EI STURDZA
INVESTMENT FUNDS

Data map for E.I. Sturdza Funds plc

This document gives an overview of the source of data for each of the elements of the monthly factsheets released by E.I. Sturdza Strategic Management Limited ("EI Sturdza") in relation to the E.I. Sturdza Funds plc. It also expands on the calculation methodologies used.

The document also describes the new fund page for the EI Sturdza Investment Funds website which contains the same data as the monthly factsheets and some further enhancements.

Note: Not all data points described below will be available for all funds. EI Sturdza retains the discretion to determine which data points to make available or to restrict.

Sarnia House
Le Truchot
St Peter Port
Guernsey GY1 1GR
Channel Islands

+44 1481 722 322

info@eisturdza.com

EI STURDZA
INVESTMENT FUNDS

1. Fund Factsheet

1.1. Performance chart

Data source: Morningstar

These charts are produced using monthly data points for both the relevant fund and index, apart from the inception data point which is set to the exact day of launch of the fund.

1.2. Cumulative & Calendar Year performance tables

Data source: Morningstar

Fund return

All fund returns are as calculated by Morningstar Direct using a monthly data series, with the exception of the since inception points which are calculated to the exact day of launch. The annualised since inception returns calculated for the funds by Morningstar uses an actual/365.25 day convention for annulisation whereas historically the annualised returns within the factsheets had used a 30/360 day convention.

Index returns

All index returns are as calculated by Morningstar Direct using a monthly data series with the exception of the since inception points which are calculated to the exact fund launch date.

This means that the index performance will always reflect the index returns from month end to month end points (with the exception of since inception figures). The returns will therefore always be in line with the index returns provided by the index providers themselves.

The only time a difference to the index returns between the historic factsheets and future factsheets would be seen is if the last valuation date at the end of a month was different for the fund compared to the index, for example if the fund and index observed different bank holidays at a month end.

1.3. Market Capital Allocation

Data source: Bloomberg PORT, HSBC valuation

Portfolio data is sourced from Bloomberg PORT at the end of each month and the Market Cap of each portfolio holding in base currency terms is extracted and classified according to the funds standard classification scheme.

The percentage weight of each portfolio holding is then calculated as (market value of the holding according to PORT as at month end / Fund AUM as at month end as reported by HSBC)

The percentage weights within each bucket are then summed to give the final percentage allocations on the factsheet.

Only the long equity positions are included in the analysis. Cash and index options are ignored.

1.4. Sector Allocation

Data source: Bloomberg PORT, HSBC valuation

Portfolio data is sourced from Bloomberg PORT at the end of each month and the GICS sector/TSE sectors of each portfolio holding as defined by Bloomberg is extracted. Cash is commonly utilised as an additional allocation.

The Investment Adviser/Investment Manager retain the flexibility to manually adjust the classification of stocks based on their own assessment.

The percentage weight of each portfolio holding is then calculated as (market value of the holding according to PORT as at month end / Fund AUM as at month end as reported by HSBC)

The percentage weights within each bucket are then summed to give the final percentage allocations on the factsheet.

1.5. Top 5 over / under weights

Data source: Bloomberg PORT, HSBC valuation

Sector allocations for the Fund are calculated as in section 1.4. Then the sector allocations for the benchmark are extracted directly from Bloomberg PORT.

To build the over/under weight tables the difference between the Fund weight and index weight for each sector is calculated. The top 5 positive overweights appear in the top 5 overweights table and the top 5 most negative underweights appear in the underweights table.

If less than 5 overweights or underweights exist the remaining lines in each table are left blank in order to minimise layout disruption each month.

Only stock positions are considered as part of this analysis.

1.6. Share Classes / ISIN / NAV

Data source: Morningstar

All details sourced from Morningstar Direct.

EI STURDZA
INVESTMENT FUNDS

1.7. Geographic Allocation

Data source: Bloomberg PORT, HSBC valuation

Portfolio data is sourced from Bloomberg PORT at the end of each month and the country of each portfolio holding as defined by Bloomberg is extracted. Bloomberg's "country of risk" is the data field that is used to determine the country. "Country of Risk" is defined in Bloomberg as:

> *Returns the International Organization for Standardization (ISO) country code of the issuer's country of risk. Methodology consists of four factors listed in order of importance: management location, country of primary listing, country of revenue and reporting currency of the issuer. Management location is defined by country of domicile unless location of such key players as Chief Executive Officer (CEO), Chief Financial Officer (CFO), Chief Operating Officer (COO), and/or General Counsel is proven to be otherwise.*

The Investment Adviser/Investment Manager retain the flexibility to manually adjust the classification of stocks based on their own assessment.

The percentage weight of each portfolio holding is then calculated as (market value of the holding according to PORT as at month end / Fund AUM as at month end as reported by HSBC)

The percentage weights within each country are then summed to give the final percentage allocations on the factsheet. Cash and index options are not included within this analysis.

1.8. Credit rating allocation (fixed income funds)

Data source: Bloomberg PORT, HSBC valuation

Portfolio data is sourced from Bloomberg PORT at the end of each month and the credit rating of each portfolio holding as defined by Bloomberg is extracted. The credit rating is a custom scheme from the Investment Adviser, which is based on the lowest rating for the issuer from 3 rating agencies. In addition to the ratings buckets there is also Cash.

The percentage weight of each portfolio holding is then calculated as (market value of the holding according to PORT as at month end / Fund AUM as at month end as reported by HSBC) Bond futures are ignored in the analysis.

The percentage weights within each bucket are then summed to give the final percentage allocations on the factsheet.

1.9. Maturity Allocation (fixed income funds)

Data source: Bloomberg PORT, HSBC valuation

Portfolio data is sourced from Bloomberg PORT at the end of each month and the maturity of each portfolio holding as defined by Bloomberg is extracted. The maturity is the Effective Maturity field in Bloomberg PORT which is defined as "the length of time in years between today and the workout date"

The percentage weight of each portfolio holding is then calculated as (market value of the holding according to PORT as at month end / Fund AUM as at month end as reported by HSBC)

The percentage weights within each bucket are then summed to give the final percentage allocations on the factsheet.

The exposure to short futures positions is calculated as the (notional exposure / Fund AUM as at month end as reported by HSBC)

1.10. Top 5 holdings

Data source: Bloomberg PORT

Portfolio data is sourced from Bloomberg PORT at the end of each month and the percentage weight of each portfolio holding is then calculated (as market value of the holding according to PORT as at month end / Fund AUM as at month end as reported by HSBC)

The percentage weights of each holding are then ranked and the top 5 appear on the factsheet. It should be noted that options are excluded from this ranking.

It should be noted that this information is only incorporated within the "investor" factsheets for the Strategic Europe Value Fund and Strategic Global Quality Fund.

1.11. Active Share

Data source: Bloomberg PORT

Active share vs the benchmark is calculated directly in Bloomberg PORT using Bloomberg's methodology.

1.12. AUM

Data source: HSBC

AUM is taken from HSBC's valuations.

1.13. Analytics – metrics and ratios

EI STURDZA
INVESTMENT FUNDS

Data source: Morningstar

All analytics are calculated in Morningstar Direct using the following settings:

Return series: Monthly data
Benchmark: Fund benchmark
Risk free rate: ICE LIBOR 3 Month *[applicable base currency]*

Details of the data points used within most Equity funds are as follows. Detailed descriptions of the methodology can be found at the end of this document:

Alpha: annualised alpha vs benchmark calculated by Morningstar Direct
Beta: beta vs benchmark calculated by Morningstar Direct
Standard Deviation: annualised standard deviation calculated by Morningstar Direct
Sharpe Ratio: annualised geometric sharpe ratio calculated by Morningstar Direct
Information Ratio: annualised geometric information ratio calculated by Morningstar Direct

In addition for the Fixed income funds, the following additional data points are extracted from Morningstar:

Max Drawdown the maximum drawdown of the fund since inception (monthly data points only)

Additional fixed income characteristics and metrics utilised, which are sourced from Bloomberg PORT and/or HSBC:

Weighted Average Maturity (Years): The weighted average of Bloomberg PORT's effective maturity field for each portfolio holding in years. This calculation includes the effect of any hedge overlay.

Average Yield to Maturity (Years): The weighted average of Bloomberg PORT's Yield to Maturity field for each portfolio holding in years. This calculation excludes the effect of any hedge overlay.

Average Modified Duration: The weighted average of Bloomberg PORT's modified duration field for each portfolio holding in years. For TIPS, Bloomberg's OAR (option adjusted risk) field is substituted in the calculation as this gives a better approximation of modified duration for inflation linked securities. This calculation includes the effect of any hedge overlay.

Average yield to maturity:	The weighted average of Bloomberg PORT's Yield to Maturity field for each portfolio holding in years. This calculation excludes the effect of any hedge overlay.
Modified Duration:	The weighted average of Bloomberg PORT's modified duration field for each portfolio holding in years. This calculation includes the effect of any hedge overlay.
Weighted Average Maturity:	The weighted average of Bloomberg PORT's effective maturity field for each portfolio holding in years. This calculation includes the effect of any hedge overlay.
Average Duration:	The weighted average of Bloomberg PORT's Macaulay Duration field for each portfolio holding in years. This calculation includes the effect of any hedge overlay.
Dividend Yield (Dist Class):	When a distribution is paid the yield % is calculated. This field is the sum of all yield % figures over the past 1 year.

For the Strategic US Momentum & Value Fund the following portfolio statistical data is provided by the Investment Adviser.

- Current P/E
- Beta
- Volatility
- Growth over 10 years
- PEG

The time period over which the statistics are displayed is defined within.

1.14. Analytics – exposure

Data source: Bloomberg PORT, HSBC valuation

Portfolio data is sourced from Bloomberg PORT at the end of each month and each holding is classified in one of the following categories:

Long
Short
Hedge
Cash

The percentage exposure of each portfolio holding in this section is calculated differently to the other sections as the *delta-adjusted* exposure as calculated by Bloomberg is used and then divided by the Fund AUM from HSBC to determine the final percentage. This has no effect on the majority of the holdings as the delta adjusted exposure of a long equity position is the same as its market value. However this does make a significant difference to the size and (and potentially the sign) of the exposure for options.

The final exposures for the factsheet are then calculated as follows:

Long exposure:	The sum of all delta-adjusted percent exposures classified as Long
Hedge exposure:	The sum of all delta-adjusted percent exposures classified as Hedge
Cash:	The cash exposure
Top 10:	Fund exposure to the top 10 holdings. (Note options are excluded from the top 10)

1.15. Key points/Objective/Portfolio manager/ Facts and Terms/Awards/Disclaimer/Contact

Data source: EI Sturdza

These sections largely consist of static data which changes relatively infrequently.

2. Improved Fund Webpage for EI Sturdza Investment Funds website

Currently the Fund page on the EI Sturdza Investment Funds website provides a static representation of the last version of the factsheet.

As part of ongoing projects EI Sturdza aims to improve the Fund page for each sub-fund of the E.I. Sturdza Fund plc as follows:

- Automate the update of the page when the new factsheet is produced
- Significantly improve the layout of the factsheet information on the fund page
- Make the page more interactive and provide more data for users

In addition to representing the latest factsheet data, the fund page will have the following enhancements:

- An interactive performance chart, allowing users to select time periods for analysis and additionally display the Morningstar peer average return.
- The ability to view charting and performance tables for different share classes of the fund
- The ability to view historic Sector Allocation, Market Cap Allocation and Geographical Allocation data on an aggregated basis for previous month end dates.

EI Sturdza anticipates the first website update releases will take place in early July with the following further developments to follow:

- Morningstar peer average index displayed on chart
- Daily chart data with customisable time period
- Ability to view historical sector allocation using a month end date selector on the allocations tab.

2.1. Performance chart note

Data source: Morningstar

These charts are produced as described above at 1.1. This said the website provides users with the ability to switch between share classes, allowing them to view the historic performance of the selected class over the time period defined by the user.

Should an investor select "max" then the longest possible track record will be displayed for the share class as per the data contained in Morningstar. This will include track extensions where applicable.

EI STURDZA
INVESTMENT FUNDS

3. Appendix - Morningstar data definitions

Alpha

A measure of the difference between a portfolio's actual returns and its expected performance, given its level of risk as measured by beta. A positive Alpha figure indicates the portfolio has performed better than its beta would predict. In contrast, a negative Alpha indicates the portfolio has underperformed, given the expectations established by beta.

Alpha is calculated by taking the excess average monthly return of the investment over the risk free rate and subtracting beta times the excess average monthly return of the benchmark over the risk free rate. The equations is as follows:

$$\alpha_M = \overline{R}^e - \beta \overline{B}^e$$

where,

α_M = Monthly measure of alpha
$\overline{R}^e$ = Average monthly excess return of the investment
$\overline{B}^e$ = Average monthly excess return of the benchmark
β = Beta

The resulting alpha is in monthly terms, because the average returns for the portfolio and benchmark were monthly averages. Morningstar then annualizes alpha to put it in annual terms.

$$\alpha_A = 12\,\alpha_M$$

The same methodology applies for alpha (non-excess return) except that the raw return is used instead of the excess return.

Beta

Beta is a measure of systematic risk with respect to a benchmark. Systematic risk is the tendency of the value of the fund and the value of benchmark to move together. Beta measures the sensitivity of the fund's excess return (total return minus the risk-free return) with respect to the benchmark's excess return that results from their systematic co-movement. It is the ratio of what the excess return of the fund would be to the excess return of the benchmark if there were no fund-specific sources of return. If beta is greater than one, movements in value of the fund that are associated with movements in the value of the benchmark tend to be amplified. If beta is one, they tend to be the same, and if beta is less than one, they tend to be dampened. If such movements tend to be in opposite directions, beta is negative. Beta is measured as the slope of the regression of the excess return on the fund as the dependent variable and the excess return on the benchmark as the independent variable.

The beta of the market is 1.00 by definition. Morningstar calculates beta by comparing a portfolio's excess return over T-bills to the benchmark's excess return over T-bills, so a beta of 1.10 shows that the portfolio has performed 10% better than its benchmark in up markets and 10% worse in down markets, assuming all other factors remain constant. Conversely, a beta of 0.85 indicates that the portfolio's excess return is expected to perform 15% worse than the benchmark's excess return during up markets and 15% better during down markets.

Standard Deviation

A statistical measurement of dispersion about an average, which, for a mutual fund, depicts how widely the returns varied over a certain period of time. Investors use the standard deviation of historical performance to try to predict the range of returns that are most likely for a given fund. When a fund has a high standard deviation, the predicted range of performance is wide, implying greater volatility. Standard deviation is most appropriate for measuring risk if it is for a fund that is an investor's only holding. The figure can not be combined for more than one fund because the standard deviation for a portfolio of multiple funds is a function of not only the individual standard deviations, but also of the degree of correlation among the funds' returns. If a fund's returns follow a normal distribution, then approximately 68 percent of the time they will fall within one standard deviation of the mean return for the fund, and 95 percent of the time within two standard deviations. Morningstar computes standard deviation using the trailing monthly total returns for the appropriate time period. All of the monthly standard deviations are then annualized.

Sharpe Ratio

A risk-adjusted measure developed by Nobel Laureate William Sharpe. It is calculated by using standard deviation and excess return to determine reward per unit of risk. The higher the Sharpe Ratio, the better the fund's historical risk-adjusted performance. The Sharpe ratio is calculated for the past 36-month period by dividing a fund's annualized excess returns by the standard deviation of a fund's annualized excess returns. Since this ratio uses standard deviation as its risk measure, it is most appropriately applied when analyzing a fund that is an investor's

sole holding. The Sharpe Ratio can be used to compare two funds directly on how much risk a fund had to bear to earn excess return over the risk-free rate.

The Sharpe Ratio can be calculated one of three ways:

1. Standard Sharpe Ratio ($SharpeRatio_M$)
2. Arithmetic Sharpe Ratio ($SharpeRatio_A$)
3. Geometric Sharpe Ratio ($SharpeRatio_G$)

$$\text{Sharpe Ratio}_M = \frac{\left(\frac{\sum_{i=1}^{n} R_i}{n}\right) - \left(\frac{\sum_{i=1}^{n} RF_i}{n}\right)}{\text{St Dev}_M}$$

$$\text{Sharpe Ratio}_A = \frac{\left[\prod_{i=1}^{n}(1+R_i)\right]^{\frac{m}{n}} - \left[\prod_{i=1}^{n}(1+RF_i)\right]^{\frac{m}{n}}}{\text{St Dev}_A}$$

$$\text{Sharpe Ratio}_G = \frac{\left[\prod_{i=1}^{n}(1+R_i)\right]^{\frac{m}{n}} \Big/ \left[\prod_{i=1}^{n}(1+RF_i)\right]^{\frac{m}{n}} - 1}{\text{St Dev}_A}$$

where,

$$\text{St Dev}_M = \sqrt{\frac{1}{n-1} \bullet \sum_{i=1}^{n}\left(R_i - \bar{R}\right)^2}$$

Information Ratio

Information ratio is a risk-adjusted performance measure. The information ratio is a special version of the Sharpe Ratio in that the benchmark doesn't have to be the risk-free rate. The Israelson method is an adjustment of the Information Ratio to take into account the inconsistency of the IR when excess returns are negative.