

I/B/E/S SUMMARY HISTORY – Version 2.0

1 Overview

I/B/E/S's extensive historical data presents a unique opportunity for testing investment theories in a variety of global market conditions. Historical forecasts date back to 1976 in the US, and 1987 internationally, providing the broadest and deepest knowledge base for back-testing and analysis in existence today.

Summary history consists of chronological snapshots of consensus level data taken on a monthly basis. The snapshots are as of the Thursday before the third Friday of every month (which is the I/B/E/S monthly production run) and the files are available the following week. These files are delivered on CD-ROMs or 8mm tapes on a one-time or monthly refresh basis. The monthly files consist of a complete update of our historical data that includes the latest month's data and historical data adjusted for corporate actions and corrections.

Data sets are available for U.S. and International stocks and can be customized by country or region. In addition, summary history is not limited to earnings per share data. Sales, cash flow, EBITDA, dividends per share and other forecast measures are also available.

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. A common misconception is that I/B/E/S selects which companies enter the database. But inclusion in the database is dependent on brokerage firms following that company.

Removing a Company from the I/B/E/S Database

A company can disappear from the I/B/E/S database for a variety of reasons: It has gone out of business, it has been acquired (see below), or no analyst makes a forecast on it any longer. However, once a company has appeared in I/B/E/S, its estimates will remain in the database forever. This helps keep the I/B/E/S database free from survivorship bias.

Handling 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.

Defining Fiscal Periods

I/B/E/S database contains estimate data for up to five Annual Fiscal Periods, eight Quarter Fiscal Periods, four Semi-annual Periods, and Long Term Growth. It should be noted that 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". A company's last reported annual earnings is referred to as FY0, 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 2000 year-end, the FY1 mean estimate is for December 2001 and the FY2 mean estimate is for the period ended December 2002. The same holds true for the interim periods. If Q0 refers to the period ended March 2000 (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.

Converting 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, and Japan, earnings reports are culled directly from the news wires, adjusted for comparability with estimates and reported to subscribers by the next day. In other 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 in 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.

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. newspaper reports; other databases.

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 in the I/B/E/S database may not exactly match earnings that appear in a company's earnings releases.

Capitalization Changes and Accounting Differences

When a stock split occurs, I/B/E/S immediately adjusts all current as well as historical estimates and actuals for consistency in reflecting the current capitalization. File 4 contains split factors and dates for those users who wish to adjust back historical estimates to reflect the values as they were at the time (pre-split).

Likewise, I/B/E/S maintains a staff of research analysts to examine incoming data for stock splits, extraordinary items, accounting changes, anomalies, and inconsistencies. Our rigorous quality control processes ensure consistency and comparability in estimates. A wide range of estimates reflects a wide range of analyst opinion—not the mixing of estimates on different accounting bases.

Important Nomenclature

This section documents important abbreviations and terms that are universal within the I/B/E/S Summary History database. These terms are key in understanding the I/B/E/S data model.

I/B/E/S Ticker	The I/B/E/S Ticker is an I/B/E/S assigned identifier that is unique and permanent. In the event of a company name change or ticker change, the I/B/E/S ticker remains the same. In the case of an acquisition or merger of two companies, the I/B/E/S ticker for the dominant entity prevails for future reporting. This allows for historical continuity.
Stat Period	The dates the summary statistics were calculated in an YYYYMMDD format.
Measure	The type or kind of estimate being represented.
Fiscal Period	The frequency by which a measure is recorded.
Forecast Period End Date	The fiscal period's end date in YYYYMM format, for which the measure/periodicity applies.
Forecast Period Indicator	This code represents the number of fiscal periods ahead of the last fiscal period. For example, if the last reported fiscal year (FY0) for a company is 1999, the next fiscal year to be reported (FY1) is 2000, represented by a fiscal period indicator of 1. Conversely, prior to the announcement of FY1999 results, the fiscal period indicator for FY1999 would have been represented as 2. The fiscal period indicator would only be shifted from 2 to 1 after the results for FY1999 have been reported. The same applies to interim periods such as semi-annuals or quarters. For a detail listing of fiscal period indicators, please refer to Appendix 2.
Currency Code	The currency in which the coverage of the company or the reported actual is stated.

The I/B/E/S Summary History File System

The I/B/E/S Summary History File system was designed for use with relational database management systems (RDBMS) such as Oracle, Microsoft SQL Server and Sybase. Its normalized file structure allows flexible updates and manipulation of the data.

Summary History files are organized by measures. Each set of files is specific to the measure and region.

Naming Conventions

Intuitive file naming conventions have been devised to allow users better understanding of the file content. All Summary History file names adhere to the following convention:

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

<Type> represents a two-character mnemonic for the type of file, **hs** for history summary adjusted or **us** for history summary unadjusted.

<Measure> represents a three-character mnemonic for the measure.

<Name> represents a two or three-character mnemonic for the specific file (summary, actuals, etc)

<Region> represents a two or three-character mnemonic for the region.

For example, the adjusted U.S. EPS summary file will be named: "**hsepssum.us**"

The unadjusted U.S. EPS ID file will be named: "**usepsid.us**"

Compressed Files

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

<Type><Measure><Region>.zip

- <Type>** represents a two-character mnemonic for the type of file, **hs** for history summary adjusted or **us** for history summary unadjusted.
- <Measure>** represents a three-character mnemonic for the measure.
- <Region>** represents a two or three-character mnemonic for the region.

For example, the adjusted U.S. sales summary files will be named: "**hssalus.zip**"

The unadjusted version will be named: "**ussalus.zip**"

For example, the adjusted European EPS set, "**hsepseur.zip**" contains the following files:

1. "**hsepssum.eur**" The Summary Statistics file
2. "**hsepsact.eur**" The Actuals Data file
3. "**hsepsid.eur**" The Company Identification file
4. "**hsepsadj.eur**" The Adjustment Factors file
5. "**hsepssig.eur**" The Sector/Industry/Group Codes file
6. "**hsepspan.eur**" The Pricing & Ancillary file
7. "**hsepseur.eur**" The EURO Exchange Rate file

2 File Layout

Set forth below is a description of each file. Detail definitions of all data elements are available in the I/B/E/S Glossary, available from your account executive.

Numeric characters are right justified, integers or decimal fractions. Numbers less than 1.0 fill with spaces to the left of the decimal point. Negative values are prefixed with a minus sign. Decimal numbers that are not available are indicated by a minus sign followed by 9's to fill the field. For example, "-99999" would be used for a 6-byte field.

Date values that are not available or not meaningful are indicated by a "0".

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 numeral next to the column header, i.e., D#4. The numeral dictates the order of the column within the key.

File 1 - Summary Statistics

Name: <Type><Measure>**SUM**.<Region>

Record Length: 118

The **Summary Statistics File** contains one record for each forecast period for each I/B/E/S statistical period. The forecast period is the fiscal year or quarter for which the forecasts were made while the I/B/E/S statistical period is the date when the set of summary statistics was calculated.

Estimate Flag	The estimate flag allows for the inclusion of different types of estimates for the same company.
Number of Estimates	The total number of estimates covering the company for the fiscal period.
Number Up	The number of upward revisions since the last monthly production
Number Down	The number of downward revisions since the last monthly production
Median Estimate	The estimate which is the middle one in a set of estimates arranged in order of size
Mean Estimate	The consensus estimate, also the arithmetic average of all outstanding estimates for a particular fiscal period
Standard Deviation	The statistical measure of dispersion of estimates for the fiscal period indicated.
High Estimate	The greatest value in a set of estimates for a company, for the specified fiscal period.
Low Estimate	The smallest value in a set of estimates for a company, for the specified fiscal period.

This file contains one record for each statistical period per estimate flag. Each record contains an estimate value that is of a different basis, i.e. parent/consolidated.

	<u>Item</u>	<u>Format</u>	<u>Length</u>	<u>Start</u>	<u>End</u>	<u>Comments</u>
A#1	I/B/E/S Ticker	CCCCC	6	1	6	
B#2	I/B/E/S Statistical Period	YYYYMMDD	8	8	15	
C#3	Measure	CCCCC	6	17	22	Appendix 1
D#4	Fiscal Period	CCC	3	24	26	Appendix 2
E#5	Forecast Period End Date	YYYYMM	6	28	33	
F#6	Forecast Period Indicator	C	1	35	35	Appendix 3
G	Estimate Flag	C	1	37	37	P=Primary; S=Secondary
H	Currency Code	CCC	3	39	41	Appendix 4
I	Number of Estimates	999	3	43	45	
J	Number Up	999	3	47	49	
K	Number Down	999	3	51	53	
L	Median Estimate	999999999999	12	55	66	
M	Mean Estimate	999999999999	12	68	79	
N	Standard Deviation	999999999999	12	81	92	
O	High Estimate	999999999999	12	94	105	
P	Low Estimate	999999999999	12	107	118	

File 2 - Actuals Data

Name: <Type><Measure>**ACT**.<Region>
 Record Length: 82

The **Actuals Data File** provides actuals information of previous fiscal periods. The actuals are the earnings numbers reported by the companies. Actuals for fiscal periods and interim periods are obtained from news services and adjusted by I/B/E/S Data Research to be comparable to the estimates made by analysts.

Actual flag The actual flag allows for the inclusion of different types of actuals for the same company.
 5-yr EPS Growth A measure of the average annualized EPS growth over the past 5 years.
 5-yr EPS Stability A gauge of EPS growth consistency over the past 5 years.

This file contains one record for each statistical period per actual flag. Each record contains an actual value that is of a different basis, i.e. parent/consolidated.

	<u>Item</u>	<u>Format</u>	<u>Length</u>	<u>Start</u>	<u>End</u>	<u>Comments</u>
Basic Block						
A#1	I/B/E/S Ticker Symbol	CCCCCC	6	1	6	
B#2	I/B/E/S Statistical Period	YYYYMMDD	8	8	15	
C#3	Measure	CCCCCC	6	17	22	Appendix 1
D#4	Actual Flag	C	1	24	24	P=Primary; S=Secondary
E	Currency Code	CCC	3	26	28	Appendix 4
FY Actuals Block						
F	FY-0 End Date	YYYYMM	6	30	35	
G	FY-0 Actual EPS	999999999999	12	37	48	
Interim Actuals Block						
H	Int-0 Date	YYYYMM	6	50	55	
I	Int-0 Actual EPS	999999999999	12	57	68	
Ancillary Data Block						
J	5 Year EPS Growth	999999	6	70	75	
K	5 Year EPS Stability	999999	6	77	82	

File 3 - Company Identification

Name: <Type><Measure>ID.<Region>

Record Length: 120

The **Company Identification File** is a time series of Name, Ticker, and CUSIP changes for each company.

I/B/E/S CUSIP	The I/B/E/S CUSIP is an I/B/E/S convention that helps differentiate CUSIPs for U.S. companies from SEDOLs for international companies. The I/B/E/S CUSIP for U.S. is the company's 8-character CUSIP. The I/B/E/S CUSIP for international companies is the 6-character SEDOL, preceded by a two-digit country code. I/B/E/S CUSIPs do not include the check sum digit.
Official Ticker	This is the identifier assigned by the primary exchange on which a stock lists. It is also known as the home market code.
Company Name	The full or abbreviated name of the company.
Dilution Factor	A measure of the difference between basic and fully diluted earnings per share.
Primary/Diluted	The flag that indicates the basis in which the company reports.
Canadian Currency or Parent/Consolidated Flag	The flag has different usages in the U.S. and international file. Its purpose for US/ Canadian companies is to mark the companies whose currency is Canadian. On the international side, the flag deals solely with Japanese companies as a mean to differentiate between companies reporting on a parent or consolidated basis.
1/10 Factor	This flag indicates that the values for the company in the other Summary History files are 1/10 th of the actual values.
Instrument Flag	This indicates the security's type of instrument, i.e. ADR, stock.
Exchange Code	This code indicates the exchange in which the stock is listed on.
Country ID	The country ID is the I/B/E/S abbreviation for the company's country of domicile.
SIG Code	The SIG code is the I/B/E/S-assigned sector/industry/group code. It can be used to determine membership in specific I/B/E/S sector/industry/group's.
Start Date	This date indicates the date that the changes contained in the rest of the record was effected.
Company Flag	A 'C' in this field indicates that the data is on a cash basis.

Space is reserved at the end of the file to accommodate inclusion of additional ID fields that may be added in the future. This is designed to minimize potential impact on existing programs in the event of an addition.

This file contains one record for each change in any of the following fields. The Start Date is that of the first I/B/E/S statistical period, for which the new identifier combination should be used.

	<u>Item</u>	<u>Format</u>	<u>Length</u>	<u>Start</u>	<u>End</u>	<u>Comments</u>
A#1	I/B/E/S Ticker	CCCCCC	6	1	6	
B	Cusip	CCCCCCCC	8	8	15	☉
C	Official Ticker	CCCCCCCC	8	17	24	
D	Long Company Name	CCCCCCCC...	32	26	57	
E	Dilution Factor	999999	6	59	64	
F	Basic/Diluted Indicator	C	1	66	66	blank=Basic; D=Diluted
G	Canadian Currency or P/C Flag	C	1	68	68	
H	1/10 Factor	9	1	70	70	0; 1=(1/10 th)
I	Instrument Type Flag	C	1	72	72	A = ADR D = Dual listed S = Security I = Index M = Multi-share Blank

J	Exchange Code	C	1	74	74	Appendix 5
K	Country ID	CC	2	76	77	Appendix 4
L	Sector/Industry/Group Code	999999	6	79	84	
M#2	Start Date	YYYYMMDD	8	86	93	
N	Company Flag	C	1	95	95	C = Cash basis
O	Reserved	CCCCCCC....	24	97	120	

© CUSIP for US/Canadian companies; Country code (Appendix 4) & SEDOL for all others.

File 4 - Adjustment Factors

Name: <Type><Measure>**ADJ**.<Region>

Record Length: 38

The **Adjustment Factor File** is a time series of historical split factors. They can be used to unadjust data for splits. However, because I/B/E/S data reflects all splits up to the most recent I/B/E/S statistical period, the split factors are not required for normal usage of the data.

The data can be unadjusted by dividing or multiplying by the cumulative split factor. Multiply all per share related data in monetary units by the adjustment factor and divide the shares outstanding to get numbers as they were as of the I/B/E/S statistical period. Note that in some cases, only the split factor of the earliest I/B/E/S statistical period is available, but not the actual date of the split.

Split Factor This field lists the cumulative split factors. The cumulative split factor is derived by multiplying individual splits up to a specific time to allow for simple unadjustment of data.

Split Date The date of the individual splits.

	<u>Item</u>	<u>Format</u>	<u>Length</u>	<u>Start</u>	<u>End</u>	<u>Comments</u>
A#1	I/B/E/S Ticker	CCCCCC	6	1	6	
B	Split Factor	99999999999999	13	8	20	
C	Split Date	YYYYMMDD	8	22	29	
D#2	I/B/E/S Statistical Period	YYYYMMDD	8	31	38	

File 5 - Sector/Industry/Group Codes

Name: <Type><Measure>**SIG**.<Region>

Record Length: 108

The **Sector/Industry/Group File** contains the proprietary I/B/E/S abbreviations and names of sectors, industries and groups. It can be linked to the Sector/Industry/Group Code field in File 3, the Company Identification File. This file contains one record for each Sector/Industry/Group Code.

	<u>Item</u>	<u>Format</u>	<u>Length</u>	<u>Start</u>	<u>End</u>	<u>Comments</u>
A#1	Sector/Industry/Group Code	999999	6	1	6	
B	Sector Abbreviation	99999999	8	8	15	
C	Sector Name	CCCCCCCC...	24	17	40	
D	Industry Abbreviation	CCCCCCCC	8	42	49	
E	Industry Name	CCCCCCCC...	24	51	74	
F	Group Abbreviation	CCCCCCCC	8	76	83	
G	Group Name	CCCCCCCC...	24	85	108	

File 6 – Pricing & Ancillary File

Name: <Type><Measure>**PAN**.<Region>

Record Length: 63

The **Pricing & Ancillary File** contains two basic blocks. The first block contains basic information such as the I/B/E/S ticker and the statistical period while the second block carries pricing and ancillary data for each company.

Price	Please note that I/B/E/S' pricing information is issue-specific. The price will be the last closing price available to I/B/E/S before the statistics were calculated.
Pricing Date	The date of the last available price.
Shares Outstanding	The total number of shares outstanding. This data item is also issue-specific.
Indicated Annual Dividend	The dividend data provided is the indicated annual dividend as of the I/B/E/S statistical period. This is a projection for the next 12 months, based on most recent paid and/or declared dividends. It does not necessarily represent actual cash dividends. This data is supplied by our pricing vendor.

There is one record for each I/B/E/S statistical period.

	<u>Item</u>	<u>Format</u>	<u>Length</u>	<u>Start</u>	<u>End</u>	<u>Comments</u>
Basic Block						
A#1	I/B/E/S Ticker Symbol	CCCCCC	6	1	6	
B#2	I/B/E/S Statistical Period	YYYYMMDD	8	8	15	
C	Currency Code	CCC	3	17	19	Appendix 4
Pricing Block						
D	Price	999999999999	12	20	32	
E	Pricing Date	YYYYMMDD	8	34	41	
F	Shares Outstanding (millions)	9999999999	10	43	52	
G	Indicated Annual Dividend	9999999999	10	54	63	

File 7 – EURO Exchange Rate File

Name: <Type><Measure>**EUR**.<Region>

Record Length: 41

This file is supplied for tapes that contain “EURO-IN” countries. In general, I/B/E/S data will exist in native currency prior to E-day, January 1, 1999, and thereafter it will be represented in the euro currency. This file contains the fixed exchange rates as promulgated at E-day back to 1987 to give users maximum flexibility in viewing and reporting historical time series. Or users can substitute their own synthetic rates to adjust.

	<u>Item</u>	<u>Format</u>	<u>Length</u>	<u>Start</u>	<u>End</u>	<u>Comments</u>
A#1	Currency Code From	CCC	3	1	3	Appendix 4
B	Currency Code To	CCC	3	5	7	Appendix 4
C#2	Start Date	YYYYMMDD	8	9	16	
D	Exchange Rate	99999999999999	13	18	30	
E	Reserved	CCCCCCCC...	10	32	41	

File 8: QFS Currency File (Optional)

Name: **QCUR**

Record Length: 100

This **QFS Currency File** provides currency-specific information such as currency codes, currency names and data representation for non per-share measures.

Currency Name The currency’s common name, as known in international markets.
Representation This field indicates if the values are shown in millions or billions. It is only applicable to
(non-per share) non-per-share measures such as sales, pretax profit.

	<u>Item</u>	<u>Format</u>	<u>Length</u>	<u>Start</u>	<u>End</u>	<u>Comments</u>
A#1	Currency Code	CCC	3	1	3	Appendix 4
B	Currency Long Name	CCCCCCCC...	25	5	29	Appendix 4
C	Representation (non-per share)	C	1	31	31	B=billions; M=millions
D	Reserved	CCCCCCCC...	68	33	100	

3 Appendices

1	Measures		Start Date
	Code	Description	
	BPS	Book value per share	12/96
	BPSPAR	Book value per share for parent company	12/96
	CPS	Cash flow per share	12/94
	CPSPAR	Cash flow per share for parent company	12/94
	DPS	Dividend per share	12/94
	DPSPAR	Dividend per share for parent company	12/94
	EBG	Earnings before goodwill	12/94
	EBGPAR	Earnings before goodwill for parent company	12/94
	EBI	EBIT	05/99
	EBIPAR	EBIT for parent company	05/99
	EBT	EBITDA	12/98
	EBTPAR	EBITDA for parent company	12/98
	EPS	Earnings per share	►01/87
	EPSPAR	Earnings per share for parent company	01/87
	FFO	Funds From Operations	05/99
	FFOPAR	Funds From Operations for Parent	05/99
	NAV	Net asset value	05/99
	NAVPAR	Net asset value for parent company	05/99
	NET	Net income	12/94
	NETPAR	Net income for parent company	12/94
	OPR	Operating profit	06/96
	OPRPAR	Operating profit for parent company	06/96
	PRE	Pre tax profit	12/94
	PREPAR	Pre tax profit for parent company	12/94
	ROA	Return on asset	05/99
	ROAPAR	Return on asset for parent company	05/99
	ROE	Return on equity	05/99
	ROEPAR	Return on equity for parent company	05/99
	SAL	Sales	12/96
	SALPAR	Sales for parent company	12/96

► for US stocks, EPS historical data starts 01/76

2 Fiscal Periods

Code	Description
ANN	Annual
SAN	Semi-annual
QTR	Quarterly
12M	Trailing 12 months earnings
LTG	Long-term growth

Forecast Period Indicator

<i>Code</i>	<i>Description</i>
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
I	Fiscal Year 10
6	Quarter 1
7	Quarter 2
8	Quarter 3
9	Quarter 4
N	Quarter 5
O	Quarter 6
P	Quarter 7
Q	Quarter 8
A	Semi-Annual 1
B	Semi-Annual 2
C	Semi-Annual 3
D	Semi-Annual 4
X	Fiscal Year greater than 10
Y	Quarter greater than 8
Z	Semi-annual greater than 4

Country/Currency

Region	Country	Country Code	Currency Code	Currency Name	Start
Asia	Australia	AA	AUD	Australian Dollar	01/87
	China	FC	CNY	Chinese Renminbi	04/93
	Hong Kong	FH	HKD	Hong Kong Dollar	01/87
	India	FI	INR	Indian Rupee	01/93
	Indonesia	FL	IDR	Indonesian Rupiah	05/90
	Japan	FJ	JPY	Japanese Yen	01/87
	Korea	FK	KRW	South Korean Won	02/88
	Malaysia	FM	MYR	Malaysian Ringgit	01/87
	New Zealand	AN	NZD	New Zealand Dollar	01/87
	Pakistan	FQ	PKR	Pakistani Rupee	01/93
	Philippines	FP	PHP	Phillipine Peso	04/87
	Singapore	FS	SGD	Singapore Dollar	01/87
	Sri Lanka	BL	LKR	Sri Lankan Rupee	01/93
	Taiwan	FA	TWD	Taiwan Dollar	01/88
	Thailand	FT	THB	Thailand Baht	09/87
Canada	Canada	NC	CAD	Canadian Dollar	01/85
Europe	Austria♦	EA	ATS	Austrian Schilling	01/87
	Belgium♦	EB	BEF	Belgian Franc	01/87
	Bulgaria	DB	BGL	Bulgarian Lev	
	Croatia	DC	HRK	Croatian Kuna	05/99
	Czech Republic	EC	CZK	Czech Koruna	06/95
	Denmark	SD	DKK	Danish Krone	01/87
	Estonia	DE	EEK	Estonian Kroon	05/98
	Finland♦	SF	FIM	Finnish Markka	01/87
	France♦	EF	FRF	French Franc	01/87
	Germany♦	ED	DEM	German Deutschmark	01/87
	Greece	EH	GRD	Greek Drachma	11/92
	Hungary	EM	HUF	Hungarian Forint	06/95
	Ireland♦	EZ	IPN	Irish Pence	01/87
	Italy♦	EI	ITL	Italian Lire	01/87
	Latvia	DK	LVL	Latvian Lats	05/98
	Lithuania	DL	LTL	Lithuanian Litas	05/98
	Luxembourg♦	EL	LUF	Luxembourg Franc	08/96
	Netherlands♦	EN	NLG	Netherlands Guilder	01/87
	Norway	SN	NOK	Norwegian Krone	01/87
	Poland	EG	PLN	Polish Zloty	06/95
	Portugal♦	EP	PTE	Portugese Escudo	04/91
	Romania	EK	ROL	Romanian Leu	05/98
	Russia	ER	USD	US Dollar	08/97
	Slovakia	DR	SKK	Slovak Koruna	12/95
	Slovenia	DV	SIT	Slovenian Tolar	05/99
	Spain♦	EE	ESP	Spanish Peseta	01/87
	Sweden	SS	SEK	Swedish Krona	01/87
Switzerland	ES	CHF	Swiss Franc	01/87	
Turkey	ET	TRL	Turkish Lira	12/91	
Ukraine	DU	UAH	Ukraine Hryvnia		

Region	Country	Country Code	Currency Code	Currency Name	Start
	United Kingdom	EX	BPN	British Pence	01/87
	♦ <i>euro-in country</i>	----	EUR	euro	01/99
Latin America	Argentina	LA	ARS	Argentine Peso	07/92
	Brazil	LB	BRL	Brazilian Real (1000 shares)	07/92
	Chile	LC	CLP	Chilean Peso	10/92
	Colombia	LL	COP	Colombian Peso	06/94
	Mexico	LM	MXN	New Mexican Peso	05/92
	Peru	LP	USD	US Dollar	06/94
	Venezuela	LV	VEB	Venezuelan Bolivar	06/94
Middle East/ Africa	Botswana	KB	BWP	Botswana Pula	
	Egypt	KE	EGP	Egyptian Pound	05/99
	Ghana	KJ	GHC	Ghanaian Cedi	
	Israel	FZ	ILS	Israeli Shekel	07/95
	Jordan	FR	JOD	Jordanian Dinar	05/99
	Kenya	KK	KES	Kenyan Shilling	
	Lebanon	FX	LBN	Lebanese Pound	01/00
	Mauritius	KP	MUS	Mauritian Rupee	01/00
	Morocco	KM	MAR	Moroccan Dirham	01/00
	Nigeria	KN	NGN	Nigerian Naira	
	South Africa	KS	ZAR	South African Rand	01/87
	Zimbabwe	KR	ZWD	Zimbabwe Dollar	
United States	United States	NA	USD	US Dollar	01/76

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Exchanges

<i>Region</i>	<i>Country</i>	<i>Country Code</i>	<i>Exchange Code</i>	<i>Exchange</i>
Asia	Australia	AA	A	Adelaide
	Australia	AA	B	Brisbane
	Australia	AA	H	Hobart
	Australia	AA	M	Melbourne
	Australia	AA	P	Perth
	Australia	AA	S	Australia S/E National Market
	Bangladesh	FB	D	Dacca
	China	FC	S	Shanghai Securities Exchange
	China	FC	Z	Shenzhen Stock Exchange
	Hong Kong	FH	H	Hong Kong
	India	FI	B	Bombay
	India	FI	C	Calcutta
	India	FI	D	Delhi
	India	FI	M	Madras
	Indonesia	FL	J	Jakarta
	Japan	FJ	1	OTC
	Japan	FJ	F	Fukuoka
	Japan	FJ	H	Hiroshima
	Japan	FJ	K	Kyoto
	Japan	FJ	N	Nagoya
	Japan	FJ	O	Osaka
	Japan	FJ	P	Niigata
	Japan	FJ	Q	OTC
	Japan	FJ	S	Sapporo
	Japan	FJ	T	Tokyo
	Korea	FK	S	Seoul
	Malaysia	FM	1	OTC
	Malaysia	FM	K	Kuala Lumpur
	New Zealand	AN	A	Auckland
	New Zealand	AN	W	NZSE National Market
	Pakistan	FQ	K	Karachi Stock Exchange
	Philippines	FP	A	Makiti
	Philippines	FP	M	Manila
Singapore	FS	S	Singapore	
Sri Lanka	BL	C	Colombo Stock Exchange	
Taiwan	FA	T	Taipei	
Thailand	FT	A	Bangkok Alien Market	
Thailand	FT	B	Bangkok	
Canada	Canada	NC	0	Index - Canada
	Canada	NC	J	Toronto
	Canada	NC	K	Montreal
	Canada	NC	O	OTC
	Canada	NC	V	Vancouver
	Canada	NC	Z	Alberta
Europe	Austria	EA	V	Vienna
	Belgium	EB	A	Antwerp
	Belgium	EB	B	Brussels

Region	Country	Country Code	Exchange Code	Exchange
	Belgium	EB	G	Ghent
	Belgium	EB	L	Liege
	Czech Republic	EC	P	Prague
	Denmark	SD	C	Copenhagen
	Finland	SF	H	Helsinki
	France	EF	B	Bordeaux
	France	EF	K	Lille
	France	EF	L	Lyon
	France	EF	M	Marseilles
	France	EF	N	Nancy
	France	EF	P	Paris
	France	EF	R	Nantes
	Germany	ED	B	Berlin
	Germany	ED	C	Bremen
	Germany	ED	D	Dusseldorf
	Germany	ED	F	Frankfurt
	Germany	ED	H	Hamburg
	Germany	ED	I	Hanover
	Germany	ED	M	Munich
	Germany	ED	S	Stuttgart
	Greece	EH	A	Athens Stock Exchange
	Hungary	EM	B	Budapest
	Ireland	EZ	1	OTC
	Ireland	EZ	I	Irish
	Ireland	EZ	O	OTC
	Ireland	EZ	S	Irish Small Co. Marker
	Ireland	EZ	T	Third Market
	Ireland	EZ	U	Unlisted Securities Market (USM)
	Italy	EI	B	Bologna
	Italy	EI	F	Florence
	Italy	EI	G	Genoa
	Italy	EI	M	Milan
	Italy	EI	N	Naples
	Italy	EI	P	Palermo
	Italy	EI	R	Rome
	Italy	EI	T	Turin
	Italy	EI	U	Trieste
	Italy	EI	V	Venice
	Luxembourg	EL	L	Luxembourg
	Netherlands	EN	A	The Hague
	Netherlands	EN	B	Amsterdam
	Norway	SN	O	Oslo
	Poland	EG	W	Warsaw
	Portugal	EP	L	Lisbon
	Portugal	EP	P	Oporto
	Russia	ER	X	Moscow
	Slovakia	DR	B	Bratislava
	Spain	EE	A	Bilbao
	Spain	EE	B	Barcelona
	Spain	EE	M	Madrid

Region	Country	Country Code	Exchange Code	Exchange
	Spain	EE	V	Valencia
	Sweden	SS	S	Stockholm
	Switzerland	ES	B	Basel
	Switzerland	ES	E	EBS
	Switzerland	ES	G	Geneva
	Switzerland	ES	L	Lausanne
	Switzerland	ES	N	Neuchatel
	Switzerland	ES	R	Berne
	Switzerland	ES	S	St. Gallen
	Switzerland	ES	Z	Zurich
	Turkey	ET	I	Istanbul
	United Kingdom	EX	1	OTC
	United Kingdom	EX	D	Granville
	United Kingdom	EX	L	London Main Market
	United Kingdom	EX	O	OTC
	United Kingdom	EX	T	Third Market
	United Kingdom	EX	U	Unlisted Securities Market
	United Kingdom	EX	X	Unquoted or unlisted
Latin America	Argentina	LA	B	Buenos Aires
	Brazil	LB	S	Sao Paulo Stock Exchange
	Chile	LC	S	Santiago Stock Exchange
	Colombia	LL	B	Bogota
	Mexico	LM	M	Mexico City
	Peru	LP	L	Lima
	Venezuela	LV	C	Caracas
Middle East/ Africa	Israel	FZ	T	Tel Aviv
	South Africa	KS	J	Johannesburg
United States	United States	NA	0	Index - United States
	United States	NA	A	New York
	United States	NA	B	American
	United States	NA	C	Philadelphia
	United States	NA	D	Mid-West
	United States	NA	E	Pacific
	United States	NA	F	NASDAQ National List
	United States	NA	H	NASDAQ Non-National List
	United States	NA	I	NASDAQ Mutual Funds
	United States	NA	T	Boston
	United States	NA	U	Non-NASDAQ OTC equities & NQB equities

