (Share Weighted)

The average coefficient of variation for the calendar year, share weighted. The coefficient of variation is defined as the standard deviation of the estimates expressed as a percent of the mean estimate. This is a measure of the relative dispersion of forecasts around the mean estimate. A low CV indicates a tight consensus (or, a high level of agreement among analysts). A high CV indicates that analysts disagree on the company's future.

The Share Weighted CV is calculated as follows:

$$\text{CV FYX} = \left[\frac{\sum_{i=1}^{n} \text{shares}_i * \text{cal FYX Standard Deviation}_i}{\sum_{i=1}^{n} \text{shares}_i * \text{cal FYX Mean}_i} - 1 \right] * 100$$

Coefficient of Variation (CV) – Twelve-Month-Forward (Equal Weighted)

The average coefficient of variation for the 12-month-forward forecast, equally weighted. The coefficient of variation is defined as the standard deviation of the estimates expressed as a percent of the mean estimate. This is a measure of the relative dispersion of forecasts around the mean estimate. A low CV indicates a tight consensus (or, a high level of agreement among analysts). A high CV indicates that analysts disagree on the company's future.

The Equal Weighted CV is calculated as follows:

$$\text{CV } 12-\text{Month}-\text{Forward} = \left[\frac{\text{12 Month Forward Standard Deviation}}{\text{12 Month Forward Mean}} - 1 \right] * 100$$

Coefficient of Variation (CV) – Twelve-Month-Forward (Share Weighted)

The average coefficient of variation for the 12-month-forward forecast, share weighted. The coefficient of variation is defined as the standard deviation of the estimates expressed as a percent of the mean estimate. This is a measure of the relative dispersion of forecasts around the mean estimate. A low CV indicates a tight consensus (or, a high level of agreement among analysts). A high CV indicates that analysts disagree on the company's future.

The Share Weighted CV is calculated as follows:

$$\text{Weighted CV } 12-\text{Month}-\text{Forward} = \left[\frac{\sum_{i=1}^{n} \text{shares}_i * \text{12 Month Forward Standard Deviation}_i}{\sum_{i=1}^{n} \text{shares}_i * \text{12 Month Forward Mean}_i} - 1 \right] * 100$$

Coefficient of Variation (CV) – LTG (Equal Weighted)

The standard deviation of the estimates, for the Long-Term Growth period, expressed as a percent of the mean estimate. This is a measure of the relative dispersion of estimates around the mean estimate. A small CV indicates a tight consensus (or, much agreement among the analysts). A large CV indicates that analysts disagree on the company's future.

$$\text{CV LTG} = \frac{\text{Mkt Cap} * \text{LTG Standard Deviation}}{\text{Mkt Cap} * \text{LTG Median}}$$

Currency

Aggregates containing companies from only one market (e.g. Germany or Germany/Steel) are calculated in the local currency of that market.

Aggregates containing companies for more than one market are calculated in US Dollars ($US). Both earnings and price data are adjusted using the spot-rate as of the date when the share prices were updated.

Five-Year Historical EPS Growth (Equal Weighted)

Displays the average annual earnings per share growth for the company over the past five years, equally weighted. Five-year historical growth is calculated by the Least Squares method using the last 20 quarters of reported earnings. Where quarterly data is unavailable, the last 10 semi-annual actuals are used. Where semi-annual data is unavailable, the last 5 annual actuals are used.

The Equal Weighted 5-Year Historical Growth is calculated as follows:

$$\text{Equal Weighted 5 Year Historical Growth} = \left[\frac{\sum_{i=1}^{n} 5 \text{ Year Historical Growth}_i}{n} - 1 \right] * 100$$

Five-Year Historical EPS Growth (Share Weighted)

Displays the average annual earnings per share growth for the company over the past five years, share weighted. Five-year historical growth is calculated by the Least Squares method using the last 21 quarters of reported earnings. Where quarterly data is unavailable, the last 11 semi-annual actuals are used. Where semi-annual data is unavailable, the last 6 annual actuals are used.

The Share Weighted 5-Year Historical Growth is calculated as follows:

$$\text{Share Weighted 5 Year Historical Growth} = \frac{\sum_{i=1}^{n} \text{Mkt Cap}_i * 5 \text{ Year Historical Growth}_i}{\sum_{i=1}^{n} \text{Mkt Cap}_i}$$

Growth, FY1/FY0 (Equal Weighted)

The projected year-over-year growth in EPS for the current calendar year (cal FY1), equally weighted.

The Equal Weighted Growth is calculated as follows:

$$\text{Growth FY 1/FY 0} = \left[\frac{\sum_{i=1}^{n} \text{cal FY 1 EPS}_i}{\sum_{i=1}^{n} \text{cal FY 0 EPS}_i} - 1 \right] * 100$$

Growth, FY1/FY0 (Share Weighted)

The projected year-over-year growth in EPS for the current calendar year (cal FY1), share weighted. By share-weighting the EPS, the formula shows the projected year-over-year growth in Net Income.

The Share Weighted Growth is calculated as follows:

$$\text{Growth FY 1/FY 0} = \left[\frac{\sum_{i=1}^{n} \text{shares}_i * \text{cal FY 1 EPS}_i}{\sum_{i=1}^{n} \text{shares}_i * \text{cal FY 0 EPS}_i} - 1 \right] * 100$$

Growth, FY2/FY1 (Equal Weighted)

The projected year-over-year growth in EPS looking one year ahead (cal FY2), equally weighted

The Equal Weighted Growth is calculated as follows:

$$\text{Growth FY 2/FY 1} = \left[\frac{\sum_{i=1}^{n} \text{cal FY 2 EPS}_i}{\sum_{i=1}^{n} \text{cal FY 1 EPS}_i} - 1 \right] * 100$$

Growth, FY2/FY1 (Share Weighted)

The projected year-over-year growth in EPS looking one year ahead (cal FY2), share weighted. By share-weighting the EPS, the formula shows the projected year-over-year growth in Net Income.

The Share Weighted Growth is calculated as follows:

$$\text{Growth FY 2/FY 1} = \left[\frac{\sum_{i=1}^{n} \text{shares}_i * \text{cal FY 2 EPS}_i}{\sum_{i=1}^{n} \text{shares}_i * \text{cal FY 1 EPS}_i} - 1 \right] * 100$$

Growth, FY3/FY2 (Equal Weighted)

The projected year-over-year growth in EPS looking two years ahead (cal FY3), equally weighted.

The Equal Weighted Growth is calculated as follows:

$$\text{Growth FY 3 /FY 2} = \left[\frac{\sum_{i=1}^{n} \text{cal FY 3 EPS}_i}{\sum_{i=1}^{n} \text{cal FY 2 EPS}_i} - 1 \right] * 100$$

Growth, FY3/FY2 (Share Weighted)

The projected year-over-year growth in EPS looking two years ahead (cal FY3), share weighted. By share-weighting the EPS, the formula shows the projected year-over-year growth in Net Income.

The Share Weighted Growth is calculated as follows:

$$\text{Growth FY 3 /FY 2} = \left[\frac{\sum_{i=1}^{n} \text{shares}_i * \text{ cal FY 3 EPS}_i}{\sum_{i=1}^{n} \text{shares}_i * \text{ cal FY 2 EPS}_i} - 1 \right] * 100$$

Growth, Twelve-Month-Forward (Equal Weighted)

The projected growth in EPS over the next 12 months, equally weighted.

The Equal Weighted Twelve-Month-Forward Growth is calculated as follows:

$$\text{12-Month-Forward Growth} = \left[\frac{\sum_{i=1}^{n} \text{12 Month Forward EPS}_i}{\sum_{i=1}^{n} \text{12 Month Trailing EPS}_i} - 1 \right] * 100$$

Growth, Twelve-Month-Forward (Share Weighted)

The average projected growth in EPS over the next 12 months, share weighted.

The Share Weighted Twelve-Month-Forward Growth is calculated as follows:

12-Month-Forward Growth =

$$\left[\frac{\sum_{i=1}^{n} \text{shares}_i * \text{12 Month Forward EPS}_i}{\sum_{i=1}^{n} \text{shares}_i * \text{12 Month Trailing EPS}_i} - 1 \right] * 100$$

Mean (Equal Weighted)

The average mean EPS, for the calendarized fiscal period indicated, equally weighted.

The Equal Weighted Mean is calculated as follows:

$$\text{Mean FY } X = \frac{\sum_{i=1}^{n} \text{cal FY } X \text{ EPS}_i}{n}$$

Mean (Share Weighted)

The average mean EPS, for the calendarized fiscal period indicated, share weighted.

The Share Weighted Mean is calculated as follows:

$$\text{Mean FY } X = \frac{\sum_{i=1}^{n} \text{shares}_i * \text{cal FY } X \text{ EPS}_i}{\sum_{i=1}^{n} \text{shares}_i}$$

Mean, Twelve-Month-Forward (Equal Weighted)

The average 12-month-forward mean EPS, equally weighted.

The Equal Weighted 12-Month-Forward Mean is calculated as follows:

$$12 - \text{Month Forward Mean} = \frac{\sum_{i=1}^{n} 12 \text{ Month Forward EPS}_i}{n}$$

Mean, Twelve-Month-Forward (Share Weighted)

The average 12-month-forward mean EPS, share weighted.

The Share Weighted 12-Month-Forward Mean is calculated as follows:

$$12 - \text{Month Forward Mean} = \frac{\sum_{i=1}^{n} \text{shares}_i * 12 \text{ Month Forward EPS}_i}{\sum_{i=1}^{n} \text{shares}_i}$$

Mean, One-Month Percent Change (Equal Weighted)

The average one-month percent change in the mean, for the calendarized fiscal period indicated, equally weighted.

The Mean One-Month Percent Change is calculated as follows:

$$\text{Mean } 1 - \text{Month \% Change} = \left[\frac{\sum_{i=1}^{n} \text{cal FYX EPS}_i}{\sum_{i=1}^{n} \text{cal FYX EPS } 1 \text{ Month Ago}_i} - 1 \right] * 100$$

Note: In order for a company to be included in this calculation, data must be available for both its current EPS and its EPS from 1 month ago.

Mean, One-Month Percent Change (Share Weighted)

The average one-month percent change in the mean, for the calendarized fiscal period indicated, share weighted.

The Mean One-Month Percent Change is calculated as follows:

$$\text{Mean 1-Month \% Change} = \left[\frac{\sum_{i=1}^{n} \text{shares}_i * \text{cal FYX EPS}_i}{\sum_{i=1}^{n} \text{shares}_i * \text{cal FYX EPS 1 Month Ago}_i} - 1 \right] * 100$$

Note: In order for a company to be included in this calculation, data must be available for both its current EPS and its EPS from 1 month ago.

Mean, One-Month Percent Change – Twelve-Month-Forward (Equal Weighted)

The average one-month percent change in the 12-month-forward mean EPS, equally weighted.

The Mean One-Month Percent Change 12-Month-Forward is calculated as follows:

$$\text{Mean 1-Month \% Change} = \left[\frac{\sum_{i=1}^{n} \text{12 Month Forward Mean}_i}{\sum_{i=1}^{n} \text{12 Month Forward Mean 1 Month Ago}_i} - 1 \right] * 100$$

Note: Data as of last month is pro-rated as of today.

Mean, One-Month Percent Change – Twelve-Month-Forward (Share Weighted)

The average one-month percent change in the 12-Month Forward mean EPS, share weighted.

The Mean One-Month Percent Change 12-Month-Forward is calculated as follows:

$$\text{Mean 1-Month \% Change} = \left[\frac{\sum_{i=1}^{n} \text{shares}_i * \text{12 Month Forward Mean}_i}{\sum_{i=1}^{n} \text{shares}_i * \text{12 Month Forward Mean 1 Month Ago}_i} - 1 \right] * 100$$

Mean, Three-Month Percent Change (Equal Weighted)

The average three-month percent change in the mean for the calendarized fiscal period indicated, equally weighted.

The Mean Three-Month Percent Change is calculated as follows:

$$\text{Mean 3-Month \% Change} = \left[\frac{\sum_{i=1}^{n} \text{cal FYX EPS}_i}{\sum_{i=1}^{n} \text{cal FYX EPS 3 Month Ago}_i} - 1 \right] * 100$$

Mean, Three-Month Percent Change (Share Weighted)

The average three-month percent change in the mean, for the calendarized fiscal period indicated, share weighted.

The Mean Three-Month Percent Change is calculated as follows:

$$\text{Mean 3-Month \% Change} = \left[\frac{\sum_{i=1}^{n} \text{shares}_i * \text{cal FYX EPS}_i}{\sum_{i=1}^{n} \text{shares}_i * \text{cal FYX EPS 3 Months Ago}_i} - 1 \right] * 100$$

Mean, Three-Month Percent Change – Twelve-Month-Forward (Equal Weighted)

The average three-month percent change in the 12-month-forward mean EPS, equally weighted.

The Mean Three-Month Percent Change 12-Month-Forward is calculated as follows:

$$\text{Mean 3-Month \% Change} = \left[\frac{\sum_{i=1}^{n} \text{12 Month Forward Mean}_i}{\sum_{i=1}^{n} \text{12 Month Forward Mean 3 Month Ago}_i} - 1 \right] * 100$$

Mean, Three-Month Percent Change – Twelve-Month-Forward (Share Weighted)

The average three-month percent change in the 12-month-forward mean EPS, share weighted.

The Mean Three-Month Percent Change 12-Month-Forward is calculated as follows:

$$\text{Mean 3-Month \% Change} = \left[\frac{\sum_{i=1}^{n} \text{shares}_i * \text{12 Month Forward Mean}_i}{\sum_{i=1}^{n} \text{shares}_i * \text{12 Month Forward Mean 3 Month Ago}_i} - 1 \right] * 100$$

Median – LTG (Equal Weighted)

The average median long-term growth (over the next five years) forecast, equally weighted.

The Median LTG Forecast Equal Weighted is calculated as follows:

$$\text{Equal Weighted Median LTG} = \frac{\sum_{i=1}^{n} \text{Median LTG Forecast}_i}{n}$$

Median – LTG (Share Weighted)

The average median long-term growth (over the next five years) forecast, share weighted.

The Median LTG Forecast Share Weighted is calculated as follows:

$$\text{Equal Weighted Median LTG} = \frac{\sum_{i=1}^{n} \text{Mkt Cap}_i * \text{Median LTG Forecast}_i}{\sum_{i=1}^{n} \text{Mkt Cap}_i}$$

Number of Companies

The number of companies with current estimates for the calendarized fiscal period indicated.

The number of companies is defined as n where cal FYX # ests > 0.

Number of Companies – Twelve-Month-Forward

The current number of companies with 12-month-forward forecasts.

This is the number of companies used in the 12-month-forward aggregate calculations. For a company to be included there must be forecast data spanning the 12-month-forward time period.

Average Number of Estimates

The average number of current estimates per company for the fiscal period indicated.

The Average Number of Estimates is calculated as follows:

$$\text{Average \# of Estimates for FYX} = \frac{\text{\# of FYX Estimates}}{\text{\# of companies}}$$

Percentage of Estimates Lowered – One Month

The percentage of estimates lowered over the past four weeks, for the calendarized fiscal period indicated.

The Percentage of Estimates Lowered over the past month is calculated as follows:

$$\%\ \text{FYX Estimates Lowered} = \left[\frac{\sum_{i=1}^{n} \#\ \text{of cal FYX Estimates Lowered}_i}{\sum_{i=1}^{n} \#\ \text{of cal FYX Estimates}_i} \right] * 100$$

Percentage of Estimates Raised – One Month

The percentage of estimates raised over the past four weeks, for the calendarized fiscal period indicated.

The Percentage of Estimates Raised over the past month is calculated as follows:

$$\%\ \text{FYX Estimates Raised} = \left[\frac{\sum_{i=1}^{n} \#\ \text{of cal FYX Estimates Raised}_i}{\sum_{i=1}^{n} \#\ \text{of cal FYX Estimates}_i} \right] * 100$$

One-Month Percent Change in Price (Share Weighted)

The average one-month percent change in price, share weighted.

The One-Month Price Percent Change is calculated as follows:

$$1 - \text{Month \% Change} = \left[\frac{\sum_{i=1}^{n} \text{shares}_i * \text{Price}_i}{\sum_{i=1}^{n} \text{shares}_i * \text{Price One Month Ago}_i} - 1 \right] * 100$$

P/E (Equal Weighted)

The average projected price/earnings ratio for the calendarized fiscal period indicated, equally weighted.

The Calendarized P/E Ratio is calculated as follows:

$$\text{FY}X\ \text{P/E Ratio} = \frac{\sum_{i=1}^{n} \text{price}_i}{\sum_{i=1}^{n} \text{cal FY}X\ \text{EPS}_i}$$

P/E (Share Weighted)

The average projected price/earnings ratio for the calendarized fiscal period indicated, share weighted.

The Share Weighted Calendarized P/E Ratio is calculated as follows:

$$\text{FY}X\ \text{P/E Ratio} = \frac{\sum_{i=1}^{n} \text{shares}_i * \text{price}_i}{\sum_{i=1}^{n} \text{shares}_i * \text{cal FY}X\ \text{EPS}_i}$$

P/E – Twelve-Month-Forward (Equal Weighted)

The average projected price/earnings ratio based on 12-month-forward earnings, equally weighted.

The 12-Month-Forward P/E Ratio is calculated as follows:

$$\text{12-Month-Forward P/E Ratio} = \frac{\sum_{i=1}^{n} \text{price}_i}{\sum_{i=1}^{n} \text{12 Month Forward Mean EPS}_i}$$

P/E – Twelve-Month-Forward (Share Weighted)

The average projected price/earnings ratio based on 12-month-forward earnings, share weighted.

The Share Weighted 12-Month-Forward P/E Ratio is calculated as follows:

$$\text{12-Month-Forward P/E Ratio} = \frac{\sum_{i=1}^{n} \text{shares}_i * \text{price}_i}{\sum_{i=1}^{n} \text{shares}_i * \text{12 Month Forward Mean EPS}_i}$$

Standard Deviation – LTG (Equal Weighted)

The average standard deviation of the distribution of Long Term Growth estimates, equally weighted.

The Long Term Growth Standard Deviation:

$$\text{LTG Standard Deviation} = \frac{\sum_{i=1}^{n} \text{LTG Standard Deviation}_i}{n}$$

Standard Deviation – LTG (Share Weighted)

The average standard deviation of the distribution of Long Term Growth estimates, share weighted.

The Long Term Growth Standard Deviation is calculated as follows:

$$\text{LTG Standard Deviation} = \frac{\sum_{i=1}^{n} \text{shares}_i * \text{LTG Standard Deviation}_i}{\sum_{i=1}^{n} \text{shares}_i}$$

Twelve-Month-Forward Data

Data is also presented on a 12-month-forward basis.

The period covered under "12-month-forward" is based on the current date. For example, if the current month is March 1998, then 12-month-forward data encompasses the 12-month period ending March 1999.

Twelve-month-forward data is calculated on a pro-rated basis. For example, if the current date is May 1998, the twelve-month-forward EPS forecast for a company with a December fiscal year will sum 7/12 of the 1998 forecast and 5/12 of the 1999 forecast.

Twelve-Month-Trailing Data

In conjunction with the 12-month-forward data, I/B/E/S also calculates pro-rated, 12-month-trailing data in order to calculate growth over the next 12 months. For example, if the current date is May 1998, the *12-month-trailing* EPS for a company with a December fiscal year will sum 7/12 of the 1997 actual and 5/12 of the 1998 forecast.

Index

G

H

I

L

M

N

O

P

R

S

T

Y

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