I/B/E/S DETAIL HISTORY

USER GUIDE

A GUIDE TO THE I/B/E/S ANALYST-BY-ANALYST HISTORICAL
EARNINGS ESTIMATE DATABASE

DECEMBER 2009

Date of issue: December 2009

THOMSON REUTERS

Contents

About this document

Intended readership

The I/B/E/S Detail History User Guide is intended for use only by Thomson Reuters clients who receive History directly from Thomson Reuters and not via any third party platform.

In this document

A guide to the I/B/E/S analyst-by-analyst historical earnings estimate database.

Feedback

If you have any comments on this document please contact your local Thomson Reuters customer service or account team by visting the Thomson Reuters Customer Zone at https://customers.reuters.com/Home/.

Chapter 1   Overview

Detail Earnings Estimate History contains forecast changes dating back to 1982 for US companies and 1987 for non-US companies. All Detail Files are separated into regions (i.e. <.us> for United States and <.int> for all other countries including Canada.

This data will allow users to test investment techniques in new and innovative ways. Among the many possible applications of historical detail data, notables include:

- Isolate a particular estimator or analyst

  The accuracy of any individual estimator's forecast can be tracked over time. Each estimator, analyst or industry team is assigned a unique and independent identification number.

- Back test revisions hypothesis

  Functionality allows for the development and back testing of unique derivations of the user's design. The product is created in a relational database format with distinct variables in each file. For example, the I/B/E/S ticker is a unique identifier assigned to each security that is consistent throughout I/B/E/S History. Most other common identifiers (CUSIP, SEDOL, Official Ticker, and Company Name) are subject to change over time. If a user prefers an alternate variable a number of options are available in the Identifier file, File #3 described in this document.

How This Database Is Built

This database is built by applying two methods:

1. For estimates made between 1982 and May 1993, archived monthly detail files were used.
2. For estimates made since June 1993, the data has been sourced from the History production database.

Prior to 1993, Detail History was a reconstruction of archived Detail tapes. Extensive audits were performed to preserve the integrity of the original data.

For a variety of reasons (restricted lists, corporate announcements, etc.) an analyst may discontinue his/her earnings estimates on an individual security. In the source files for the Detail History there is no explicit indicator of this occurrence for periods before June 1993. Stop dates were calculated based on an algorithm. These dates are provided in the Stopped Estimate File, File #13 described in this document.

Company Coverage in the Thomson Reuters Database

For a company to be available in the I/B/E/S History files there must have been at least one analyst providing estimate forecasts for the company.

Inactive Companies in the Thomson Reuters Database

There may be cases where a company is no longer in existence or analysts are no longer contributing forecasts. Estimates will remain in I/B/E/S History in these cases. This helps keep the Thomson Reuters database free from survivorship bias.

Handling Mergers and Acquisitions

When two companies that are both represented in the Thomson Reuters universe merge, the new company may change CUSIP/SEDOL, Name or Official Ticker, as well as any other identifiers. However, the I/B/E/S ticker for the acquiring company will not change. This is done to preserve a historical timeline for the new company. In the Thomson Reuters historical databases, all data relating to the acquired company will stop as of the acquisition date.

Defining Fiscal Periods

The Thomson Reuters database contains estimate data for up to five Annual Fiscal Periods, eight Quarter Fiscal Periods, four Semi-annual Periods, and Long Term Growth.

Because not all companies have the same fiscal year end, Thomson Reuters uses FY1, FY2, etc. to identify estimates for each unique period where the most recently reported actual is denoted as "0". Thus, a company's last reported annual is referred to as FY0, the most recently reported quarter is Q0, and the most recent semi-annual reported earnings is SAN0.

Using the reported periods as a base, the period end dates for all estimated periods are easily calculated. For example, if FY0 corresponds to December 2007 (the last reported annual), the FY1, FY2 and FY3 mean estimates are for the periods ending December 2008, 2009 and 2010, respectively. Looking at the quarterly periods, if Q0 refers to the period ended March 2008 (the last reported quarter), and then the Q1 estimate is for the June 2008 quarter.

International Financial Reporting Standards (IFRS) – 2005

In 2005, The European Union passed a regulation that requires listed European companies to comply with International Financial Reporting Standards (IFRS) for their consolidated financial statements. There is a limited exception for certain companies to delay implementation until 2007. Generally, the regulation applies to consolidated financial statements for accounting periods starting on or after January 1, 2005. Thus, for those companies with 12-month accounting periods covering the calendar year, IFRS was first applied to periods ending on December 31, 2005. As a result, companies first published IFRS financial information as of March 31, 2005 (if they report quarterly) or as of June 30, 2005 (if they report semi-annually).

Estimates collected by Thomson Reuters reflect the adoption of this ruling on a majority basis.

In addition to countries in Europe, IFRS was adopted by parts of Asia, including Australia and New Zealand. For I/B/E/S History, Thomson Reuters implemented IFRS for European countries effective April 9, 2005. The transition period to IFRS is visible for companies in Australia and New Zealand effective September 11, 2005.

FAS123(R)

On December 16, 2004, The Financial Accounting Standards Board (FASB) issued FAS123(R). This ruling requires companies to calculate the fair value of stock options granted to employees, and amortize that amount over the vesting period as an expense through the income statement. FAS123(R) is currently effective for fiscal years beginning after June 15, 2005, with company transition choices of; modified

prospective, modified retrospective or early adoption. The effective date of the ruling was then extended from quarterly to annual periods beginning after June 15, 2005.

Estimates collected by Thomson Reuters reflect the adoption of this ruling on a majority basis.

Global Client Support

For further information or assistance, please visit the Thomson Reuters Customer Zone at https://customers.reuters.com/Home/. The Customer Zone is the single online entry point to Thomson Reuters support and service functions which include:

- Contact Us: Customers who have access to the public internet can log support requests via an online form which captures key information. You will receive an on-screen confirmation number and response to your service request within 15 minutes. Alternatively, you can view a listing of contact numbers.

- Online Notifications: Product change notifications, service alerts and product users guides.

- Community: Online archive of Thomson Reuters newsletters and customer events.

Please note the Thomson Reuters Customer Zone requires registration for first time users. You can access the "Contact Us" form directly at https://customers.reuters.com/crmcontactus/support.asp (direct access to this link does not require a login).

If your product is not displayed in the "Product" drop-down box, select "Product not found…. Search more". This will open a free text box and allow you to type your product as defined in this user guide. Once selected, continue to populate the remaining fields.

Chapter 2   File Delivery

Detail History is delivered monthly and contains data collected by Thomson Reuters up to the Thursday before the third Friday of every month (which is the Thomson Reuters monthly production cycle). Historical files are updated and delivered via electronic delivery (FTP) on a monthly basis. 2009 and 2010 file delivery schedule documentation can be downloaded from the following links (depending on you web browser)

ftp://samples:luk$tou@ftp.ibes.com/samples/documentation

or

ftp://samples:luk$tou@ftp.ibes.com/samples/

Please note that historical files are archived on the ftp server until Thursday before the third Friday of each month at which time the last month's historical files are removed from all clients' ftp accounts.

History Subscription Level

Level	Measure	Description	Regions	
			Int'l	US
Level I	EPS (FIL)	Earnings per Share	X	X
Level II	CPS	Cash Flow per Share	X	X
	DPS	Dividend per Share	X	X
	EBG	Earnings per Share – Before Goodwill	X	NA
	FFO	Funds from Operations per Share	NA	X
	PRE	Pre-tax Profit (Non per Share)	X	X
	SAL	Revenue (Non per Share)	X	X
	Recommendation	Recommendation	X	X
Level III	BPS	Book Value per Share	X	X
	CPX	Capital Expenditure (Non per Share)	X	X
	CSH	Cash Earnings Per Share	X	X
	EBI	EBIT (Non per Share)	X	X
	EBS	EBITDA per share	X	X
	EBT	EBITDA (Non per Share)	X	X

			Regions	
	ENT	Enterprise Value (Non per Share)	X	X
	EPX	Earnings per Share - Alternate	NA	X
	GPS	GAAP / Earnings per Share – Fully Reported	X	X
	GRM	Gross Margin (Percent)	X	X
	NAV	Net Asset Value (Non per Share)	X	X
	NDT	Net Debt	X	X
	NET	Net income (Non per Share)	X	X
	OPR	Operating Profit (Non per Share)	X	X
	PTG	Price Target	X	X
	ROA	Return On Asset (Percent)	X	X
	ROE	Return On Equity (Percent)	X	X

- Companies with no subsidiaries are classified as Primary Consolidated, with no corresponding Secondary data measures.

- For companies that carry two-basis (Parent and Consolidated), both Primary and Secondary data measures are available. The basis is determined based on the majority contributor submission and populated under the Primary measure. Markets where two-basis measures are available are Japan, Korea, Taiwan and Thailand. A set of secondary measure files is available for these markets in the DHSAS.ZIP files

- The per-share data measures of UK companies are covered in BPN (pence) and the values for non-per share data measures are displayed in GBP (pounds). The label for all estimates is BPN. For UK companies which have had a change in currency on a company level, the label for non per-share data estimates is GBP.

- FFO is available primarily for Canadian and US companies only.

- All per share measures data including Price Targets are adjusted for corporate actions represented as splits.

Normalized History Files

Thomson Reuters follows companies based on their reporting currency. However in some cases where the reporting currency does not reflect the clear majority of estimate submissions, Thomson Reuters may exercise the option to set the default based on the currency of the majority of estimate submissions. In cases where companies report in multiple currencies, Thomson Reuters will set the default currency based on the majority of estimate submissions.
As a result of currency fluctuations over time, starting with the April 2009 Monthly cycle, Thomson Reuters introduced an additional set of I/B/E/S Normalized historical files that include summary and detail data with normalized company default currencies. This new offering provides a smooth historical view of companies that have had a currency change over time and is intended to simplify clients' workflow.

The normalized Detail history files will not be available in older formats of the Detail History files. All clients will be receiving normalized Detail history files in the latest available version.

- Announce w/Time Stamp Detail Estimates
- Detail Price Targets
- Announce w/Time Stamp Exclude Estimates
- Report Currency
- Time Stamp Actuals
- Restated Actuals

What rules will be followed when producing the normalized Detail History files?

Estimates are converted to the latest company default currency by using the closing exchange rate that coincides with the date prior to the announced date of the estimate. When an exchange rate is unavailable for the date prior to the announce date, the next available prior exchange rate is used.

Actuals are converted to the latest company default currency by using the closing exchange rate as of the FYE date of the actual. When an exchange rate is unavailable for the date prior to the FYE date, the next available prior exchange rate is used.

How will changes to currency be reflected from month to month in the Detail files?

In the existing files, all estimates and actuals are provided in the default currency followed at the respective point in time. In the normalized files, all estimates and actuals will be supplied in the default currency followed as of the latest monthly run.

To illustrate:

Thomson Reuters started coverage of company ABC in January 2001. The company was covered in USD. In March 2008, the majority of analyst covering company ABC started providing estimates in EUR. Therefore, TR changed the default currency to EUR. In the Detail and Summary Files prior to March 2008 all estimates and actuals will be displayed in USD. Starting with the March 2008 monthly files, all previously supplied estimates in USD, will be displayed in EUR by converting values following the rules detailed in question #5.

Do any differences exist between the "normalized" and "regular" History files?

Yes, a few changes will be noticed between the two versions:

- In the "regular" *I/B/E/S Detail History*, estimates are converted to the latest company default currency by using the closing exchange rate that coincides with the date prior to the activation date of the estimate. In the "normalized" *I/B/E/S Detail History*, estimates are converted to the latest company default currency by using the closing exchange rate that coincides with the date prior to the announced date of the estimate. As a result, estimates that have been received in a non-default currency could be slightly different in "regular" vs. "normalized" *I/B/E/S Detail History* due to the fluctuation of the currency exchange rates.
- Normalized files will not be available for the following measures as these are not affected by currency: Gross Margin (GRM), Recommendations, Return on Assets (ROA), and Return on Equity (ROE).

- The Normalized Report Currency files in *I/B/E/S Detail History* (adjusted and unadjusted) include less rows than the Regular Report Currency files in *I/B/E/S Detail History* (adjusted and unadjusted) because the coverage in the normalized files is always in one currency only as opposed to multiple currencies (for a subset of companies out of the entire universe) across a historical series.
- The Normalized Detail Estimates History files for all regions include a Currency field at the end of the file while the Regular Detail Estimates History files do not include the Currency field for the US & Canadian regional files.
- The Normalized Timestamp Actuals Detail History files for all measures include a Currency field at the end of the file while the Regular Timestamp Actuals Detail History files do not include the Currency field for the EPS measure files.

File Naming Conventions

Intuitive file names offer users an indication of file content. All Detail History file names adhere to the following convention:

<Type><Measure><Name>.<Region>

<Type> Mnemonic for the type of file. For example, id for identifier, adj for adjustments.

<Measure> 3-character mnemonic for the measure.

In this product, measure EPS is represented by the 3 letter code "FIL". For all other measure codes, see the measure table above.

<Name> 1- or 2-character mnemonic for the file version. See File names in the file format section.

In the case of the EPS measure, noted as FIL in filename, there may also be either "i" or "d" following the "FIL" portion of the filename. Ex. ACTFILDT.US = US EPS Actuals file and ACTFILIT.INT = International EPS Actuals file.

<Region> 2- or 3-character mnemonic for the region. For example, the US Detail Estimate file for EPS is named: "detfilat.us"

Compressed Files

Detail History files are grouped and zipped by measure. Zipped file names are of the form:

<Type><Measure><Region>.zip

<Type> 2-character mnemonic for the type of file.

<Measure> 3-character mnemonic for the measure.

<Region> 2- or 3-character mnemonic for the region.

For example:

- DHEPSUS.ZIP: includes Detail data files for EPS measure and US region.
- DHMESUS.ZIP: includes Detail data files for NON-EPS measures and US region
- UDEPSUS.ZIP: includes Unadjusted Detail data files for EPS measure and US region

- UDMESUS.ZIP: includes Unadjusted Detail data files for <u>per share</u> NON-EPS measures and US region (measures affected by split adjustments)

- UDSMESUS.ZIP: includes Detail data files for <u>NON-per share</u> measures and US region (measures not affected by split adjustments)

- HDRECUS.ZIP: includes Detail recommendation data for US region

Only per share values are adjusted for corporate actions and therefore unadjusted zip files include PER SHARE UNADJUSTED files as well as NON PER SHARE ADJUSTED files.

Please note that all historical Zip files include Regular as well as applicable Normalized for currency files.

Detail Zip File List by Subscription (Adjusted)

Detail Level 1

DHEPS<REG>.ZIP   Detail EPS Files

Detail Level 2

DHEPS<REG>.ZIP   Detail EPS Files
DHMES<REG>.ZIP   Detail Additional Level 2 Measure non-EPS Files
HDREC<REG>.ZIP   Detail Recommendations Files

Detail Level 3

DHEPS<REG>.ZIP   Detail EPS Files
DHMES<REG>.ZIP   Detail Additional Level 3 Measure non-EPS Files (Including PTG files)
HDREC<REG>.ZIP   Detail Recommendations Files

Detail Zip File List by Subscription (Unadjusted)

Detail Level 1

UDEPS<REG>.ZIP   Detail EPS Files

Detail Level 2

UDEPS<REG>.ZIP   Detail EPS Files
UDMES<REG>.ZIP   Detail Additional Level 2 Measure per share non-EPS Files
UDSMES<REG>.ZIP   Detail Additional Level 2 Measure NON-per share Files
HDREC<REG>.ZIP   Detail Recommendations Files

Detail Level 3

UDEPS<REG>.ZIP   Detail EPS Files
UDMES<REG>.ZIP   Detail Additional Level 3 Measure per share non-EPS and PTG Files

UDSMES<REG>.ZIP   Detail Additional Level 3 Measure NON-per share Files

HDREC<REG>.ZIP   Detail Recommendations Files

Detail Zip File List by Subscription (Adjusted and Unadjusted)

Detail Level 1

DHEPS<REG>.ZIP   Detail EPS Files (Adjusted)

UDEPS<REG>.ZIP   Detail EPS Files (Unadjusted)

Detail Level 2

DHEPS<REG>.ZIP   Detail EPS Files (Adjusted)

UDEPS<REG>.ZIP   Detail EPS Files (Unadjusted)

DHMES<REG>.ZIP   Detail Additional Level 2 Measure non-EPS Files (Adjusted)

UDMES<REG>.ZIP   Detail Additional Level 2 Measure per share non-EPS Files (Unadjusted)

HDREC<REG>.ZIP   Detail Recommendations Files

Detail Level 3

DHEPS<REG>.ZIP   Detail EPS Files (Adjusted)

UDEPS<REG>.ZIP   Detail EPS Files (Unadjusted)

DHMES<REG>.ZIP   Detail Additional Level 3 Measure non-EPS Files (Adjusted)

UDMES<REG>.ZIP (Unadjusted)   Detail Additional Level 3 Measure per share non-EPS and PTG Files

HDREC<REG>.ZIP   Detail Recommendations Files

Note: Clients subscribed for Detail history data also receive Summary history data. Summary history documentation (/B/E/S History Summary User Guide) can be downloaded from the following link (depending on you web browser)

ftp://samples:luk$tou@ftp.ibes.com/samples/documentation

or

ftp://samples:luk$tou@ftp.ibes.com/samples/

Chapter 3   File Descriptions

This section provides a brief description of each of the files included in the I/B/E/S History Product.

File 1:   **Actuals**

Level: Detail

Frequency: Monthly

Actuals is a list of actual reported earnings from the company and the date that Thomson Reuters received them.

Reported earnings are entered into the database on the same basis as analysts' forecasts. In general earnings estimates are followed on an operating basis. Often, reported earnings are adjusted for accounting irregularities not included in the analysts' forecasts. The date reflected on this file prior to January 1999 is the activation date. After January 1999, the announce date is used.

Restated Actuals are not included in this file. Please see File #2

File 2:   **Restated Actuals**

Level: Detail

Frequency: Monthly

Restated Actuals presents restated data for the measures and periods provided by the company. The file can accommodate multiple restatements over the years, as applicable for the company.

File 3:   **Identifier**

Level: Detail

Frequency: Monthly

The Identifier file provides important cross-reference information allowing the user to map the I/B/E/S ticker to official tickers, CUSIPs or SEDOLs. This allows for ease integration of data across the IBES files as well as into databases that are keyed by other identifiers. I/B/E/S tickers for international (non US and Canadian) companies are preceded by an @.

For US companies, the value that appears in the CUSIP/SEDOL field will always be a CUSIP. SEDOLs are used for non-US companies. The SEDOL field consists of a country code followed by the first six digits of the official SEDOL (he last digit of a SEDOL is a check digit and is not used by I/B/E/S).

SEDOLs were originally designed to be a unique 7-digit numeric code. By 2004, the London Stock Exchange (LSE), which issues SEDOLs, reached its capacity. Consequently, the LSE modified its specification to its current state which is a unique 7-character alphanumeric code. Generally, the client can identify a valid SEDOL if it is a 7-digit numeric (i.e. 1234567) or the first character is an alpha character followed by the numeric characters (i.e. A1234567). Dummy SEDOLs (used for some inactive companies) are normally numeric followed by XX (12345XX) or mostly alpha characters followed by numeric (DUMMY12).

The Dilution factor used in the Identifier file is calculated from the issuer's annual earnings report. It is calculated by dividing primary EPS by fully diluted EPS.

The Currency Flag is used in the US file to identify companies followed in Canadian Dollars in the US file.

The Parent/Consolidated flag appears only in non-US files. The field is populated with a "P" when the company is followed on a Parent basis and Null when the company is followed on a Consolidated basis. Canadian companies included in the INT files, a designation of "C" identifies companies followed in Canadian dollars. If there is no designation present then the Canadian company is followed in US dollars.

The file includes a Currency Flag which can be used to identify companies followed in Canadian Dollars in the US file.

Uniform Actuals Indicator and MSCIP flag fields are no longer required therefore are not being updated. Clients should ignore these fields.

The Start Dates represent the first date that a data row is effective, as of the Thomson Reuters monthly run date, which falls anywhere between the 14th and 20th day of a given month.

File 4:   Adjustments

Level: Detail

Frequency: Monthly

Adjustments file includes corporation action factors (i.e. splits, dividends) that were used to adjust the data historically. Clients who prefer to unadjust their per share estimate data can use factors included in this file. The split date is provided as an indicator of when the split was originally activated on the Thomson Reuters database. Because the archives used to create the Detail History are monthly slices of data, splits are effective as of the split date, which corresponds to the monthly statistical monthly run date. Any data prior to the split date has been adjusted in the Detail file by the corresponding factor in this file. Cumulative split factors are displayed in the adjustment file.

Unadjusted data files are also available. Please contact your account representative for details.

File 5:   SIG Codes

Level: Detail

Frequency: Monthly

SIG (Sector/Industry/Group) codes are provided for informational purposes and to allow the user to create subsets of the data based on individual company's line of business. The convention used by Thomson Reuters to classify companies is loosely based on the MSCI and S&P classification system for non-US and US companies respectively. As companies were added that did not fit into the MSCI convention, several additional SIG codes were introduced to the I/B/E/S list. Sector is the broadest division, with Industry and Group becoming more specific.

File 6:   Company Level Footnote

Level: Detail

Frequency: Monthly

Company Level Footnote was added on April 9, 2005, when Thomson Reuters implemented International Financial Reporting Standards (IFRS). The company level footnote file is designed to indicate the majority basis of the primary earnings measure, as well as all supporting secondary measures for a security. All secondary measures will be treated in accordance with the majority primary measure regardless of majority basis for the secondary measure. This ensures that the company level footnote consistently reflects the basis of all unfiltered estimates across all measures and fiscal years. All estimates not on the same basis as the primary earnings measure will be filtered and footnoted accordingly.

File 7: **Report Currency**

Level: Detail

Frequency: Monthly

There are companies in the Detail History database that have reported their data in different currencies at different points in time. For example, in 2002, TPC Technology Ltd., a company in Hong Kong, changed its reporting currency from Hong Kong Dollars to US Dollars. As a result, analysts subsequently changed the currency of their earnings forecasts and therefore, Thomson Reuters changed the company's default currency.

Report Currency contains the companies in the Detail History database and their reporting currencies over time. This file includes the exact date a company level currency change occurred.

File 8 **Estimator/Analyst Translations**

Level: Detail

Frequency: Monthly

Estimator/Analyst Translation should be used to map the Estimator/Analyst codes listed in the Detail file to the corresponding names. Estimator is an abbreviated name given to each contributor by Thomson Reuters. Analysts are assigned unique six digit codes while Estimators are assigned unique five digit codes.

File 9 **Daily Currency Exchange Rates**

Level: Detail

Frequency: Monthly

This file includes daily historical exchange rates. Detail history estimates received in a non-default currency are converted to the company level currency in order for all estimates of a given company to be displayed in the same currency. The Daily Currency Exchange Rate file can be used to convert estimates to values in other currencies.

File 10 **Detail Estimates**

Level: Detail

Frequency: Monthly

Detail Estimate is the core of the Detail History product. This file contains analyst-by-analyst estimates for annual, quarterly, semi-annual and long terms growth periods. Quarterly estimates and long-term growth forecasts are most prominent for US and Canadian companies. Semi-annual estimates are available for Japanese companies.

It is possible for a contributing broker to provide multiple revisions to an estimate on the same day. In this scenario, all estimates are available in the Detail history files and only the most current estimate is included in the mean.

The Brokers and Analysts are provided under numeric codes. The codes can be mapped to the estimator and analyst names by accessing a separate Estimator/Analyst Translation file (branfil*.<reg>).

In the non-US files, for estimates received on a Parent-company basis a "P" appears in field D of this file. If an estimate was received on a Consolidated-company basis then an indicator is not present in

field D. In the US file, if the Canadian Currency field is C, the estimate was received in Canadian currency. If the indicator is not present, the estimate is in US Dollars.

The Currency field and the Primary/Diluted Flag in this file are Estimate specific. When programming against the data, it is important not to confuse these fields with the Currency field in the Report Currency file and the Primary/Diluted Indicator in the Identifier file. The records in the Report Currency file and the Identifier file are company-specific.

It is very important to note that all data in the Detail file is completely adjusted. That is, if an analyst's forecast is received with different Currency or Primary/Diluted indicators on the estimate level versus the existing company level, the estimate value will appear as adjusted to the company level basis. The indicators reflect the basis in which the estimate was received. Users may "unadjust" the data if they choose using data provided in the Identifier or Exchange Rate files.

Timestamps are provided with the Activation, Announce and Confirmation dates included in this file.

File 11   Excluded Estimates

Level: Detail

Frequency: Monthly

It is possible that estimates are provided on a different accounting basis that differs from the basis of the majority of the estimates. When this occurs, Thomson Reuters contacts the analyst for confirmation (shown as review date) of either the estimate itself or the methodology behind it. Thomson Reuter's estimates are removed from the database if a satisfactory resolution to the discrepancy is not reached. Thomson Reuters developed a system whereby these estimates would be excluded from the consensus data, while still allowing users access to the individual analysts forecast.

If an estimate has not been updated for 105 days, the estimate is filtered, footnoted and excluded from the mean. (Estimates are updated by a contributing analyst sending a confirmation, revision or drop in coverage.) When Q4 is the current reporting period, Q4 and FY1 estimates are an exception to this rule: Q4 and FY1 estimates will be filtered when they have not been updated for 120 days. (This allows extra time for companies to report year-end results.)

On February 21, 2005, Thomson Reuters added an end date to the Excluded Estimates file. This end date allows Thomson Reuters the ability to expire filters that were relevant in the past (but are no longer valid) without removing them from the database. Filters that are still active will have an end date in the future. Filters that are no longer valid will have an end date in the past relative to the fiscal period. Only filters with end dates in the past should be expired in client databases.

For example:

End date 1/1/06

Fiscal year end of the record 12/2000

Today's date: 1/1/07

Today's fiscal year end date 12/2008.

The 2000 annual number was reported on 2/2001. This number should remain excluded.

File 12   Stop Estimate

Level: Detail

Frequency: Monthly

This file includes stops applied to estimates that are no longer active. This can result from several events, e.g. an estimator places a stock on a restricted list due to an underwriting relationship or the estimator no longer covers the company. Prior to June 1993, actual stop dates did not exist in the archive files used to create the Detail History. An algorithm was developed to determine the date when an estimate became invalid if, for example, a merger between companies occurred or an analyst stopped working for a firm, etc.

Estimate that are not updated or confirmed for a total of 180 days, the estimate is stopped.

Stopped Estimate contains a timestamp for the stop date.

File 13   Detail Price Targets (PTG)

Level: Detail

Frequency: Monthly

Price Target represents the projected price level forecasted by the analyst within a specific time horizon.

File 14   Stop Price Target

Level: Detail

Frequency: Monthly

Analogous to the daily Stop Detail Estimates File, except that these stops are applied to the price target data.

File 15   Detail Recommendations

Level: Detail

Frequency: Monthly

Detail Recommendations contains analyst-by-analyst recommendations for a security. Each recommendation received from the estimator is mapped to one of the Thomson Reuters standard ratings. Assigning a numeric value to the estimator text enables Thomson Reuters to calculate a consensus recommendation.

A recommendation is an analyst's rating for a particular company. Thomson Reuters maintains these ratings in the following two formats:

- Estimator Text – The actual recommendation received from the estimator, in their text.

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

    1. Strong Buy

    2. Buy

    3. Hold

4. Underperform

5. Sell for the acquiring company

File 16: **Recommendations Stop**

Level: Detail

Frequency: Monthly

This file includes stops applied to recommendations that are no longer active. This can result from several events, e.g. an estimator places a stock on a restricted list due to an underwriting relationship, an analyst is leaving a firm, or the estimator no longer covers the company.

If a recommendation is updated or confirmed for a total of 180 days, the recommendation is stopped. (Recommendations are updated by a contributing analyst sending a confirmation, revision or drop in coverage.)

File 17: **Recommendations Estimator Translation**

Level: Detail

Frequency: Monthly

Recommendations Estimator Translation should be used to map the estimator's ID listed in the Detail Recommendations File to the appropriate estimator's name. The estimator ID is an abbreviated name given to each contributor by Thomson Reuters.

File 18 **Recommendations ID**

Level: Detail

Frequency: Monthly

The Identifier file provides important cross-reference information allowing the user to map the I/B/E/S ticker to official tickers, CUSIPs or SEDOLs. This allows for ease integration of data across the IBES files as well as into databases that are keyed by other identifiers. I/B/E/S tickers for international (non US and Canadian) companies are preceded by an @.

I/B/E/S tickers for non-U.S. companies are preceded by a "@".For US companies, the value that appears in the CUSIP/SEDOL field will always be a CUSIP. SEDOLS are used for non-US companies. The SEDOL field consists of a country code followed by the first six digits of the official SEDOL (The last digit of a SEDOL is a check digit and is not used by I/B/E/S.).

SEDOLS were originally designed to be a unique 7 digit numeric code. By 2004, the London Stock Exchange (LSE), which issues SEDOLS, reached its capacity. Consequently, the LSE modified its specification to its current state which is a unique 7 character alphanumeric code. Clients can identify a valid SEDOL if it is a 7 digit numerical character (i.e. 1234567) or the first character is an alpha character followed by the numeric characters (i.e. A1234567). Dummy SEDOLs used for select inactive companies are numeric values followed by XX (12345XX) or mostly alpha characters followed by a numeric value i.e.DUMMY12.

For information on Sedol/Cusip licensing, please refer to page 8.

Chapter 4   File Layouts

Each file utilizes from one to six columns as primary keys, the columns or sets of columns to identify a row of data as unique. Primary keys are indicated by a # sign followed by a number next to the column header, i.e., D#4. The number dictates the order of the column within the key.

Note: Unavailable numbers are indicated by a minus sign followed by 9's to fill in the field (-99999). A zero indicates non-available or non-meaningful date values. In the case of contributor or analyst names which are not available six zeroes (000000) are used. A string of asterisks for an estimate or actual value indicates that the figure is too large to fit into the field.

File 1:	**Actuals**	
Name (Adjusted):	actfildt.<reg> (EPS, US) **or** actfilit.<reg> (EPS, non-US)	
	nactfilt.<reg> (Normalized EPS, US & non-US)	
	act<measure>t.<reg> (non-EPS measures)	
	nact<measure>.<reg> (Normalized, non-EPS measures)	
Name (Unadjusted):	actfilut.<reg> (EPS, US & non-US)	
	nactfilut.<reg> (Normalized EPS, US & non-US)	
	act< measure>ut.<reg> (non-EPS measures)	
	nact<measure>ut.<reg> (Normalized, non-EPS measures)	
Level:	Detail	
Frequency:	Monthly	

Key	Item	Data Type	Format	Length	Start	End	Comments
A #1	I/B/E/S Ticker	X	CCCCCC	6	1	6	
B #2	Measure	X	CCC	3	8	10	See Measures chart
C #3	Periodicity	X	CCC	3	12	14	ANN, SAN, QTR, LTG
D #4	Period End Date	N	YYMM	4	16	19	
E	Value	D	CCCCCCCCC	9	21	29	
F #5	Announce Date	N	YYMMDD	6	31	36	
G #6	Announce Time	N	HH:MM:SS	8	38	45	
H	Company Level Currency	X	CCC	3	47	49	Not available in Regular History EPS files; Available in Normalized History EPS files

File 2: **Restated Actuals**

Name (Adjusted): h<measure>ract.<reg>

<measure>nract.<reg> (Normalized)

Name (Unadjusted): h<measure>ract.<reg>

u<measure>nract.<reg> (Normalized)

Level: Detail and Summary

Frequency: Monthly

Key	Item	Data Type	Format	Length	Start	End	Comments
A#1	I/B/E/S Ticker	X	CCCCCC	6	1	6	
B#2	Measure	X	CCCCCC	6	8	13	See Measures chart
C#3	Periodicity	X	CCC	3	15	17	ANN, SAN, QTR, LTG
D#4	Period End Date	N	YYYYMM	6	19	24	
E	Value	D	999999999999	12	26	37	
F	Activation Date	N	YYYYMMDD	8	39	46	
G	Activation Time	N	HH:MM:SS	8	48	55	
H	Announce Date	N	YYYYMMDD	8	57	64	
I	Announce Time	N	HH:MM:SS	8	66	73	
J	Company Level Currency	X	CCC	3	75	77	
K	Reserved		CCCCCCCC	40	79	118	

File 3: **Identifier**

Name: idfild.<reg> (EPS, US) or idfili.<reg>

Level: Detail

Frequency: Monthly

Key	Item	Data Type	Format	Length	Start	End	Comments
A #1	I/B/E/S Ticker	X	CCCCCC	6	1	6	
B	CUSIP/ SEDOL	X	CCCCCCCC	8	8	15	
C	Official Ticker	X	CCCCCC	6	17	22	
D	Company Name	X	CCCCCC	16	24	39	
E	Dilution Factor	D	99.99	5	41	45	
F	Primary/Diluted Indicator	X	C	1	47	47	
G	Canadian Currency	X	C	1	49	49	Parent/Consolidated Flag
H	MSCIP Flag	X	C	1	51	51	
I	Uniform Actuals Indicator	X	C	1	53	53	
J	Sector/Industry/Group Code	X	CCCCCC	6	55	60	
K #2	Start Date	N	YYMMDD	6	62	67	

File 4: **Adjustments**

Name: adjfild.<reg> (EPS, US), adjfili.<reg> (EPS, non-EPS)

Adj<measure>.<reg>

Level: Detail

Frequency: Monthly

Key	Item	Data Type	Format	Length	Start	End
A #1	I/B/E/S Ticker	X	CCCCCC	6	1	6
B	Adjustment Factor	D	999.999	7	8	14
C #2	Split Date	N	YYMMDD	6	16	21

File 5:   **SIG Codes**

Name: sigfild.<reg> (EPS, US) or sigfili.<reg> (EPS, non-US)

                         sig<measure>.<reg>

Level: Detail

Frequency: Monthly

Key	Item	Data Type	Format	Length	Start	End
A #1	Sector/ Industry/Group Code	X	CCCCCC	6	1	6
B	Sector Abbreviation	X	CCCCCCCC	8	8	15
C	Sector Name	X	CCCCC	24	17	40
D	Industry Abbreviation	X	CCCCCCCC	8	42	49
E	Industry Name	X	CCCCC	24	51	74
F	Group Abbreviation	X	CCCCCCC	8	76	83
G	Group Name	X	CCCCC	24	85	108

The Sector/ Industry/Group Code field is used to link this file to the identifier file.

File 6:   **Company Level Footnote**

Name   hsfco.<reg>

Level   Detail

Frequency   Monthly

Key	Item	Data Type	Format	Length	Start	End
A #1	I/B/E/S Ticker	X	CCCCCC	6	1	6
B	Footnote Type	X	CCCC	3	8	10
C #2	Activation Date	N	YYMMDD	6	13	18
D	Activation Time	N	HH:MM:SS	8	20	27
E	Expiration Date	N	YYMMDD	6	29	34
F	Footnote Text	X	CCCCC	120	36	155
G	Reserved		CCCCCCC	45	157	202

File 7:   **Report Currency**

Name: curfild.<reg> (US) or curfili.<reg> (non-US)

          ncurfil.<reg> (Normalized, US & non-US)

Level: Detail

Frequency: Monthly

Key	Item	Data Type	Format	Length	Start	End
A #1	I/B/E/S Ticker	X	CCCCCC	6	1	6
B #2	Start Date	N	YYMMDD	6	8	13
C	Currency	X	CCC	3	15	17

File 8:   **Estimator/Analyst Translations**

Name: branfild.<reg> or branfili.<reg>

Level: Detail

Frequency: Monthly

Key	Item	Data Type	Format	Length	Start	End
A	Estimator/Analyst Indicator	X	C	1	1	1
B #1	Estimator/Analyst Code	N	999999	6	3	8
C	Estimator/Analyst Name	X	CCCCC	40	10	49
D	Estimator Code	X	CCCCC	10	50	59

File 9: **Daily Currency Exchange Rates (available only in non-US packages)**

Name: hdxrati.<reg>

Level: Detail

Frequency: Monthly

Key	Item	Data Type	Format	Length	Start	End
A	Announce Date	N	YYYYMMDD	8	1	8
B	Currency Code	X	CCC	3	10	12
C	Exchange Rate	D	100000	15	14	28

File 10: **Announce with Timestamp (AT) Detail Estimates**

Name (Adjusted): detfilat.<reg> (EPS), det<measure>at.<reg> (non-EPS)

ndetfilat.<reg> (EPS), ndet<measure>at.<reg> (non-EPS) (Normalized)

Name (Unadjusted): detfilut.<reg>, det<measure>ut.<reg>

ndetfilut.<reg> (EPS), ndet<measure>ut.<reg> (non-EPS) (Normalized)

Level: Detail

Frequency: Monthly

Key	Item	Data Type	Format	Length	Start	End	Comments
A#1	I/B/E/S Ticker	X	CCCCCC	6	1	6	
B#2	Estimator	N	99999	5	8	12	
C	Analyst Code	N	999999	6	14	19	
D	Canadian Currency (Est Level)	X	C	1	21	21	Parent/Consolidated Flag (non US)
E	Primary/ Diluted Flag (Est Level)	X	C	1	23	23	
F#3	Forecast Period Indicator	X	C	1	25	25	
G#4	Measure	X	CCC	3	27	29	See Measures chart
H#5	Forecast Period End Date	X	CCCC	4	31	34	
I	Value	D	99999.9999	9	36	44	
J#6	Activation Date	N	YYMMDD	6	46	51	

Key	Item	Data Type	Format	Length	Start	End	Comments
K#7	Activation Time	N	HH:MM:SS	8	53	60	
L	Review Date (YYMMDD)	N	YYMMDD	6	62	67	
M	Review Time	N	HH:MM:SS	8	69	76	
N	Announce Date (YYMMDD)	N	YYMMDD	6	78	83	
O	Announce Time	N	HH:MM:SS	8	85	92	
P	Currency	X	CCC	3	94	96	Available in Regular History Non-US files only; Available in Normalized History for all regions

File 11a (US):   **Announce with Timestamp (AT) Excluded Estimates**

Name (Adjusted):   exlfilat.US (EPS) and exl<measure>at.US (non-EPS)

     nexlfilat.US (EPS) and nexl<measure>at.US (non-EPS) (Normalized)

Name (Unadjusted):   exlfilut.US and exl<measure>ut.US

     nexlfilut.US (EPS) and nexl<measure>ut.US (non-EPS) (Normalized)

Level: Detail

Frequency: Monthly

Key	Item	Data Type	Format	Length	Start	End	Comments
A#1	I/B/E/S Ticker	X	CCCCCC	6	1	6	
B#2	Estimator	N	99999	5	8	12	
C	Analyst Code	N	999999	6	14	19	
D#3	Forecast Period Indicator	X	C	1	21	21	
E#4	Measure	X	CCC	3	23	25	See Measures chart
F#5	Forecast Period End Date	N	YYMM	4	27	30	
G	Value	D	99999.999	9	32	40	
H	Activation Date	N	YYMMDD	6	42	47	

Key	Item	Data Type	Format	Length	Start	End	Comments
I	Activation Time	N	HH:MM:SS	8	49	56	
J#6	Exclude Date	N	YYMMDD	6	58	63	
K#7	Exclude Time	N	HH:MM:SS	8	65	72	
L	Exclude Flag	X	C	1	74	74	
M	Exclude End Date	N	YYMMDD	6	76	81	
N	Exclude End Time	N	HH:MM:SS	8	83	90	

File 11b (non-US): **Announce with Timestamp (AT) Excluded Estimates**

Name (Adjusted): exlfilat.<reg> (EPS) and exl<measure>at.<reg> (non-EPS)

nexlfilat.<reg> (EPS) and nexl<measure>at.<reg> (non-EPS) (Normalized)

Name (Unadjusted): exlfilut.<reg> and exl<measure>ut.<reg>

nexlfilut.<reg> (EPS) and nexl<measure>ut.<reg> (non-EPS) (Normalized)

Level: Detail

Frequency: Monthly

Key	Item	Data Type	Format	Length	Start	End	Comments
A#1	I/B/E/S Ticker	X	CCCCCC	6	1	6	
B#2	Estimator	N	99999	5	8	12	
C	Analyst Code	N	999999	6	14	19	
D#3	Forecast Period Indicator	X	C	1	21	21	
E#4	Measure	X	CCC	3	23	25	See Measures chart
F#5	Forecast Period End Date	N	YYMM	4	27	30	
G	Value	D	99999.999	9	32	40	
H	Activation Date	N	YYMMDD	6	42	47	
I	Activation Time	N	HH:MM:SS	8	49	56	
J#6	Exclude Date	N	YYMMDD	6	58	63	
K#7	Exclude Time	N	HH:MM:SS	8	65	72	
L	Currency	X	CCC	3	74	76	
M	Exclude Flag	X	C	1	78	78	
N	Exclude End Date	N	YYMMDD	6	80	85	
O	Exclude End Time	N	HH:MM:SS	8	87	94	

File 12: **Stop Estimates**

Name: stpfilat.<reg> (EPS) and stp<measure>at.<reg> (non-EPS)

Level: Detail

Frequency: Monthly

Key	Item	Data Type	Format	Length	Start	End	Comments
A#1	I/B/E/S Ticker	X	CCCCC	6	1	6	
B#2	Estimator	N	99999	5	8	12	
C#3	Periodicity	X	C	1	14	14	ANN, SAN, QTR, LTG
D#4	Measure	X	CCC	3	16	18	See Measures chart
E#5	Forecast Period End Date	N	YYMM	4	20	23	
F#6	Announce Stop Date	N	YYMMDD	6	25	30	
G#7	Announce Stop Time	N	HH:MM:SS	8	32	39	

File 13: **Price Target (PTG)**

Name (Adjusted): detptg.<reg>

ndetptgat.<reg> (Normalized)

Name (Unadjusted) detptgut.<reg>

ndetptgut.<reg> (Normalized)

Level: Detail

Frequency: Monthly

Key	Item	Data Type	Format	Length	Start	End
A#1	I/B/E/S Ticker	X	CCCCCC	6	1	6
B#2	Estimator ID	N	CCCCCCCC	8	8	15
C	Analyst Name	X	CCCCCC	20	17	36
D	Horizon	X	999	3	38	40
E	Value	D	99999.999	9	42	50
F	Estimate Currency	X	CCC	3	52	54
G#3	Activation Date	N	YYYYMMDD	8	56	63
H# 4	Activation Time	N	HH:MM:SS	8	65	72

Key	Item	Data Type	Format	Length	Start	End
I	Announce Date	N	YYYYMMDD	8	74	81
J	Announce Time	N	HH:MM:SS	8	83	90
K	Currency at Company Level	X	CCC	3	92	94
L	Analyst Mask Code	N	999999	6	96	101
M	Reserved	X	CCCCCCCC	40	103	142

File 14: **Stop Price Target**
Name: stopptg.<reg>
Level: Detail
Frequency: Monthly

Key	Item	Data Type	Format	Length	Start	End
A#1	I/B/E/S Ticker	X	CCCCCC	6	1	6
B#2	Estimator	N	CCCCCCCC	8	8	15
C#3	Stop Date	N	YYYYMMDD	8	17	24
D#4	Stop Time	N	HH:MM:SS	8	26	33
E	Reserved		CCCCCCCC	40	35	74

File 15: **Detail Recommendations**
Name: hrecdett.<reg>
Level: Detail
Frequency: Monthly

Key	Item	Data Type	Format	Length	Start	End
A#1	I/B/E/S Ticker	X	CCCCCC	6	1	6
B#2	Estimator	X	CCCC	8	9	16
C	Analyst Name	X	CCCC	40	19	58
D#3	Activation Date	N	YYMMDD	6	61	66
E#4	Activation Time	N	HH:MM:SS	8	68	75
F	Review Date	N	YYMMDD	6	78	83
G	Review Time	N	HH:MM:SS	8	85	92
H	Estimator Rec Code	X	CCCCC	5	95	99
I	Estimator Text	X	CCCC	20	102	122
J	IBES Rec Code	X	CCCC	8	124	131
K	IBES Text	X	CCCC	16	134	149
L	Estimator Mask Code	N	99999	8	152	159
M	Analyst Mask Code	N	999999	8	162	169

Key	Item	Data Type	Format	Length	Start	End
N	Announce Date	N	YYMMDD	6	172	177
O	Announce Time	N	HH:MM:SS	8	179	186

File 16: **Stop Recommendations**

Name: hrecstpt.<reg>

Level Detail

Frequency: Monthly

Key	Item	Data Type	Format	Length	Start	End
A#1	I/B/E/S Ticker	X	CCCCCC	6	1	6
B#2	Estimator ID	N	CCC	8	9	16
C#3	Activation Date	N	YYMMDD	6	19	24
D#4	Activation Time	N	HH:MM:SS	8	26	33

File 17: **Recommendations Estimator Translation**

Name: hrecbkru.<reg> (US) and hrecbkri.<reg> (non-US)

Level: Detail

Frequency: Monthly

Key	Item	Data Type	Format	Length	Start	End
A#1	Estimator ID	X	CCCC	6	1	6
B	Name	X	CCCC	16	12	27
C	Start Date	N	YYMMDD	6	29	34
D	End Date	N	YYMMDD	6	36	41

File 18:   **Recommendations ID**

Name: hrecidu.<reg> (US) and hrecidi.<reg> (non-US)

Level: Detail

Frequency: Monthly

Key	Item	Data Type	Format	Length	Start	End
A#1	I/B/E/S Ticker	X	CCCCCC	6	1	6
B	CUSIP/SEDOL	X	CCCC	8	8	15
C	Company Name	X	CCCC	16	17	32
D	Official ticker	X	CCCCCC	6	34	39
E	Home mkt code	X	CCCC	15	41	55
F	SIG Code	X	CCCCCC	6	57	62
G	MSCIP Flag	X	C	1	64	64
H	Start Date	N	YYMMDD	6	66	71
I	End Date	N	YYMMDD	6	73	78

Chapter 5   Currency Conversion

Estimate Level

A default currency is assigned to every company under coverage and all detailed estimates are provided in that default currency. All estimates received in a currency other than the default company currency are converted using the exchange rate of the estimate's activation date.

The default currency with its start date is indicated in the Report Currency file (curfili.int).

Example

Estimator 11111 contributed an estimate of 24.03 in Norwegian Krone (NOK) for fiscal period December 2005 on March 04, 2004. Using the curfili.int file, it can be determined that the EPS estimate included in the detfili.int file has been converted to US Dollar (USD).

Records from the Report Currency File (curfili.int)

Ticker	Start Date	Currency
@5RO	971110	NOK
@5RO	011115	USD

Record from the Detail Estimate File (detfili.int)

Ticker	Estimator Code	Analyst Code	Estimate Currency	Measure	Fiscal Period	Value	Activation Date
@5RO	11111	222222	NOK	EPS	0512	3.3719	20040304

Guidelines to Convert Detail Estimate to an Alternate Currency

To convert an estimate back to its original value provided by the analyst, use the estimate's activation date. The exchange rates are available in the Daily Exchange Rate File (hdxrati.int).

Example

To convert the USD estimate of 3.3719 in the file to NOK, multiply 3.37193 by the exchange rate of 7.127050 from the estimate's activation date on March 4, 2004. The result is 24.03 in NOK.

Records from the Report Currency File (curfili.int)

Ticker	Start Date	Currency
@5RO	971110	NOK
@5RO	011115	USD

Record from the Detail Estimate File (detfili.int)

Ticker	Estimator Code	Analyst Code	Estimate Currency	Measure	Fiscal Period	Value	Activation Date
@5RO	11111	222222	NOK	EPS	0512	3.3719	20040304

Record from the Daily Exchange Rate File (hdxrati.int)

Date	Currency	Exchange Rate
20040304	NOK	7.127050

Company-Level Currency Changes

The default currency assigned to a company may change over time. Possible reasons for this change include a company changing its reporting currency or the majority of analysts submitting estimates in a new currency.

To view the history of estimates in one common currency, the exchange rate from the estimate's activation date may be used. The exchange rates are available in the Daily Exchange Rate File (hdxrati.int).

Example

For @BPA, the default currency was British Pence (BPN) from January 15, 1987 to December 15, 2004. Starting December 16, 2004, it was in US Dollar (USD). To convert the values that were entered into the database before December 16, 2004 from BPN to USD, the daily exchange rate may be used.

On April 22, 2003, Estimator 11111 contributed estimates in British Pence (BPN) for the fiscal year ending December 2004.

To convert the BPN estimate of 21.558 in the file to USD, divide 21.558 by the exchange rate of 63.406 from the estimate's activation date on April 22, 2003. The result is 0.34 in USD.

Records from the Report Currency File (curfili.int)

Ticker	Start Date	Currency
@BPA	870115	BPN
@BPA	041216	USD

Record from the Detail Estimate File (detfili.int)

Ticker	Estimator Code	Analyst Code	Estimate Currency	Measure	Fiscal Period	Value	Activation Date
@BPA	11111	222222	BPN	EPS	0412	21.558	20030422

Record from the Daily Exchange Rate File (hdxrati.int)

Date	Currency	Exchange Rate
20030422	BPN	63.406000

Note that the Daily Exchange Rate File (hdxrati.int) shows conversion rates to the US Dollar (USD). In order to convert to a currency other than USD, divide the exchange rate of Currency A by the exchange rate of Currency B from the same day.

Actuals

In cases where the default currency of the company changes, the actuals captured on or after the date of change will reflect the new currency. All earlier actuals remain in the currency they were originally recorded.

Example:

The default currency for @5RO changed on November 15, 2001 from NOK to USD.

The latest actual captured on or before the date of the currency change is the December 2000 actual, originally 20.635 NOK. After the company level currency is changed to USD the value of 2.34 is displayed for fiscal year December 2000, with the original report date of February 13, 2001. The values for the previous fiscal years remain in Norwegian Krone (NOK). For example: the December 1999 actual remains at 17.0 NOK.

Records from the Report Currency File (curfili.int) before the currency change

Ticker	Start Date	Currency
@5RO	971120	NOK

Records from the Actuals File (actfili.int) before the currency change (Oct)

Ticker	Measure	Periodicity	Period End Date	Value	Announce Date
@5RO	EPS	ANN	9812	14.200	990211
@5RO	EPS	ANN	9912	17.000	000201
@5RO	EPS	ANN	0012	20.635	010213

Records from the Report Currency File (curfili.int) after the change

Ticker	Start Date	Currency
@5RO	971120	NOK
@5RO	011115	USD

Records from the Actuals File (actfili.int)

Ticker	Measure	Periodicity	Period End Date	Value	Announce Date
@5RO	EPS	ANN	9812	14.200	990211
@5RO	EPS	ANN	9912	17.000	000201
@5RO	EPS	ANN	0012	2.340	010213

Guidelines to Convert Actuals to an Alternate Currency

To view the history of actuals in one common currency, the examples below illustrate how to use the Daily Exchange Rate File (hdxrati.int) to convert using the last day of the period end date.

Example

To convert the NOK actual of 17.00 in file to USD, divide 17.00 by the exchange rate of 8.0372 from the last of the period end date of December 1999. The result is 2.1151 in USD.

To convert USD actual of 2.34 in the file to NOK, multiply 2.34 by the exchange rate of 8.8185 from the last day of the period end date of December 2000. The result is 20.6353 in NOK.

Records from the Actuals File (actfili.int)

Ticker	Measure	Periodicity	Period End Date	Value	Announce Date
@5RO	EPS	ANN	9912	17.000	000201
@5RO	EPS	ANN	0012	2.340	010213

Records from the Daily Exchange Rate File (hdxrati.int)

Date	Currency	Exchange Rate
19991231	NOK	8.037200
20001229	NOK	8.818500

Appendix

Instrument Type

Code	Instrument Type
A	ADR Security
B	Fixed Income Research
D	Dual Listing
F	Foreign Listing
G	GDR Security
I	Index
O	Commodity
S	Security
U	Funds
X	Multi Share Not In Mkt Cap

Forecast Period Indicator

Code	Description
0	Long Term Growth
1	Fiscal Year 1
2	Fiscal Year 2
3	Fiscal Year 3
4	Fiscal Year 4
5	Fiscal Year 5
E	Fiscal Year 6
F	Fiscal Year 7
G	Fiscal Year 8
H	Fiscal Year 9

Code	Description
I	Fiscal Year 10
A	Semi-Annual 1
B	Semi-Annual 2
C	Semi-Annual 3
D	Semi-Annual 4
6	Quarter 1
7	Quarter 2
8	Quarter 3
9	Quarter 4
N	Quarter 5
O	Quarter 6
P	Quarter 7
Q	Quarter 8
X	Fiscal Year without an actual or more than 10 years in the future
Y	Quarter more than 8 quarters in the future
Z	Semi-annual without an actual or at least 5 semi-annual periods in the future

Data Types

Code	Description
D	Decimal Data
N	Numeric Data, fixed format
X	Character Data, any character string

Company Level Footnote Types

Code	Description
3	Earnings on a fully adjusted basis (IFRS)
4	Earnings on a fully reported basis (IFRS)
8	MMMYY Estimate reflects FASB APB 14-1
9	MMMYY Estimate does not reflect FASB APB 14-1
A	Accounting alert, Free form
C	Accounting alert, Company followed on a cash earnings basis
E	MMMYY Estimate reflects adoption of FAS123(R)
F	MMMYY Estimate does not reflect adoption of FAS123(R)
G	MMMYY Accounting alert, Company earnings before goodwill amortization
I	MMMYY Estimates have always reflected adoption of FAS123(R)
N	MMMYY No known impact from FAS123(R) on estimates
M	Majority Basis includes/excludes…(freeform criteria utilized to define specific accounting scenario of the mean calculation)
W	MMMYY Estimates based on IFRS

Currency Units

Code	Currency	Millions/Billions
AED	U.A.E. Dirham	Millions
AFN	Afghanistan New Afghani	Millions
AMD	Armenian Dram	Millions
ARS	Argentine Peso	Millions
AUD	Australian $	Millions
AZN	Azerbaijan Manet New	Millions
BAM	Marka (Bosnia)	Millions
BDT	Bangladesh Taka	Millions
BGN	Bulgarian Lev (New)	Millions

Code	Currency	Millions/Billions
BHD	Bahrain Dinar	Millions
BMD	Bermuda Dollar	Millions
BOB	Bolivian boliviano	Millions
BPN	British Pence	Millions
BRL	Brazilian Real	Millions
BSD	Bahamas $	Millions
BWP	Botswanan Pula	Millions
BYR	Belarus Rouble	Millions
BZD	Belize Dollar	Millions
CAD	Canadian $	Millions
CDF	Congolese Franc	Millions
CHF	Swiss Franc	Millions
CLP	Chilean Peso	Billions
CNY	China Renminbi	Millions
COP	Colombian Peso	Billions
CRC	Costa Rica Colon	Millions
CZK	Czech Koruna	Millions
DKK	Danish Krone	Millions
DOP	Dominican Republic peso	Millions
DZD	Algerian Dinar	Millions
EEK	Estonian Kroon	Millions
EGP	Egyptian Pound	Millions
EUR	Euro	Millions
GEL	Georgian Lari	Millions
GHS	Ghanian Cedi New	Millions
GTQ	Guatemala Quetzal	Millions
HKD	Hong Kong $	Millions

Code	Currency	Millions/Billions
HNL	Honduran Lempira	Millions
HRK	Croatian Kruna	Millions
HUF	Hungarian Forint	Millions
IDR	Indones. Rupiah	Billions
ILS	Israeli Shekel	Millions
INR	Indian Rupee	Millions
IQD	Iraqi Dinar	Millions
IRR	Iranian Rial	Millions
ISK	Icelandic Krona	Millions
JMD	Jamaican Dollar	Millions
JOD	Jordanian Dinar	Millions
JPY	Japanese Yen	Billions
KES	Kenyan Shilling	Millions
KGS	Kyrgyzstani Som	Millions
KRW	S. Korean Won	Billions
KWD	Kuwait Dinar	Millions
KYD	Cayman Island Dollar	Millions
KZT	Kazakhstan Tenge	Millions
LBP	Lebanese Pound	Millions
LKR	Sri Lanka Rupee	Millions
LTL	Lithuanian Litas	Millions
LVL	Latvian Lat	Millions
LYD	Libyan Dinar	Millions
MAD	Moroccan Dirham	Millions
MDL	Moldovan Leu	Millions
MKD	Macedonian Denar	Millions
MNT	Mongolian Tugrik	Millions

Code	Currency	Millions/Billions
MOP	Macau Pataca	Millions
MUR	Mauritius Rupee	Millions
MXN	Mexican Peso	Millions
MYR	Malays. Ringgit	Millions
NAD	Namibian Dollar	Millions
NGN	Nigerian Naira	Millions
NIO	Nicaragua Cordoba Oro	Millions
NOK	Norwegian Krone	Millions
NZD	New Zealand $	Millions
OMR	Oman Rial	Millions
PAB	Panama Balboa	Millions
PEN	Peruvian Soles	Millions
PGK	Papua New Guinea Kina	Millions
PHP	Philip. Peso	Millions
PKR	Pakistan Rupee	Millions
PLN	Polish Zloty	Millions
PYG	Paraguay Guarani	Millions
QAR	Qatar Rial	Millions
RON	Romanian Leu New	Millions
RSD	Serbian Dinar New	Millions
SAR	Saudi Riyal	Millions
SDG	Sudanese Pound	Millions
SEK	Swedish Krona	Millions
SGD	Singapore $	Millions
SKK	Slovakian Koruna	Millions
SVC	El Salvadorian Colon	Millions
SYP	Syrian Pound	Millions

Code	Currency	Millions/Billions
THB	Thailand Baht	Millions
TJS	Tajik Somoni	Millions
TMM	Turkmenistani Manet	Millions
TND	Tunisian Dinar	Millions
TRY	Turkish Lira New	Millions
TTD	Trinidad and Tobago Dollar	Millions
TWD	Taiwan $	Millions
UAH	UKRAINE HRYVNIA	Millions
UDT	$U.S./1000 Shrs	Millions
UGX	Ugandan Shilling New	Millions
USD	U.S. Dollar	Millions
UYU	Uruguayan New Peso	Millions
UZS	Uzbekistani Som	Millions
VEF	Bolivar Fuerte	Millions
VND	Vietnam Dong	Millions
XAF	Cameroon CFA franc	Millions
ZAR	S. African Rand	Millions
ZMK	Zambian kwacha	Millions
ZWD	Zimbabwe Dollar	Millions

I/B/E/S Country and Currency Codes with Start Dates

Country	Country Code	Currency Code	Currency	Data From	ISO Country Code	ISO Currency Code
Argentina	LA	ARS	Argentine Peso	Jul-92	AR	ARS
Australia	AA	AUD	Australian Dollar	Jan-87	AU	AUD
Austria	EA	ATS	Austrian Shilling	Jan-87	AT	ATS
Bahrain	FD	BHD	Bahrain Dinar	Jun-05	BH	BHD

Country	Country Code	Currency Code	Currency	Data From	ISO Country Code	ISO Currency Code
Bangladesh	FB	BDT	Bangladesh Taka	-	BD	BDT
Belgium	EB	BEF	Belgium Franc	Jan-87	BE	BEF
Bermuda	NB	BMD	Bermuda Dollar	Jul-05	BM	BMD
Botswana	KB	BWP	Botswanan Pula	Jan-00	BW	BWP
Brazil	LB	BRL	Brazilian Real	Aug-92	BR	BRL
Brazil	XB	UDT	United States Dollar/1000 Shares	Aug-92	-	UDT
Bulgaria	DB	BGN	Bulgarian Lev	Jan-00	BG	BGN
Canada	NC	CAD	Canadian Dollar	Jan-76	CA	CAD
Cayman Islands	LF	KYD	Cayman Island Dollar	Jul-05	KY	KYD
Chile	LC	CLP	Chilean Peso	Oct-92	CL	CLP
China	FC	CNY	China Renminbi	Apr-93	CN	CNY
Colombia	LL	COP	Colombian Peso	Jun-94	CO	COP
Croatia	DC	HRK	Croatian Kruna	May-99	HR	HRK
Cyprus	EO	CYP	Cypriot Pound	Sep-05	CY	CYP
Czech Republic	EC	CZK	Czech Koruna	Jun-95	CZ	CZK
Denmark	SD	DKK	Danish Krone	Jan-87	DK	DKK
Egypt	KE	EGP	Egyptian Pound	May-99	EG	EGP
Estonia	DE	EEK	Estonian Kroon	Jul-98	EE	EEK
Finland	SF	FIM	Finnish Marka	Jan-87	FI	FIM
France	EF	FRF	French Franc	Jan-87	FR	FRF
Germany	ED	DEM	Deutch Mark	Jan-87	DE	DEM
Ghana	KJ	GHC	Ghanaian Cedi	Jan-00	GH	GHC
Greece	EH	GRD	Greek Drachma	Dec-92	GR	GRD
Hong Kong	FH	HKD	Hong Kong Dollar	Jan-87	HK	HKD
Hungary	EM	HUF	Hungarian Forint	Jun-95	HU	HUF
Iceland	SI	ISK	Icelandic Krona	Apr-05	IS	ISK

Country	Country Code	Currency Code	Currency	Data From	ISO Country Code	ISO Currency Code
India	FI	INR	Indian Rupee	Jan-93	IN	INR
Indonesia	FL	IDR	Indones Rupiah	May-90	ID	IDR
Ireland	EZ	IPN	Irish Pence	Jan-87	IE	IPN
Israel	FZ	ILS	Israeli Shekel	Jun-95	IL	ILS
Italy	EI	IPL	Italian Lira	Jan-87	IT	IPL
Japan	FJ	JPY	Japanese Yen	Jan-87	JP	JPY
Jordan	FR	JOD	Jordanian Dinar	May-99	JO	JOD
Kenya	KK	KES	Kenyan Shilling	Jan-00	KE	KE
Korea	FK	KRW	South Korean Won	Feb-88	KR	KRW
Kuwait	FO	KWD	Kuwait Dinar	May-05	KW	KWD
Latvia	DK	LVL	Latvian Lat	Jul-98	LV	LVL
Lebanon	FX	LBP	Lebanese Pound	Jan-00	LB	LB
Lithuania	DL	LTL	Lithuanian Litas	Jul-98	LT	LTL
Luxembourg	EL	LUF	Luxembourg Franc	-	LU	LUF
Malaysia	FM	MYR	Malaysian Ringgit	Jan-87	MY	MYR
Mauritius	KP	MUR	Mauritius Rupee	Jan-00	MU	MUR
Mexico	LM	MXN	Mexican Peso	May-92	MX	MXN
Morocco	KM	MAD	Moroccan Dirham	Jan-00	MA	MA
Namibia	JX	NAD	Nambian Dollar	Aug-05	NA	NA
Netherlands	EN	NLG	Netherland Guilder	Jan-87	NL	NLG
New Zealand	AN	NZD	New Zealand Dollar	Jan-87	NZ	NZD
Nigeria	KN	NGN	Nigerian Naira	Jan-00	NG	NGN
Norway	SN	NOK	Norwegian Krone	Jan-87	NO	NOK
Oman	DM	OMR	Oman Rial	Aug-05	OM	OMR
Pakistan	FQ	PKR	Pakistan Rupee	Jan-93	PK	PKR
Papua New Guinea	AP	PGK	Papua New Guinea Kina	Mar-00	PG	PGK

Country	Country Code	Currency Code	Currency	Data From	ISO Country Code	ISO Currency Code
Peru	LP	USD	United States Dollar	Jun-94	PE	USD
Philippines	FP	PHP	Philippine Peso	Apr-87	PH	PHP
Poland	EG	PLN	Polish Zloty	Jun-95	PL	PLN
Portugal	EP	PTE	Portuguese Escudo	Apr-91	PT	PTE
Qatar	GQ	QAR	Qatar Rial	May-05	QA	QAR
Romania	EK	ROL	Romanian Leu	Jul-98	RO	ROL
Russia	ER	USD	United State Dollar	Aug-97	RU	USD
Saudi Arabia	FW	SAR	Saudi Riyal	May-05	SA	SAR
Singapore	FS	SGD	Singapore Dollar	Jan-87	SG	SGD
Slovakia	DR	SKK	Slovakian Koruna	Dec-95	SK	SKK
Slovenia	DV	SIT	Slovenian Tolar	May-99	SI	SIT
South Africa	KS	ZAR	South African Rand	Jan-87	ZA	ZAR
Spain	EE	ESP	Spanish Pesetas	Jan-87	ES	ESP
Sri Lanka	BL	LKR	Sri Lanka Rupee	Jan-93	LK	LKR
Sweden	SS	SEK	Swedish Krona	Jan-87	SE	SEK
Switzerland	ES	CHF	Swiss Franc	Jan-87	CH	CHF
Taiwan	FA	TWD	Taiwan Dollar	Jan-88	TW	TWD
Thailand	FT	THB	Thailand Baht	Sep-87	TH	THB
Tunisia	KV	TND	Tunisian Dinar	Oct-05		
Turkey	ET	TRY	Turkish Lira	Dec-91	TR	TRY
United Arab Emirates (UAE)	FU	AED	United Arab Emirates (UAE) Dirham	Jun-05	AE	AED
Ukraine	DU	USD	United States Dollar	Jan-00	UA	USD
United Kingdom	EX	BPN	British Pence	Jan-87	GB	BPN
United States	NA	USD	United States Dollar	Jan-76	US	USD
Venezuela	LV	VEB	Venezuelan Bolivar	Jun-94	VE	VEB

Country	Country Code	Currency Code	Currency	Data From	ISO Country Code	ISO Currency Code
World	WL	USD	United States Dollar	-	WD	USD
Zimbabwe	KR	ZWD	Zimbabwe Dollar	Jan-00	ZW	ZWD

- Currency code is EUR for Euro-in countries.
- Start Date column refers to earliest date of available Summary History.
- Per-share data items, prices, and shares outstanding in British pence, non-per-share data items in British Pounds.

Sample Data Account & Additional Information

FTP Information

FTP address : ftp.ibes.com

User id : samples

Password : luk$tou

You can copy and paste the URL:

ftp://samples:luk$tou@ftp.ibes.com/samples/history/

or

ftp://samples:luk$tou@ftp.ibes.com/history/

(depending on your web browser)

Data Sets

US data set consists of 77 US companies. 22 are DOW components. INTL data set consists of 77 INTL companies. There are 2 large cap companies from each country.

Detail History Sample Files

dhepssmi.zip   Detail EPS Non-US History

dhepssmu.zip   Detail EPS Measures US History

dhmessmi.zip   Detail Additional Measures Non-US History

dhmessmu.zip   Detail Additional Measures US History

hdrecsmi.zip   Detail Recommendations Non-US History

hdrecsmu.zip   Detail Recommendations US History

udepssmi.zip   Unadjusted Detail EPS Non-US History

udepssmu.zip   Unadjusted Detail EPS Measures US History

udmessmi.zip   Unadjusted Detail Additional Measures Non-US History

udmessmu.zip   Unadjusted Detail Additional Measures US History

Additional Related Documentation is also available using the link above in the "Documentation" directory.

- Estimates Data Measure Definitions Guide.pdf
- TF Estimates Glossary - February 2008.pdf
- TF Methodology for Estimates - February 2008.pdf

Glossary

Term	Definition
Adjustment Factor	Cumulative factor that has been applied to historical data to adjust for splits and capitalization changes.
Analyst	Person at the sell-side institution or contributing analyst making the forecast.
Analyst Code	Numeric code matched to each contributing analyst.
Activation Date (YYMMDD)	Date that the forecast/actual was recorded by Thomson Reuters.
Activation Time	Time that the forecast/actual was recorded by Thomson Reuters.
Announce Date (YYMMDD)	Date that the forecast/actual was reported.
Announce Time	Time that the forecast/actual was reported.
Announce Split Date	Effective split date on the Thomson Reuters database.
Announce Stop Date	Effective stop date of an estimate in the Thomson Reuters database.
Cumulative Adjustment Factor	Adjustment factors multiplied together.
Currency	3-CHAR abbreviation indicating denomination of estimate data.
Canadian Currency or Parent/Consolidated Flag	The flag has different usages in the US and non-US file. Its purpose for Canadian companies is to mark the companies whose currency is Canadian. For non-US companies it is a way to differentiate between companies reporting on a parent or consolidated basis.
CUSIP/SEDOL	CUSIPs and SEDOLs are unique alphanumeric identifiers for individual securities. Thomson Reuters uses the first 8 digits for each CUSIP, and Country Code followed by the first 6 digits of SEDOLs in its database.
Dilution Factor	Numeric factor used to convert non-conforming forecasts to Street convention when dilutive issues exist.
Estimator Code	Numeric code matched to each contributing estimator.
Estimator Name	Full name for each contributing estimator.
Estimator	Sell-side institution or contributor making the forecast.
Exchange Rate	Exchange rate used for currency conversions

Term	Definition
Forecast Period Indicator	Each fiscal period (FY1, FY2, Q1, etc.) is given a numeric value. This allows for company comparison regardless of FY end. FY year-end can be cross-referenced through the Forecast Period End Date. (Please refer to Appendix).
Forecast Period End Date	Fiscal period's end date format, for which the measure/periodicity applies.
Group Abbreviation	Coded abbreviation of Group Name.
Group Name	Tertiary division based on business activity.
I/B/E/S Ticker	Unique Thomson Reuters identifier that allows the user to link companies over time regardless of ownership changes.
Industry Abbreviation	Abbreviation for Industry Name.
Industry Name	Secondary division based on business activity.
Measure	Data type indicator or kind of estimate being represented. Examples of measure are EPS, CPS, DPS, etc.
MSCIP Flag	Indicator for companies in the Morgan Stanley Capital International Perspective. This field is no longer used.
Official Ticker	Official trading ticker of company (limited to first four digits).
Parent/ Consolidated Flag	Indicates whether earnings forecasts are provided on a Parent or Consolidated basis.
Periodicity	Frequency by which a measure is recorded. Examples of periodicity are ANN, QTR, SAN, LTG. (Please refer to Appendix).
Primary/Diluted Indicator (Company Level)	Indicates whether the company is followed on a primary or diluted basis.
Primary/Diluted Flag	Indicates whether an individual estimate was received on a Primary basis. In cases where the estimate level (Estimate Level) flag differs from the company level flag, the data has been converted.
Review Date (YYMMDD)	Most recent date that an estimate was confirmed as accurate.
Review Time	Most recent time that an estimate was confirmed as accurate.
Sector Abbreviation	Coded abbreviation for Sector Name.
Sector Name	Primary division based upon business activity.
Sector/Industry/Group	Numeric code indicating type of business; loosely based on S&P industry groupings.

Term	Definition
Start date (YYMMDD)	Date when variable first appeared in the Thomson Reuters database.
Uniform Actuals	Indicator Toggle flag indicating analysts' agreement with regard to latest reported earnings. This field is no longer used.
Value	Value of the forecast or another name for an Estimate.

For more information

**Send us a sales enquiry at
reuters.com/salesenquiry**

**Read more about our products at
reuters.com/productinfo**

**Find out how to contact your local
office reuters.com/contacts**

THOMSON REUTERS