Using the Style Research Markets Analyzer

Access

The Style Research Markets Analyzer is accessed through **http://www.StyleResearch.Com**. The service requires a user name and password, which must be set up by Style Research.

Using the Screens

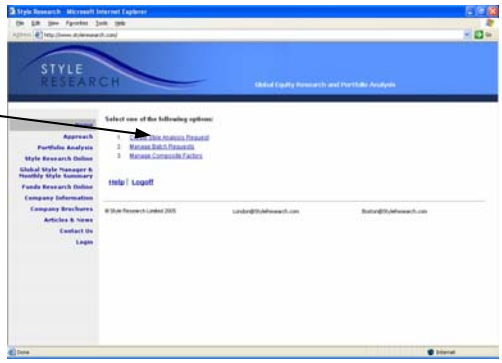
A research job is started by clicking the Style Research Markets Analyzer option on our home page:

First Click the Markets Analyzer Option

This starts the login process which prompts for a user name and password and then advances to the initial page of the facility.

The 3 options offer the choice of either:

Creating a Style Analysis Request (designing a research job);

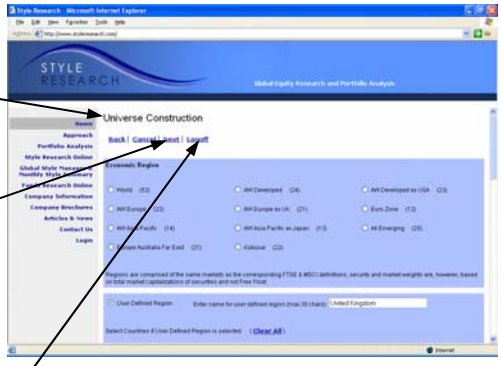


Creating or Managing Batch Files of Requests (loading and saving analysis requests for subsequent use); or,

Managing Composite Factors (defining linear combinations of factor rankings to be used as new factors in subsequent analyses).

This leads to the first screen of the analysis request specification.

The **Universe Construction** Filters focus the analysis within the markets sectors and size limits which are of direct interest.

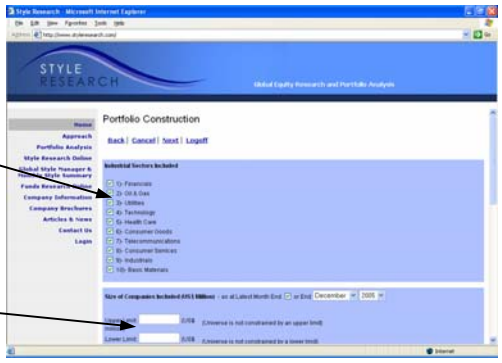


Identify the **Markets**, **Currency**, **Sectors**, and market capitalization or (number of largest/smallest) **Size** constraints to define the Universe and **click next.**

Note that capitalization Size constraints "float" throughout the analysis interval reflecting changes in the overall level of the market(s) being analyzed.

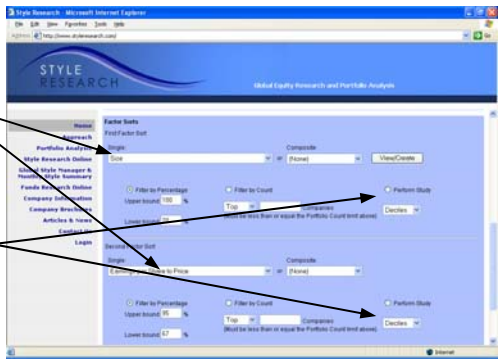
Throughout the entire procedure, **click logoff** to exit. Exiting by simply redirecting the browser to another site will result in a temporary, 10 minute, security lock-out from the Style Research Markets Analyzer.

Next, the **Portfolio Construction** Filters. These specify the job in further detail.



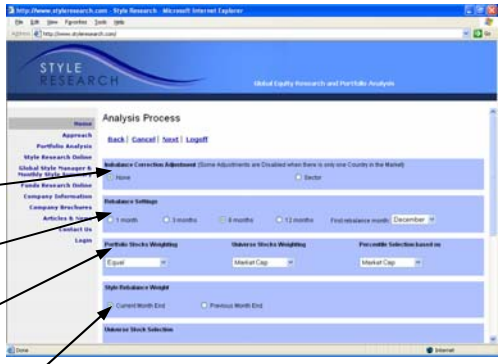
Portfolio specification includes: **Industrial Sector** specification (in terms of the FTSE/Dow Jones/ICB classifications or the MSCI/S&P/GICS classifications);

Further portfolio **Size limits** (also floating);



Two levels of **Factor Selection** criteria (see Notes and Definitions, below), including basic factors as well as predefined **Composites**.

A **Perform Study** option which initiates a number of analyses examining results across quartiles, quintiles or deciles, with respect to the specified Factor.



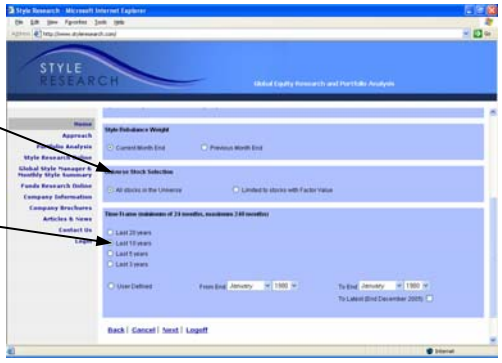
Proceeding to the next screen, **Analysis Process**, there are options to set the:

Imbalance Correction (Sector or Market Adjustment - see Notes and Definitions, below);

Rebalance Settings (to set the starting month and selection rebalance frequency);

Portfolio Weighting (to set the weighting regime to apply to the portfolio, the universe and any percentile selection)

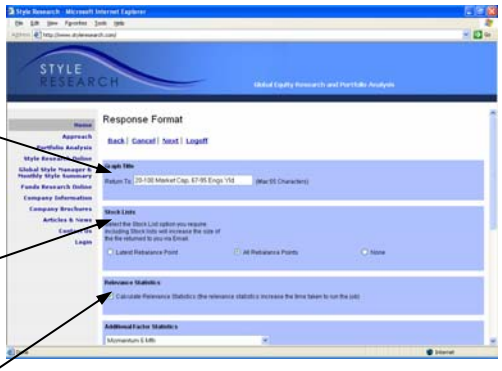
Style Rebalance Weight (to set the rebalance delay);



Universe Stock Selection (to revisit the Universe specification and determine whether the Universe ought to contain only those shares where all Factors selected have values);

Time Frame (to specify the time horizon for the analysis – for batch setups it is advisable to specify either a Last N years setting or use the To Latest option).

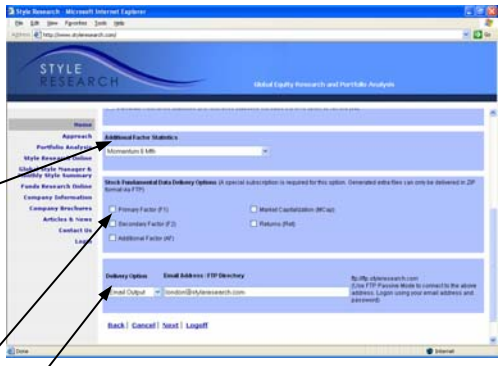
Proceeding to the next screen, **Analysis Process**, there are options to set the:



Graph Title (accept the default or write in a different heading – note all titles can be edited in the excel output)

Stock Lists (stock lists can be provided for the last rebalance point or all rebalance points – note that the lists can be directly input into the Style Research Portfolio Analyzer for further study)

Relevance Statistics (to receive the full range of statistics relating to the distinctiveness, internal consistency and possible predictability of the return history: Identity; Attribution; and Regularity – note that the calculation of Relevance Statistics does increase the running time of each analysis)



Additional Factor Statistics (analysis of the optional selected factor will also be provided across the universe, the specified portfolio, and its complement – note that the output will always also carry the analysis of the factors used in the portfolio construction process)

Stock Fundamental Data Delivery (subject to subscription, Style Research can also provide full supporting data relating to all factors and returns for all securities in the global database)

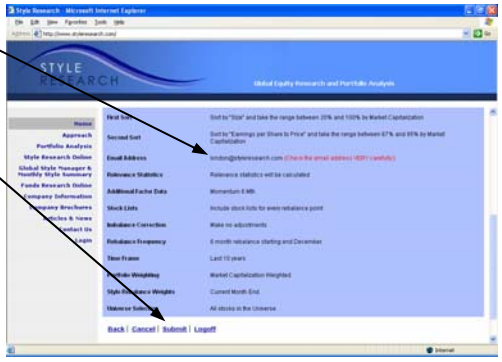
Delivery Option (enter either the email address where the output will be sent or the name of the ftp directory from which you will retrieve the analysis)

Proceeding to the final screen, the **Style Analysis Request Profile** provides a review of the detail of the completed specification.

It is important to check this carefully, with particular attention to the **Email Address** or **FTP Directory** specified.

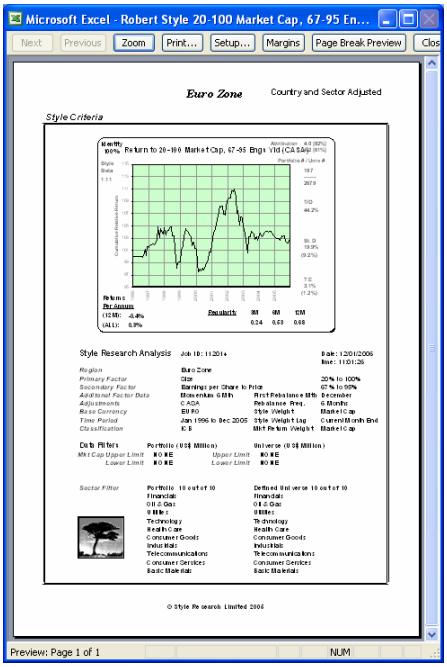
Then click on **Submit** to start the analysis.

The results of the analysis will be returned by email or will be available from the designated FTP directory.



Structure of Results

Results are returned as Zipped Excel Workbook (.xls) files. Once unzipped (using Winzip, commercially available at **WWW.WinZip.com**), each Workbook contains 8 WorkSheets.



WorkSheets 1 & 2: Graphic Output

Returns to the Factor(s) Portfolio, including full statistical analysis of the characteristics of the return series (details below)

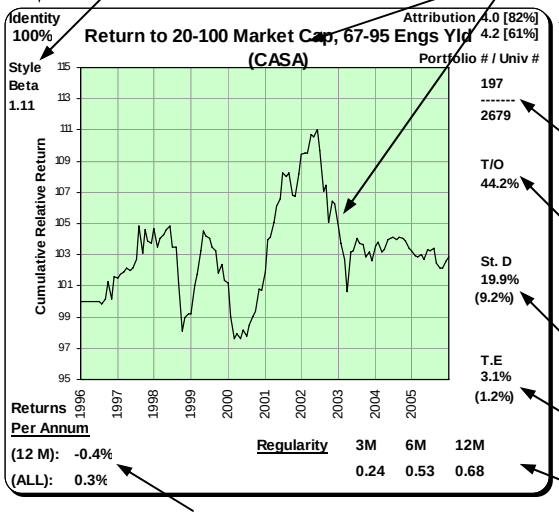
Market Composition of Factor(s) Portfolio (showing market imbalances against the total market weights – Country Adjustment reduces these imbalances)

Industrial Sector Composition of Factor(s) Portfolio (showing sector imbalances against the total sector weights – Sector Adjustment reduces these imbalances)

Detail

A measure of the clarity of the **Identity** of the Factor combination as an investment Style. It reports the probability that the distinct performance of the Factor Portfolio can not be explained simply by chance portfolio construction within the Universe selected.

The "Beta" of the Factor Portfolio with respect to the specified Universe.



The annualized 12 month and 10 year relative total returns of the Factor Portfolio, measured relative to the total return of the selected Universe of stocks.

The **cumulative Universe-relative total returns** from investing in a portfolio constructed according to the criteria and Factors selected, weighted by market capitalization, and rebalanced every 6 months.

Country and Sector Adjusted, i.e. the analysis reviews all security Factor scores relative to the industrial sector average, country by country (also Sector Adjusted and Country Adjusted, defined analagously, see Notes and Definitions).

The statistical relevance (T-Statistic) of the Factor(s) as a contributor to the returns of individual stocks, and the percentage of the time this value is over 2.00. The **Attribution** statistics are available for both single and double sort enquiries (see Notes and Definitions, below).

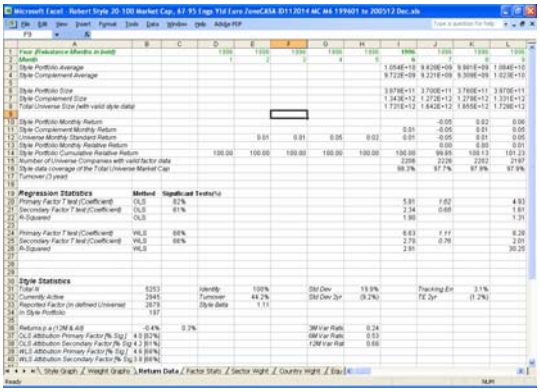
The number of securities in the Factor Portfolio, and the number of securities within the selected Universe for which there are current data available for this particular set of Factors.

Average annual turnover of the Factor Portfolio, over 3 years.

The volatility of the investment performance of the Factor Portfolio, as:
- the annualized standard deviation of 5 (2) years of monthly total returns; and,
- the annualized tracking error of 5 (2) years of monthly returns vs. the selected Universe.

A measure of the degree to which the cumulative relative returns are regularly mean averting (above 0.25) or mean reverting (below –0.25) within 3, 6 or 12 months. Series with large positive or negative **Regularity** display non-erratic behaviour and consequently offer the opportunity to identify and forecast return trends and cycles using analytical techniques.

WorkSheet 3: Time-Series Data



Market Returns - The total monthly returns, including dividend income, of the market capitalization weighted portfolios of securities selected for analysis.

Monthly Performance Indicators - The Universe relative returns of the total monthly returns, including dividend income, of the market capitalization weighted Style-based portfolios of securities, constructed as specified. Calculations are geometric, so relative returns are quoted as 1-[(1+P)/(1+M)] rather than the simpler, and incorrect, P-M.

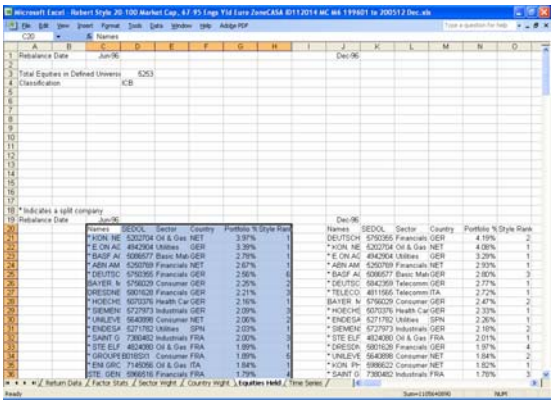
Cumulative Performance Indicators -The cumulative time series are constructed by compounding the monthly performance indicators for each Factor and comparing the "running totals" against the compound cumulative return for the Universe as a whole. The cumulative Performance Indicator time series are the ratios, in percentage terms, of the cumulative returns to the various strategies, to the cumulative return to the user-defined Universe.

The Data sheet also provides the individually located data items contained on the performance graphs and a full history of the **slope coefficients of each cross-sectional regression**, in italics, just once cell to the right of the **T-Statistics** relating to these coefficients.

WorkSheets 4, 5, 6, 7 and 8: Factor Statistics, Market and Sector Weights and Data for the Portfolio Analyzer Software:

4	Time series of fundamental data on sort factor(s) and additional factor statistics.
5	Details regarding the historic Market Weights in the Factor Portfolio.
6	Details regarding the historic Sector Weights in the Factor Portfolio.
7	Full historic (or only current) listings of all SEDOL numbers, Markets, Sectors and weightings of the securities in the Factor Portfolio, available for use in the Style Research Portfolio Analysis Software.
8	Separately configured time series of the Factor Portfolio returns, for use in the Style Research Portfolio Analysis Software for Returns-Based Style Analysis.

WorkSheet 7: Factor Portfolio Equity Listings



Factor Portfolio Holdings – The holdings of the Factor Portfolio can be listed at each rebalance point, together with all the data necessary to conduct further analysis – either within Style Research systems or using those of other analytical service providers.

Stock lists include: Name; SEDOL Number, Industrial Sector Classification; Market of Listing; % of the Factor Portfolio at each rebalance point; and the ranking of securities according to the selected sort factor (by the second if there are two).

Notes and Definitions

The Data

The data to support the **Style Research Markets Analyzer** service encompasses monthly pricing and fundamental data for over 32,000 securities in 53 global equity markets. Style Research retains historic information on securities which are no longer trading in order to minimize the impact of any survivorship bias.

Markets and Securities Covered by Style Research Software

UNITED STATES	18884	INDONESIA	696	BRAZIL	1461
JAPAN	4402	INDIA	588	CHILE	287
UNITED KINGDOM	4396	MALAYSIA	1127	COLOMBIA	66
BELGIUM	562	NEW ZEALAND	173	CZECH REPUBLIC	79
FRANCE	1656	PAKISTAN	145	EGYPT	36
GERMANY	1690	PHILIPPINES	388	HUNGARY	50
ITALY	744	KOREA (SOUTH)	1022	JORDAN	24
NETHERLANDS	364	TAIWAN	1507	MEXICO	557
SPAIN	317	THAILAND	1563	MOROCCO	22
SWITZERLAND	890	AUSTRIA	267	PERU	213
DENMARK	588	FINLAND	467	POLAND	136
SWEDEN	1253	GREECE	528	RUSSIA	91
CANADA	2629	IRELAND	139	SLOVAKIA	22
AUSTRALIA	1982	ISRAEL	193	SRI LANKA	34
HONG KONG	1132	LUXEMBOURG	37	TURKEY	250
SINGAPORE	741	PORTUGAL	187	VENEZUELA	72
NORWAY	455	SOUTH AFRICA	833	ZIMBABWE	17
CHINA	2069	ARGENTINA	214		

Total Number of Securities Covered: 58,245 Data at: December 2005

The Factors

The ***Returns to*** (see below) analysis is conducted using the following investment criteria or Factors:

VALUE CRITERIA

Book to Price The ratio of the company's Book Value (the sum of Shareholders' Equity plus accumulated Retained Earnings from the P & L Account) to its Share Price.

This Factor has been one of the most successful measures of the intrinsic Value of company shares.

Dividend Yield The annual Dividend Paid per Share divided by the Share Price.

This Factor measures the Value of company shares according to the stream of dividend income resulting from share ownership.

Earnings Yield Annual Earnings per Share divided by the Share Price.

This Factor measures the worth of a company's shares according to the company's ability to support each share with after tax earnings.

Cash Flow Yield Annual Cash Flow per Share divided by the Share Price.

This Factor is related to the earnings yield but also includes other items, specifically: depreciation, amortizations, and provisions for deferred liabilities. It is intended to capture the cash availability of the company as a multiple of the share price, and offers a Value criteria based on the stream of accessible cash earnings.

Sales to Price Net Sales per Share divided by the Share Price.

This Factor measures the worth of a company's shares according to the annual sales volume supporting the company business. The item is considered by many analysts to be less susceptible to manipulation than other valuation criteria; it is, however, a less comprehensive measure of a company's range of activities.

EBITDA to Price The ratio of the company's EBITDA to Price. EBITDA is Earnings before Interest, Taxes, Depreciations and Amortizations and is calculated by taking the pre-tax income and adding back interest expenses on debt and depreciation, depletion and amortization and subtracting interest capitalized.

The factor is a measure of a company's core profitability as a multiple of its share price.

I/B/E/S Dividend Yield The consensus 1 year forecast annual dividend per share divided by the share price.

I/B/E/S Earnings Yield The consensus 1 year forecast annual earnings per share divided by the share price.

I/B/E/S Sales Yield The consensus 1 year forecast annual sales per share divided by the share price.

Sales to EV Net Sales per Share divided by Enterprise Value.

Enterprise Value is defined as "market capitalization + total debt + preferred stock + cash and cash equivalents".

EBITDA to EV The ratio of the company's EBITDA to Enterprise Value.

EBITDA is Earnings before Interest, Taxes, Depreciations and Amortizations and is calculated by taking the pre-tax income and adding back interest expenses on debt and depreciation, depletion and amortization and subtracting interest capitalized. Enterprise Value is defined as "market capitalization + total debt + preferred stock + cash and cash equivalents".

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GROWTH CRITERIA

Return on Equity Net Income before Preferred Dividends divided by the Book Value of Shareholders' Common Equity.

RoE measures the profitability of the operations of the company as a proportion of the total amount of equity in the company. Since RoE multiplied by the reinvestment rate (the proportion of earnings not paid as dividends but reinvested in the company) gives the warranted growth rate of a company, RoE is a very usual measure of a company's growth potential.

Earnings Growth The average annual growth rate of Earnings over a trailing three years.

Earnings Growth is, perhaps, the clearest of the Growth criteria. However, it is subject to the distortions of reporting conventions and manipulation and, particularly in some markets, only known after a considerable lag.

Income to Sales The "net margin", annual Net Income before Preferred Dividends (plus Policyholders' Surplus for insurance companies), divided by annual Net Sales.

This measure attempts to assess the company's potential for profitable, sustained expansion or growth.

Sales Growth The average annual growth rate of Net Sales per Share over a trailing three years.

Although growth in sales per share might be only a narrow measure of a company's business growth, and may be subject to a number of distortions, it is less subject to differences in reporting conventions or manipulation than many other Balance Sheet or Profit and Loss items.

I/B/E/S 12 M I/B/E/S consensus forecast growth of Earnings over the next 12 months.

Earnings Growth	The I/B/E/S 12 month growth is calculated on a pro-rata basis from the forecasts for each company's next 2 annual reporting periods.
I/B/E/S 12 M Sales Growth	I/B/E/S consensus forecast growth of Sales over the next 12 months. The I/B/E/S 12 month growth is calculated on a pro-rata basis from the forecasts for each company's next 2 annual reporting periods.
I/B/E/S FY1/(2) Revisions (1M/3M)	I/B/E/S Earnings Forecast Revisions for the FY1 / 2 annual reporting period. Calculated as the difference between the upwards revisions minus the downwards revisions (as sampled over the past 1M or 3M period), expressed as a percentage of the number of estimates.
I/B/E/S Earnings Long Term Growth	This factor takes the furthest available 2 year Earnings Growth Forecasts for a stock. For stocks with a 5 year forward consensus forecast, the growth rate will be calculated from fiscal year 3 to fiscal year 5. For stocks with a 4 year forward consensus forecast, the growth rate will be calculated from fiscal year 2 to fiscal year 4. For stocks with a 3 year forward consensus forecast, the growth rate will be calculated from fiscal year 1 to fiscal year 3. If data are not available the factor is set to null.
I/B/E/S Sales Long Term Growth	This factor takes the furthest available 2 year Sales Growth Forecasts for a stock. For stocks with a 5 year forward consensus forecast, the growth rate will be calculated from fiscal year 3 to fiscal year 5. For stocks with a 4 year forward consensus forecast, the growth rate will be calculated from fiscal year 2 to fiscal year 4. For stocks with a 3 year forward consensus forecast, the growth rate will be calculated from fiscal year 1 to fiscal year 3. If data are not available the factor is set to null.
Volatility of Earnings Growth	Volatility of Earnings Growth measured over 3 years. Calculated as the standard deviation of Earnings Growth over the most recent 3 years of reported data.
Volatility of Sales Growth	Volatility of Sales Growth measured over 3 years. Calculated as the standard deviation of Sales Growth over the most recent 3 years of reported data.
Volatility of Forecast Earnings	Volatility of the I/B/E/S Earnings forecasts over 1 year. Calculated as the standard deviation of the FY1 Earnings Forecasts, as published monthly by I/B/E/S, over the most recent 1 year of reported data.
Volatility of Earnings Forecast Revisions	Volatility of the I/B/E/S Earnings Forecast Revisions over 1 year. The standard deviation of the revisions to the FY1 Earnings Forecasts, as published monthly by I/B/E/S, over the most recent 1 year of reported data.

SIZE & RISK CRITERIA

Size

The top X% of each market, by market capitalization.

Small company securities are often understood to comprise the bottom 20%, by value, of each market. However, the Style Research Markets Analyzer offers the flexibility to investigate a variety of size tranches within individual markets and regions.

Market Beta

The "slope coefficient", (β), from the simple regression:

Security Monthly Return = α + β * Market Monthly Return + Random Error

The regression is carried out over rolling 36 month periods; where sufficient information is not available, β=1 is assumed.

Share Price Volatility

Variability of the share price over the past 1 year.

Calculated as the standard deviation of the monthly share price over the most recent 1 year.

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PERFORMANCE RECORD CRITERIA

Short Term Momentum

Short Term Momentum is calculated using a 6 month "memory" of monthly relative returns. The past period returns are weighted using a "decay ratio" of 2/3, per month.

This weighted historic relative return factor measures the degree of simple price performance trend following. It is useful in recognizing the trading character of specific markets and in noticing occasional changing patterns through the market cycle.

Medium Term Momentum

Medium Term Momentum is simply the 12 month percentage change in prices.

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OTHER CRITERIA

Debt to Equity

Total Debt as a percentage of total Common Equity.

The Debt to Equity ratio measures leverage, or gearing, a particular feature of share price risk - the higher the ratio the more changes in a company's fortune might be reflected in changes in the payment of dividends. The influence of this criterion is, however, especially subject to a number of particular specific considerations (e.g. sector differences, interest rate sensitivity). Consequently it is considered separately from the other "risk" criteria.

Foreign Sales / Total Sales

International Sales as a percentage of Net Sales

Although information is occasionally rather sparse, where the data are available, and reliable, this is frequently an important investment criterion. It is undoubtedly linked to movements in the exchange rate and company size, and has different interpretations in different industrial sectors.

The Composite Factors

The standard factors above can be combined (linear combination) to create composite factors User defined Composite Style Factors can be created by combining existing factors.

These Composite Style Factors are constructed as linear combinations of the existing factors and can include up to 10 terms. Composite Style Factors are defined as:

$$f_i^* = \left\{ w_1 \, fr_{1,i} + w_2 \, fr_{2,i} + \ldots + w_n \, fr_{n,i} : \text{at least } m \text{ valid factors} \right\}$$

where $w_1, w_2 \ldots w_n$ are the weights and $fr_{1,i}$ is the factor ranking of the original data item of company *i*; and where a linear combination value will only be calculated if there are at least *m* (of *n*) valid factor ranking values.

The company with the largest factor value within a sample will have a factor ranking of 100, while the company with the smallest factor value will have a factor ranking of 1. All other factor rankings are uniformly distributed between 1 and 100. When only one company exists within a sample, a neutral ranking of 50 is adopted.

The weights are rescaled on a pro rata basis when there are missing terms in the linear combination.

For a Standard analysis, the factor rankings are calculated on a regional basis. For a Country Adjusted analysis the factor rankings are calculated for each market within the region. Factor rankings for a Sector Adjusted analysis are calculated on a sector-by-sector basis. Country and Sector analyses require factor rankings for each sector within each country.

"Return to"

The ***Return to*** series represent the cumulative Universe-relative total returns (including dividend income) that an investor would achieve using the following investment strategy:

- Portfolios are constructed according to the restrictions and Factor criteria specified by the user.
- Portfolios are constructed using market weights or equal weights to establish the portfolio proportions.
- Dealing costs are not included; however, the extended six month rebalancing interval limits the effect of transactions charges and market impact. The Turnover data (see below) does permit an approximate estimation.

The plots and statistics are constructed by compounding the monthly returns for each factor and comparing the "running totals" against the compound cumulative return for the Universe as a whole. The items plotted are the ratios, in percentage terms, of the cumulative returns to the various strategies, to the cumulative return to the Universe.

Style Rebalance Weights

When market capitalization weights are selected there is a further option to select rebalance weights based on the market capitalizations from the previous month end or from the current month end.

Although market practice favours using the current month end weights at each rebalance point, there is strong support for the use of the capitalization weights from the previous month end. This would clearly avoid any possibility of "look ahead bias"; and it may be a more practical representation of achievable investment activity.

"Identity"

The ***Identity*** statistic measures the likelihood that the performance of a particular ***Returns to*** Factor return series can not be explained simply by chance. This measure addresses the concern that an investment Style could very easily be defined according to nonsense criteria such as, say, the colour of the finance director's nephew's car. A true investment Style must be distinguishable from such nonsense criteria.

The ***Identity*** statistic offers a measure to determine the distinctiveness of each ***Returns to*** Factor return series and, consequently, to assess an individual Factor's relevance as an investment Style criteria.

The statistic is defined from a Monte Carlo simulation as follows:

* We calculate the tracking error comparing the absolute (not relative!) three month total returns of the Factor Portfolio against the returns of the portfolio comprised of the securities from the Universe.

* We calculate the tracking errors comparing the absolute (not relative!) total returns of randomly selected (from the Universe) similarly sized portfolios (as the Factor Portfolio) against the portfolio comprised of the securities from the Universe.

* We repeat the random portfolio construction process 500 times and determine the proportion of calculated tracking errors (from the randomization process) which are less than the tracking error relating to the Factor return history.

A number of "100%" would indicate that all of the randomly selected portfolios resulted in tracking errors below that relating to the portfolio constructed with reference to the Factor criteria under review. This would indicate that the systematic performance characteristics of the portfolio constructed with reference to that Factor can be regarded as distinct and very significant.

Nonsense criteria, on the other hand, score very close to "0%" on this measure and can quickly be recognized as irrelevant as investment Styles.

This statistic was developed by Style Research in accordance with research previously published by Carlo Capaul, Ian Rowley and Bill Sharpe (International Value and Growth Stock Returns, Financial Analysts Journal, Jan-Feb 1993), which used the same technique to establish the relevance of Style factors in international equity markets.

"Attribution"

The average of the absolute values of the T-Statistics of the estimates of the β and γ from the cross-sectional regressions:

Security 3 Month Return = α + β * Security Factor Exposure + Random Error;

or

Security 3 Month Return = α + β * Security Factor1 Exposure + γ * Security Factor2 Exposure + Random Error.

The regressions are both unweighted and weighted (to be relevant to portfolio construction), and the statistics quoted are: the averages over 10 years; the percentage of the time that the absolute value of the T-Statistic is over 2.00; and, on WorkSheet 3, the time-series of the individual quarterly T-Statistics.

"Turnover", "T/O"

The average annual turnover of the Factor portfolio, measured over the most recent three year period.

The T/O statistic displays the turnover in percent of total portfolio value terms, at an annualized rate and, following industry conventions, counts only one side of a sale and purchase set of transactions. For example, if 12% of the value of a portfolio were traded during a January rebalance (a 12% share sale and a subsequent 12% share purchase), and 15% of the value of the portfolio were traded in July, then the annual turnover would be quoted as 27%.

"Regularity"

The ***regularity*** statistics measure the regularity, or smoothness, of the deviations of each particular return series from their longer-term trends.

- The statistics measure the likelihood that deviations from the long-term trend can persist within 3, 6 or 12 month horizons (Each statistic is a weighted average of autocorrelation statistics within the horizon – the "half life" of the regularity statistics are 1 month, 2 months and 3 ½ months, respectively.).
- Positive figures indicate a positive likelihood that short or medium-term trends can deviate from the longer-term trend. The larger the number the more likely it is that such deviations might occur and persist with some regularity.
- Negative figures indicate that trends can only deviate from the long term trend for short periods. The more negative the number, the more likely it is that any deviation will quickly be corrected and that the series will soon return to its regular long-term trend.

the Regularity statistics are simply defined as *VR(q)*-1, where $VR(q) \equiv \frac{Var[r_t(q)]}{qVar[r_t]}$ and $r_t(k)$ is the series of multiple period compound return; i.e. $r_t(2) \equiv r_t + r_{t-1}$.

Following Campbell, Lo and MacKinlay (The Econometrics of Financial Markets, 1997), it can be shown that, *VR(q)* is a declining combination of autocorrelation statistics and that, for a sample of *nq*+1 observations and a very standard formulation of an estimator of *VR(q)*, $\overline{VR(q)}$, $\sqrt{nq}\left(\overline{VR(q)}-1\right)/\sqrt{2(q-1)}$ is normally distributed with zero mean and standard deviation of 1.

Consequently, for our Regularity statistics, the confidence ranges can be calculated as:

	1 SD	2 SD
Reg(3)	0.183	0.365
Reg(6)	0.289	0.577
Reg(12)	0.428	0.856

"Style Beta"

The "slope coefficient", (β), from the simple regression:

Style Factor Portfolio Quarterly Return = α + β * Universe Quarterly Return + Random Error

The regression is carried out over the past 5 years, using non –overlapping quarterly data.

"St. D"

The annualized Standard Deviation of the absolute (not relative) monthly returns of the relevant series, measured over the most recent 5 year (2 year) period.

This statistic provides a measure of the volatility of each of the series examined. It is useful in offering some measure of the risk of each of the investment strategies implied by the Factor Portfolio under review.

"T.E."

Tracking Error, i.e., the annualized Standard Deviation of the Universe-relative (not absolute) monthly returns of the relevant series measured over the most recent 5 year (2 year) period.

The statistic provides a measure of the Universe-relative volatility of each series. It is useful in offering some measure of the risk of each of the investment strategies implied by the Factor Portfolio under review, assessed relative to a market-neutral strategy.

"Sector Adjusted"/ "Country Adjusted"

A company's score for any particular factor can be measured either in absolute terms (such as "the Book to Price of ABC Limited is 0.70") or in relative, ***sector adjusted***, terms (such as, ABC Limited is a chemical company and the Book to Price of the industrial sector which includes chemical companies is 0.50. Therefore, the ***sector adjusted*** Book to Price score of ABC Limited is +0.20).

The ***sector adjusted*** analysis reviews all security factor scores relative to the relevant sector average for each security. These relative assessments reduce the influence of sector distortions on the appraisal of theme influences. ***Country adjustment*** and ***country and sector adjustment*** extend this analysis process across multi-market regions.