Worldwide Equity Analytics

Doing data differently

V. 2.0.

Helping the global financial community make informed decisions through the provision of fast, accurate, timely and affordable reference data services

With more than 20 years of experience, we offer comprehensive and complete securities reference data for equities and fixed income instruments around the globe.

Our customers can rely on our successful track record to efficiently deliver high quality data sets including:

- Worldwide Corporate Actions
- Worldwide Fixed Income
- Security Reference File
- Worldwide End-of-Day Prices

Exchange Data International has recently expanded its data coverage to include economic data. Currently it has three products:

- African Economic Data www.africadata.com
- Economic Indicator Service (EIS)
- Global Economic Data

Our professional sales, support and data/research teams deliver the lowest cost of ownership whilst at the same time being the most responsive to client requests.

As a result of our on-going commitment to providing cost effective and innovative data solutions, whilst at the same time ensuring the highest standards, we have been awarded the internationally recognized symbol of quality ISO 9001.

Headquartered in United Kingdom, we have staff in Australia, Canada, China, Hong Kong, India, Malaysia, Morocco, South Africa and United States.

Contents

Service Overview

The Worldwide Equity Analytics is a new feed of derived equity data which provides clients with high-quality information to efficiently manage and value their portfolio.

The file comprises of a customisable set of more than 60 equity derived data fields along with fields from our Securities Reference File and our closing pricing one.

The link to the price files ensures that the analytics for each exchange are published soon after the release of the relevant price file which is often as soon as market close.

All the necessary analytics compiled into one file

The WEA service covers equities traded in 144 global exchanges. Additional analytics can be added upon request depending on availability of raw data, processing time and formulas.

Customized versions of analytics can be generated upon request.

Derived Data Calculation Specifications

- History commencing from 1st Jan 2007 for all exchanges.
- Adjustments - events used to back-adjust history:

○ Subdivisions	○ Offers
○ Consolidations	○ Capital Calls
○ Rights	○ Capital Returns
○ Bonus	○ Dividends.

- Where a benchmark security is used the primary local index has been used however if a local index is not available then the US S&P 500 is used.
- Returns are based on adjusted data and therefore include effects from all dividends, capital returns, etc.
- The calculation used to generate the returns is simply the natural log of the price change ratio.
- Where there is insufficient data for a particular analytic, for example a new listing and the analytic requires 60 months, the analytic will be left blank or set to NAN (not a number).

File Specifications

Each file, containing the analytics for a particular exchange, will be named –

CC_MIC_Market_Analytics_yyyymmdd.zip where -

- CC: 2 character country code, e.g. “GB” for Great Britain
- MIC: 4 character market identification code, e.g. “XLON”
- Market: General market name, e.g. “Equity”
- Analytics: Specifies what the file contains, e.g. “Analytics”
- YYYYMMDD: Date the contents pertain to, e.g. “20150713”

Note: The number of fields is not fixed and additional fields (analytics) will be added to the right of current fields without warning. Therefore, ensure your handling program will ignore any additional fields, added to the right of existing fields, until you decide how to handle them.

Element Name	Data Type	Format	Max Width	Lookup table/list	Valid Values	Description
Local code	VarChar	Char String	50			Local code unique at Market level – a ticker or number
SecID	Integer	32 bit signed integer	10			Unique global level Security ID (can be used to link all multiple listings together)
ISIN	Char	String	12			ISIN ISO Standard 6166
USCode	Char	String	9			Extracted from US and Canadian Isins
IssCode	Integer	Word32	10			Unique global level Issuer ID (can be used to link all securities of a company together)
IssName	Char	String	255			EDI's Masterfile Issuer Name
SecTypCode	Char	String	3	TABLE = LOOKUP	Typegroup = SECTYPE	EDI's Masterfile Security Type Code
SecTypName	Char	String	255			EDI's Masterfile Security Type Name

MIC	Char	String	6	LIST = Swift MIC	MICCODE	Swift's ISO Standard 10383 Market Identification Code
ExchgCD	Char	String	6	TABLE = LOOKUP	EXCHANGE	EDI proprietary Exchange Code
Currency	Char	String	3	LIST = Currency	See list of codes	ISO Standard 4217 Code for Base Currency
USDRate	Float	Double	20			USD exchange rate
Date	Date	yyyymmdd	8		Valid dates	Date
High	Float	Double	20			Official High
Low	Float	Double	20			Official Low
Close	Float	Double	20			Official Close
Sector	Char	Char String	8	TABLE = LOOKUP	Typegroup = 'INDUS'	EDI's internal sector code remapped to 8 characters
Issued	Integer	64 bit unsigned integer	20			Shares on issue
IssMktCap	Float	Double	20			Company market capitalisation (only on security's primary exchange)
IssMktCapUSD	Float	Double	20			Company market capitalisation (primary exchange only) in USD
MktCap	Float	Double	20			Security market capitalisation (primary exchange only)
MktCapUSD	Float	Double	20			Security market capitalisation (primary exchange only) in USD
NotTradeDays	Integer	Word32	10			Number of no trade days over previous 3 months
9MonAvgDayVal	Float	Double	20			9 month average daily value
9MonAvgDayValUSD	Float	Double	20			9 month average daily value in USD
6MonAvgVol-1	Float	Double	20			6 month average monthly volume to end of last month
6MonAvgVol-4	Float	Double	20			6 month average monthly volume to end of 4 months ago
6MonAvgVol-7	Float	Double	20			6 month average monthly volume to end of 7 months ago
Benchmark	Char	String	50			Local code of benchmark security, usually the primary index on local exchange else S&P 500
10YerBMRet	Float	Double	20			10-year benchmark return calculated using today's close and the adjusted close of 10 years ago
5YerBMRet	Float	Double	20			5-year benchmark return calculated using today's close and the adjusted close of 5 years ago
1YerBMRet	Float	Double	20			1-year benchmark return calculated using today's close and the adjusted close of 1 years ago
10YerRet	Float	Double	20			10-year stock return calculated using today's close and the adjusted close of 10 years ago

5YerRet	Float	Double	20	5-year stock return calculated using today's close and the adjusted close of 5 years ago
1YerRet	Float	Double	20	1-year stock return calculated using today's close and the adjusted close of 1 years ago
10YerCmprRet	Float	Double	20	10-year comparative return calculated by dividing the 10-year stock return by the 10-year benchmark return
5YerCmprRet	Float	Double	20	5-year comparative return calculated by dividing the 5-year stock return by the 5-year benchmark return
1YerRCmpRet	Float	Double	20	1-year comparative return calculated by dividing the 1-year stock return by the 1-year benchmark return
5YerDivGro	Float	Double	20	5 year dividend growth ~ average percent change of annual dividends over the past 5 years
1YerDivGro	Float	Double	20	1 year dividend growth ~ average percent change of annual dividends over the past year
1YerBMRet	Float	Double	20	1-year benchmark return calculated using today's close and the adjusted close of 1 years ago
AvgVolYear	Float	Double	20	Average daily volume over 1 year (excludes all non trading days)
AvgVolMonth	Float	Double	20	Average daily volume over 1 month (excludes all non trading days)
AvgVolWeek	Float	Double	20	Average daily volume over 1 week (excludes all non trading days)
AvgValYear	Float	Double	20	Average daily value over 1 year (excludes all non trading days)
AvgValYearUSD	Float	Double	20	Average daily value over 1 year (excludes all non trading days) in USD
AvgValMonth	Float	Double	20	Average daily value over 1 month (excludes all non trading days)
AvgValMonthUSD	Float	Double	20	Average daily value over 1 month (excludes all non trading days) in USD
AvgValWeek	Float	Double	20	Average daily value over 1 week (excludes all non trading days)
AvgValWeekUSD	Float	Double	20	Average daily value over 1 week (excludes all non trading days) in USD
200BarAvg	Float	Double	20	Average close over last 200 bars using daily data, also referred to as 200 day SMA (simple moving average)
100BarAvg	Float	Double	20	Average close over last 100 bars using daily data, also referred to as 100 day SMA (simple moving average).
63BarAvg	Float	Double	20	Average close over last 63 bars using daily data, also referred to as 63 day SMA (simple moving average)
21BarAvg	Float	Double	20	Average close over last 21 bars using daily data, also referred to as 21 day SMA (simple moving average)
1YerHigh	Float	Double	20	Highest high in year to date, excluding today
1QtrHigh	Float	Double	20	Highest high in quarter to date, excluding today
1MonHigh	Float	Double	20	Highest high in month to date, excluding today

1WeekHigh	Float	Double	20	Highest high in week to date, excluding today
1DayHigh	Float	Double	20	Yesterday's high
1YerLow	Float	Double	20	Lowest low in year to date, excluding today
1QtrLow	Float	Double	20	Lowest low in quarter to date, excluding today
1MonLow	Float	Double	20	Lowest low in month to date, excluding today
1WeekLow	Float	Double	20	Lowest low in week to date, excluding today
1DayLow	Float	Double	20	Yesterday's low
RSI	Float	Double	20	Today's RSI value
MACDSig	Float	Double	20	Today's MACD signal value
MACDOsc	Float	Double	20	Today's MACD oscillator value
SARVal	Float	Double	20	Today's ParabolicSAR value
SARDir	Char	String	5	Today's parabolicSAR direction ("Long" or "Short")
90DayVolatility	Float	Double	20	90 day Daily Volatility, based on the average of the standard deviations of the daily returns
1Yer99%Var	Float	Double	20	Value at risk over 1 year of daily returns with 99% confidence
1Yer95%Var	Float	Double	20	Value at risk over 1 year of daily returns with 95% confidence
60Mon2.5%Alpha	Float	Double	20	60 month Alpha, using risk free rate of 2.5%
60Mon5.0%Alpha	Float	Double	20	60 month Alpha, using risk free rate of 5.0%
60MonBeta	Float	Double	20	60 month beta
60MonR-Sq	Float	Double	20	60 month r-squared
60Mon2.5%Sharpe	Float	Double	20	60 month Sharpe using risk-free rate of 2.5%
60Mon5.0%Sharpe	Float	Double	20	60 month Sharpe using risk-free rate of 5.0%
12Mon2.5%Alpha	Float	Double	20	12 month Alpha, using risk free rate of 2.5%
12Mon5.0%Alpha	Float	Double	20	12 month Alpha, using risk free rate of 5.0%
12MonBeta	Float	Double	20	12 month beta
12MonR-Sq	Float	Double	20	12 month r-squared
12Mon2.5%Sharpe	Float	Double	20	12 month Sharpe using risk-free rate of 2.5%
12Mon5.0%Sharpe	Float	Double	20	12 month Sharpe using risk-free rate of 5.0%
1YerDivRate	Float	Double	20	Recent dividend annualised by periodicity
1YerDivRateUSD	Float	Double	20	Recent dividend annualised by periodicity in USD
1YerDivTTM	Float	Double	20	Sum of dividends in recent 12 months
1YerDivTTMUSD	Float	Double	20	Sum of dividends in recent 12 months in USD
Split1	Char	String	30	Recent split in format date(yyyymmdd):factor
Split2	Char	String	30	Recent split in format date(yyyymmdd):factor
Split3	Char	String	30	Recent split in format date(yyyymmdd):factor
Split4	Char	String	30	Recent split in format date(yyyymmdd):factor

Split5	Char	String	30	Recent split in format date(yyyymmdd):factor
3MonAvgVal-1	Float	Double	20	Average monthly value over 3 months to the end of last month
3MonAvgValUSD-1	Float	Double	20	Average monthly value over 3 months to the end of last month in USD
3MonAvgVal-4	Float	Double	20	Average monthly value over 3 months to the end of 4 months ago
3MonAvgValUSD-4	Float	Double	20	Average monthly value over 3 months to the end of 4 months ago in USD
3MonAvgVal-7	Float	Double	20	Average monthly value over 3 months to the end of 7 months ago
3MonAvgValUSD-7	Float	Double	20	Average monthly value over 3 months to the end of 7 months ago in USD
30DayVolatility	Float	Double	20	30 day Daily Volatility, based on the average of the standard deviations of the daily returns
20BarAvgVolume	Float	Double	20	Average volume over last 20 bars using daily data, also referred to as 20 day SMA (simple moving average) of volume
30BarAvgVolume	Float	Double	20	Average volume over last 30 bars using daily data, also referred to as 30 day SMA (simple moving average) of volume
90BarAvgVolume	Float	Double	20	Average volume over last 90 bars using daily data, also referred to as 90 day SMA (simple moving average) of volume
60DayVolatility	Float	Double	20	60 day Daily Volatility, based on the average of the standard deviations of the daily returns
260DayVolatility	Float	Double	20	260 day Daily Volatility, based on the average of the standard deviations of the daily returns
%Change5D	Float	Double	20	Change in price over last week, expressed as a percent
%Change1M	Float	Double	20	Change in price over last month, expressed as a percent
%Change3M	Float	Double	20	Change in price over last 3 months, expressed as a percent
%Change6M	Float	Double	20	Change in price over last 5 months, expressed as a percent
%Change1Y	Float	Double	20	Change in price over last year, expressed as a percent
Volume	Float	Double	20	Recent Day's Volume
BBGExchID	Char	String	12	Bloomberg Global Exchange ID (BBGGlobalID)
BBGCompID	Char	String	12	Bloomberg Global Composite ID (BBGCompositeGlobalID)
DivYield	Float	Double	20	Dividend Yield (Close/1YerDivRate)
DayGain	Float	Double	20	Daily gain (/loss)
WeekGain	Float	Double	20	Weekly gain (/loss)
MonthGain	Float	Double	20	Monthly gain (/loss)
YearGain	Float	Double	20	Yearly gain (/loss)
YerHiLo	Float	Double	20	Year new high/low/none
30DaySumVol	Float	Double	20	Sum of volume last 30 trading days
30DayAvgVol	Float	Double	20	Average of above
PrimaryExchCD	Char	String	6	Primary listed exchange

Additional Derived Analytics Data

The following additional analytics can be derived from the above –

- MACD Histogram: derived by subtracting MACD Signal from MACD Oscillator.
- New High: derived by comparing today's High to the appropriate period High
- New Low: derived by comparing today's Low to the appropriate period Low
- Higher Close: derived by comparing today's Close to the appropriate period High
- Lower Close: derived by comparing today's Close to the appropriate period Low
- Close above average: derived by comparing today's close to the appropriate average.
- Sector: derived by mapping a sector name to the sector code
- Industry group: derived by mapping industry name to the sector code.

Customization

EDI is proud to offer the most effective and efficient solutions tailored to meet each individual customer's needs. We offer a range of customization options including:

- Delivery-based solutions to complement existing client infrastructure.
- Content provided at the geographical or portfolio holding level.
- Feeds containing particular formats, field content and integrated client level data items.

EDI uses its extensive data research expertise to source, scrub and integrate new client specified data items with existing products and services. For instance, a request from a multinational investment bank to source the DR universe and map it against its underlying share portfolio ultimately led to the development of EDI's successful Depositary Receipt Database.

In addition, EDI was the first vendor to successfully launch an ISO 15022 Corporate Action Messaging feed. This enables customers to reduce costs and increase efficiency by removing the need for multiple feed handlers.

Support

Customer Support

Monday – Friday Open 24 hours **Saturday** 12AM - 8AM (GMT) **Sunday** 11PM-12AM(GMT)	**Call +44 207 324 0020**

Email: support@exchange-data.com

Customer support is closed Christmas and New Year's Day.

We aim to acknowledge all queries within an hour of receipt and answer queries within 24 hours where possible.

We will send a progress report if a query is not resolved within that time-frame. We resolve around 95% of customer queries within 24 hours.

All queries sent to our Support department are filtered and dispatched to the relevant department. An IT staff member is engaged in the communication process to resolve complicated technical issues.

Contact Information

United Kingdom - Headquarters
5 Highgate Road London, NW5 1JY
United Kingdom
Tel: +44 207 324 0020

Jonathan Bloch, Chief Executive Officer
Cell: +44 7785 550 043
E-mail: j.bloch@exchange-data.com

Andrew Sabourin, Business Development Manager
Work: +44 207 324 0048
Cell: +44 7931 906 569
E-mail: a.sabourin@exchange-data.com

United States
Exchange Data International Inc
1250 Front Street, no. 260 Binghamton,
NY 13901, USA
Tel: +1 607 238 4438

Michael Hyland, Head of US Sales
Cell: +1 732 618 - 2854
E-mail: m.hyland@exchange-data.com

Nora Cervara, Business Development Manager
Cell: +1 732 670 - 1935
E-mail: n.cervara@exchange-data.com

Germany

Michael Abraham, Business Development Manager
Work: +49 160 7188 340
E-mail: m.abraham@exchange-data.com

Canada
Exchange Data International Inc ® 4920
Boul. de Maisonneuve Ouest Suite 203,
Westmount, Montreal, H3Z 1N1
Tel: +1 607 238 4438

Christian Bergeron, Head of Evaluated Pricing
Cell: 514-243-1352
E-mail: c.bergeron@exchange-data.com

Morocco
Bloc A
Numero 46 Lotissement Azaitoune
Tikiouine, Agadir 80650
Tel: +212 528 290 255

Samy Rajendran, Director, International Business Strategy
Work: +44 207 324 00260
E-mail: p.rajendran@exchange-data.com

South Africa
PO Box 2176
Cape Town 8000

Ilze Gouws, Head of Economic Data & Sales
Cell: +27 (0) 82 782 3750
E-mail: i.gouws@exchange-data.com