

Harbor Large Cap Value Fund

Aristotle Capital Management, LLC

Subadvisor Since 05/25/2012

Total Net Assets - All Classes \$1,949,224,942
Equity Assets: 97.82%
Cash & Other Assets Less Liabilities: 2.18%
Benchmark Name: Russell 1000® Value Index

Portfolio Managers



Howard Gleicher, CFA



Gregory D. Padilla, CFA

Investment Philosophy

The Fund invests primarily in equity securities, principally common and preferred stocks, of companies with market capitalizations that fall within the range of the Russell 1000® Value Index. The Subadvisor employs a fundamental, bottom-up research driven approach to identify companies for investment by the Fund. The Subadvisor focuses on those companies that it believes have higher quality businesses that are undervalued by the market relative to what the Subadvisor believes to be their fair value. The Subadvisor also looks for one or more catalysts that may help the company realize that fair value. The Subadvisor seeks to identify higher quality companies by focusing on the following attributes: attractive business fundamentals, financially strong, experienced, motivated company management, and exhibiting high and/or consistently improving market position, return on invested capital and operating margins. Under normal market conditions, the Fund expects to invest in approximately 35 to 45 companies.

CHARACTERISTICS & ALLOCATION

As of 09/30/2022

| Portfolio Characteristics | | | Economic Sectors | | |
|--------------------------------|------------|------------|------------------------|-------------|-------------|
| | Portfolio | Benchmark | | Portfolio % | Benchmark % |
| Number of Holdings | 44 | 855 | Information Technology | 17.91 | 8.72 |
| Wtd Avg Market Cap (\$Mil) | 141,044.10 | 134,714.40 | Financials | 16.79 | 19.96 |
| Med Cap - # Stocks (\$Mil) | 38,830.00 | 10,616.00 | Health Care | 12.24 | 17.28 |
| Price/Book Ratio | 4.18 | 2.24 | Materials | 11.10 | 4.09 |
| Adjusted Trailing P/E Ratio | 21.70 | 18.00 | Industrials | 10.68 | 9.98 |
| % EPS Growth - Past 3 Yr | 14.90 | 16.00 | Consumer Staples | 8.71 | 7.28 |
| Return on Equity (%) | 16.88 | 15.40 | Consumer Discretionary | 6.66 | 5.94 |
| Beta vs. Fund Benchmark | 0.96 | | Utilities | 5.13 | 5.94 |
| Forecasted P/E Ratio | 19.10 | 15.40 | Energy | 4.66 | 7.80 |
| Proj. Earnings Growth Rate (%) | 12.50 | 9.00 | Real Estate | 3.94 | 4.84 |
| | | | Communication Services | 0.00 | 8.03 |

| Top 10 Holdings | | | Top 10 Industries | | |
|----------------------------|--------------|-------------|-----------------------|--------------|--------------|
| | Portfolio % | Benchmark % | | Portfolio % | Benchmark % |
| Microsoft Corporation | 4.30 | 0.00 | Software | 11.66 | 1.67 |
| Corteva Inc. | 4.06 | 0.25 | Chemicals | 8.39 | 2.50 |
| Danaher Corporation | 3.29 | 0.94 | Banks | 7.33 | 7.30 |
| Coterra Energy Inc. | 2.84 | 0.10 | Machinery | 6.20 | 1.80 |
| Microchip Technology Inc. | 2.76 | 0.03 | Semiconductors | 5.33 | 2.32 |
| Amgen Inc. | 2.74 | 0.12 | Capital Markets | 4.88 | 4.85 |
| Martin Marietta Materia | 2.71 | 0.11 | Household Durables | 4.86 | 0.47 |
| Lennar Corporation Class A | 2.67 | 0.11 | Beverages | 4.74 | 1.04 |
| Ameriprise Financial Inc. | 2.65 | 0.06 | Oil Gas & Consumables | 4.66 | 7.26 |
| Xcel Energy Inc. | 2.59 | 0.21 | Equity REITS | 3.94 | 4.67 |
| Total | 30.61 | 1.93 | Total | 61.99 | 33.88 |

| Market Capitalization | | |
|-----------------------|---------------|-------------|
| | | Portfolio % |
| Large | Above 25.0B | 69.18 |
| | 10.0B - 25.0B | 25.52 |
| Mid | 5.0B - 10.0B | 3.97 |
| | 1.0B - 5.0B | 1.34 |
| Small | 0.0 - 1.0B | 0.00 |



Trusted Partnerships > Trusted Solutions



Average Annual Returns

| Share Class | Ticker | CUSIP | 3 Months | YTD | 1 Yr. | 3 Yr. | 5 Yr. | 10 Yr. | Since Inception | Inception Date | Net Expense Ratio % | Gross Expense Ratio % |
|---------------------------|--------|-----------|----------|---------|---------|-------|-------|--------|-----------------|----------------|---------------------|-----------------------|
| Institutional | HAVLX | 411511603 | -5.28% | -23.03% | -17.22% | 6.17% | 7.12% | 11.38% | 9.72% | 12/29/87 | 0.69 | 0.72 |
| Administrative Investor | HRLVX | 411511751 | -5.38% | -23.21% | -17.45% | 5.87% | 6.82% | 11.07% | 8.70% | 11/01/02 | 0.94 | 0.97 |
| Investor | HILVX | 411511744 | -5.43% | -23.29% | -17.54% | 5.75% | 6.70% | 10.95% | 8.55% | 11/01/02 | 1.05 | 1.08 |
| Retirement | HNLVX | 411512478 | -5.33% | -23.04% | -17.19% | 6.23% | 7.19% | 11.42% | 9.73% | 03/01/16 | 0.61 | 0.64 |
| Russell 1000® Value Index | | | -5.62% | -17.75% | -11.36% | 4.36% | 5.29% | 9.17% | 9.95% | 12/29/87 | | |

MANAGER COMMENTARY

As of 09/30/2022

“While the current market environment seems to be dominated by macro news and geopolitical events, we remain steadfast in our belief that the fundamentals of a company, ultimately, determine its intrinsic worth.”

Aristotle Capital Management, LLC

Market in Review

Looking back at the third quarter of 2022, inflation still remains a primary concern. While the annual Consumer Price Index eased from 8.5% in July to 8.3% in August, it was still above the consensus estimate of 8.1%. Discussions over whether the U.S. economy is already in a recession abound, as the economy contracted at an annual pace of 0.6% in the second quarter, and the decreasing likelihood of a “soft landing” fueled worry in the markets. Conversely, a tight labor market is providing support that the economy could potentially withstand additional central bank tightening.

In response to elevated inflation, in September, the Federal Reserve (“Fed”) raised the federal funds rate by 0.75%, moving the benchmark rate to a range of 3.00% to 3.25%. Fed Chair Jerome Powell signaled the Fed would continue to hike rates into 2023, in conjunction with quantitative tightening, to bring down the rate of inflation. In response to the Fed’s hawkish stance, interest rate and foreign-exchange markets repriced sharply, with the U.S. Dollar Index trading at its highest level since 2002. Geopolitical tensions continued to simmer ahead of the winter months in Europe, while earnings warnings piled up ahead of the third-quarter earnings season.

The U.S. equity market posted its third, consecutive quarterly decline, as the S&P 500 Index fell by 4.88% during the period, bringing its year-to-date return to -23.87%. This marks the first, three-quarter losing streak for the index since 2009. Concurrently, the Bloomberg US Aggregate Bond Index dropped by 4.75% for the quarter, bringing the year-to-date return to -14.61%. The Russell 1000® Value Index underperformed its growth counterpart by 2.02% during the quarter. On a sector basis, 10 sectors within the Russell 1000® Value Index finished lower for the quarter—the Energy sector was the only outperformer. Meanwhile, Communication Services and Real Estate declined the most.

Retirement Class shares commenced operations on March 1, 2016. The performance attributed to the Retirement Class shares prior to that date is that of the Institutional Class shares. Performance prior to March 1, 2016 has not been adjusted to reflect the lower expenses of Retirement Class shares. During this period, Retirement Class shares would have had returns similar to, but somewhat higher than, Institutional Class shares due to the fact that Retirement Class shares represent interests in the same portfolio as Institutional Class shares but are subject to lower expenses.

Expense ratio information is as of the Fund’s current prospectus, as supplemented. Gross expenses are the Fund’s total annual operating expenses. The net expense ratios for this fund are subject to a contractual management fee waiver and/or expense limitation agreement, excluding interest expense and acquired fund fees and expenses (if any), through 02/28/2023.

Performance data shown represents past performance and is no guarantee of future results. Past performance is net of management fees and expenses and reflects reinvested dividends and distributions. Past performance reflects the beneficial effect of any expense waivers or reimbursements, without which returns would have been lower. Investment returns and principal value will fluctuate and when redeemed may be worth more or less than their original cost. Returns for periods less than one year are not annualized. Current performance may be higher or lower and is available through the most recent month end at harborcapital.com or by calling 800-422-1050.



Portfolio Performance

During the third quarter, the Harbor Large Cap Value Fund (Institutional Class, "Fund") returned -5.28%, slightly outperforming its benchmark, the Russell 1000® Value Index, which returned -5.62%, and underperforming the S&P 500 Index, which returned -4.88%.

The Fund's outperformance relative to the Russell 1000® Value Index can be attributed to security selection, while allocation effects also had a positive impact. Security selection in Materials, Industrials, and Information Technology, and a lack of exposure to Communication Services contributed the most to relative performance. Conversely, security selection in Consumer Discretionary, Consumer Staples, and Financials detracted the most from relative performance. (Relative weights are the result of bottom-up security selection.)

Contributors & Detractors

Cullen/Frost Bankers, the Texas-based bank, was a top contributor for the quarter. The regional bank reported its fifth-straight quarter of zero-provisioning costs, and its net interest income grew by 16% sequentially. Due to its relatively low loan-to-deposit ratio, higher core-deposit base, and mix of floating-rate loans relative to peers, we believe Cullen/Frost has been well positioned to benefit when interest rates increase. The bank is continuing to execute on its expansions in Houston and Dallas—a catalyst for the business—exceeding its loan- and deposit-growth goals in each of these markets. Management has also confirmed it will be moving forward on plans to both originate and service mortgage loans, with anticipation of a pilot program launch by the end of 2022. This should serve to further diversify its loan book. Lastly, with its operations solely in Texas, Cullen/Frost prides itself on its relationship-based approach to banking and strong customer loyalty. This is, in our opinion, an important competitive advantage and a differentiator versus larger peers that have a national presence. As such, the bank has continued to see deposits grow and has not yet faced the same deposit pressure seen by many peers—a sign of the relationships that Cullen/Frost has built.

Adobe, the content creation and publishing software provider, was the largest detractor for the third quarter. So far in 2022, Adobe has achieved record revenues with strength in all its businesses, as the acceleration toward digital has continued to drive content creation across industries. During the quarter, however, the company's shares declined after announcing its plans to acquire Figma, a web-first, collaborative, interface design platform, for \$20 billion. While, at first glance, this may seem like a steep price, Figma's web-based, multiplayer platform could accelerate the delivery of Adobe's Creative Cloud technologies on the web, increasing Adobe's reach and total addressable market. Management expects the deal to close in 2023 and the transaction to be accretive by the end of the third year of integration. As is the case with any significant acquisition, we will take our time to understand this deal's rationale and follow management's ability to take Figma to "new heights." This has been the case with previous acquisitions, including Marketo and Magento (although each at a much smaller purchase price). In general, we admire management teams that are able to recognize the evolving needs of their clients and are unafraid of "competing with themselves" by developing new offerings. We will continue to study this acquisition and better understand the desire of content creators to collaborate over the web.



Buys and Sells

Consistent with our long-term horizon and low turnover, there were no new purchases or sales completed during the quarter.

Outlook

Our investment process seeks to identify businesses that, in our opinion, possess a combination of qualities that are both sustainable and difficult to reproduce. While broad macroeconomic factors, such as inflation, central bank policies, foreign exchange markets, and various other data points are taken into consideration as part of our research, we spend the vast majority of our time analyzing individual companies. Rather than attempting to predict the path of stock prices in the short term, we focus our efforts on understanding businesses over the long term. We believe the long-term benefits of patience and extensive research far outweigh the potential risk of a missed opportunity; seldom are reactionary decisions optimal. While the current market environment seems to be dominated by macro news and geopolitical events, we remain steadfast in our belief that the fundamentals of a company, ultimately, determine its intrinsic worth. As such, we will continue to focus our efforts on studying the unique qualities and characteristics of the companies in which we are invested.

QUARTERLY ATTRIBUTION

As of 09/30/2022

Best & Worst Performers

| Best Performers | Average Weight % | Return % |
|--------------------------------|------------------|----------|
| PayPal Holdings Inc. | 0.90 | 23.24 |
| Cullen/Frost Bankers Inc. | 2.12 | 14.30 |
| Xylem Inc. | 2.23 | 12.11 |
| Autodesk Inc. | 2.39 | 8.63 |
| Martin Marietta Materials Inc. | 2.61 | 7.84 |

| Worst Performers | Average Weight % | Return % |
|--------------------------------------|------------------|----------|
| Adobe Incorporated | 2.98 | -24.82 |
| Cincinnati Financial Corporation | 2.21 | -24.20 |
| Tyson Foods Inc. Class A | 1.82 | -22.92 |
| Sony Group Corporation Sponsored ADR | 2.44 | -21.67 |
| Alcon AG | 2.05 | -16.75 |

Contributors & Detractors

| Greatest Contributors | Return % | Contribution to Return % |
|--------------------------------|----------|--------------------------|
| Cullen/Frost Bankers Inc. | 14.30 | 0.22 |
| Xylem Inc. | 12.11 | 0.19 |
| Martin Marietta Materials Inc. | 7.84 | 0.16 |
| Autodesk Inc. | 8.63 | 0.15 |
| Lennar Corporation Class A | 6.16 | 0.15 |
| Total | | 0.87 |

| Greatest Detractors | Return % | Contribution to Return % |
|--------------------------------------|----------|--------------------------|
| Adobe Incorporated | -24.82 | -0.66 |
| Cincinnati Financial Corporation | -24.20 | -0.57 |
| Sony Group Corporation Sponsored ADR | -21.67 | -0.51 |
| Tyson Foods Inc. Class A | -22.92 | -0.43 |
| Microsoft Corporation | -9.12 | -0.39 |
| Total | | -2.56 |

Performance data shown represents past performance and is no guarantee of future results. Past performance is net of management fees and expenses and reflects reinvested dividends and distributions. Past performance reflects the beneficial effect of any expense waivers or reimbursements, without which returns would have been lower. Investment returns and principal value will fluctuate and when redeemed may be worth more or less than their original cost. Returns for periods less than one year are not annualized. Current performance may be higher or lower and is available through the most recent month end at harborcapital.com or by calling 800-422-1050.

Harbor Large Cap Value Fund

ATTRIBUTION

As of 09/30/2022



Quarterly Attribution:

Harbor Large Cap Value Fund vs Russell 1000® Value

Performance

| | Portfolio | Benchmark | Active |
|-----------------------|--------------|--------------|-------------|
| Return Ex Currency | -5.30 | -5.63 | 0.33 |
| Currency Contribution | 0.00 | 0.00 | 0.00 |
| Total Return | -5.30 | -5.63 | 0.33 |

Sector Attribution

| Sector Attribution | Average Weight | | | Total Return | | | Contribution to Return | | Attribution Analysis | | |
|------------------------|-----------------|------------------|------------------------|--------------------|---------------------|---------------------------|------------------------------|-------------------------------|----------------------|------------------|--------------|
| | Port. Avg. Wgt. | Bench. Avg. Wgt. | Variation in Avg. Wgt. | Port. Total Return | Bench. Total Return | Variation in Total Return | Port. Contribution To Return | Bench. Contribution To Return | Allocation Effect | Selection Effect | Total Effect |
| Materials | 10.64 | 4.15 | 6.49 | 4.11 | -8.01 | 12.12 | 0.24 | -0.32 | -0.16 | 1.24 | 1.09 |
| Communication Services | 0.00 | 8.44 | -8.44 | 0.00 | -13.39 | 13.39 | 0.00 | -1.06 | 0.69 | 0.00 | 0.69 |
| Industrials | 10.64 | 10.09 | 0.55 | -1.39 | -4.55 | 3.16 | -0.23 | -0.46 | -0.01 | 0.33 | 0.33 |
| Information Technology | 18.59 | 9.16 | 9.43 | -6.28 | -8.25 | 1.97 | -1.06 | -0.68 | -0.29 | 0.39 | 0.09 |
| Health Care | 11.63 | 16.72 | -5.09 | -5.45 | -5.70 | 0.25 | -0.66 | -0.89 | 0.05 | 0.00 | 0.05 |
| Real Estate | 4.37 | 5.02 | -0.65 | -12.70 | -10.46 | -2.24 | -0.48 | -0.49 | 0.05 | -0.11 | -0.07 |
| Utilities | 5.25 | 6.02 | -0.77 | -8.78 | -5.71 | -3.07 | -0.52 | -0.42 | -0.01 | -0.16 | -0.17 |
| Energy | 4.48 | 7.42 | -2.94 | 2.05 | 3.03 | -0.98 | 0.01 | 0.08 | -0.24 | -0.06 | -0.31 |
| Financials | 16.55 | 19.80 | -3.25 | -5.55 | -3.42 | -2.13 | -0.97 | -0.73 | -0.07 | -0.34 | -0.41 |
| Consumer Staples | 8.70 | 7.15 | 1.55 | -11.40 | -6.27 | -5.13 | -1.00 | -0.48 | -0.02 | -0.46 | -0.48 |
| Consumer Discretionary | 6.84 | 6.03 | 0.81 | -10.63 | -2.81 | -7.82 | -0.62 | -0.18 | 0.05 | -0.54 | -0.50 |
| Total | 100.00 | 100.00 | 0.00 | -5.30 | -5.63 | 0.33 | -5.30 | -5.63 | 0.04 | 0.29 | 0.33 |

Trailing 1 Year Attribution:

Harbor Large Cap Value Fund vs Russell 1000® Value

Performance

| | Portfolio | Benchmark | Active |
|-----------------------|---------------|---------------|--------------|
| Return Ex Currency | -16.73 | -11.37 | -5.36 |
| Currency Contribution | 0.00 | 0.00 | 0.00 |
| Total Return | -16.73 | -11.37 | -5.36 |

Sector Attribution

| Sector Attribution | Average Weight | | | Total Return | | | Contribution to Return | | Attribution Analysis | | |
|------------------------|-----------------|------------------|------------------------|--------------------|---------------------|---------------------------|------------------------------|-------------------------------|----------------------|------------------|--------------|
| | Port. Avg. Wgt. | Bench. Avg. Wgt. | Variation in Avg. Wgt. | Port. Total Return | Bench. Total Return | Variation in Total Return | Port. Contribution To Return | Bench. Contribution To Return | Allocation Effect | Selection Effect | Total Effect |
| Materials | 10.06 | 3.96 | 6.10 | 3.13 | -11.04 | 14.17 | -0.02 | -0.53 | -0.01 | 1.32 | 1.31 |
| Communication Services | 1.00 | 7.62 | -6.62 | -18.76 | -31.65 | 12.89 | -0.32 | -2.56 | 1.44 | -0.22 | 1.22 |
| Consumer Staples | 8.41 | 7.36 | 1.05 | -1.67 | -1.63 | -0.04 | -0.44 | -0.28 | 0.15 | -0.01 | 0.14 |
| Financials | 17.04 | 20.68 | -3.64 | -17.53 | -17.06 | -0.47 | -3.10 | -3.34 | 0.14 | -0.02 | 0.12 |
| Real Estate | 4.66 | 4.84 | -0.18 | -17.37 | -17.39 | 0.02 | -0.73 | -0.83 | 0.04 | 0.01 | 0.05 |
| Industrials | 11.26 | 10.62 | 0.64 | -16.47 | -16.25 | -0.22 | -1.95 | -1.66 | -0.10 | -0.10 | -0.20 |
| Utilities | 3.25 | 5.40 | -2.15 | -3.27 | 5.69 | -8.96 | -0.29 | 0.06 | -0.12 | -0.09 | -0.21 |
| Consumer Discretionary | 7.57 | 5.53 | 2.04 | -33.42 | -22.49 | -10.93 | -2.46 | -1.21 | -0.25 | -0.91 | -1.17 |
| Energy | 4.00 | 6.75 | -2.75 | 27.86 | 45.79 | -17.93 | 0.41 | 1.48 | -1.13 | -0.42 | -1.54 |
| Information Technology | 18.32 | 9.78 | 8.54 | -32.05 | -27.44 | -4.61 | -5.60 | -2.54 | -1.44 | -0.84 | -2.27 |
| Health Care | 11.80 | 17.46 | -5.66 | -20.02 | -0.42 | -19.60 | -2.26 | 0.05 | -0.63 | -2.36 | -2.99 |
| Total | 100.00 | 100.00 | 0.00 | -16.73 | -11.37 | -5.36 | -16.73 | -11.37 | -1.73 | -3.63 | -5.36 |

Risks

There is no guarantee that the investment objective of the Fund will be achieved. Stock markets are volatile and equity values can decline significantly in response to adverse issuer, political, regulatory, market and economic conditions. Since the Fund typically invests in a limited number of companies, an adverse event affecting a particular company may hurt the Fund's performance more than if it had invested in a larger number of companies. Since the Fund may hold foreign securities, it may be subject to greater risks than funds invested only in the U.S. These risks are more severe for securities of issuers in emerging market regions.

Benchmarks

The Russell 1000[®] Value Index is an unmanaged index generally representative of the U.S. market for larger capitalization value stocks. This unmanaged index does not reflect fees and expenses and is not available for direct investment. The Russell 1000[®] Value Index and Russell[®] are trademarks of Frank Russell Company.

Disclosures

All holdings-related data is provided by FactSet. Because FactSet relies on external sources for its data, that data may differ slightly from actual values maintained by Harbor Funds.

Due to the security valuation procedures of the Fund and intra-day trading activity not included in the FactSet calculations, the actual returns may vary. From time to time the cash return in the portfolio may appear distorted based on the way FactSet's attribution calculation methodology addresses delayed settlements.

Beta is a rolling three year, unless the Fund has a track record of less than three years, in which case it is a rolling one year.

The mean/median long term growth rate for Projected Earnings Growth Rate is the expected growth over the next 3-5 years calculated by FactSet from data provided by brokers. The Adjusted Trailing P/E (Price/Earnings) Ratio is the closing stock price divided by the sum of the last 12 months actual EPS. The Forecast P/E Ratio is the closing stock price divided by the sum of the next 4 quarters estimated EPS. All P/E, ROE and P/B statistics are calculated as weighted medians.

Return on Equity (ROE) is the measure of a company's net income divided by its shareholders' equity.

Price-to-Book (P/B) Ratio compares a company's market value to its book value. The market value of a company is its share price multiplied by the number of outstanding shares. The book value is the net assets of a company.

Best and Worst Performers sections reflect stocks in the portfolio for the quarter with an average weight of 0.25% or greater.

Views expressed herein are drawn from commentary provided to Harbor by the subadvisor and may not be reflective of their current opinions or future actions, are subject to change without prior notice, and should not be considered investment advice.

The views expressed herein may not be reflective of current opinions, are subject to change without prior notice, and should not be considered investment advice.

This information should not be considered as a recommendation to purchase or sell a particular security. The weightings, holdings, industries, sectors, countries, and returns mentioned may change at any time and may not represent current or future investments.

As a result of changing market conditions, total net asset levels, expenses and other statistics may change at any time and may differ from those shown.

The total amount shown for sector, industries, or country holdings may be greater than 100% because of the inclusion of derivatives and the collateral securities supporting those instruments.

Sector allocations are determined using the Global Industry Classification Standard (GICS), which is a service of Morgan Stanley Capital International (MSCI) and Standard & Poor's (S&P).

Investors should carefully consider the investment objectives, risks, charges and expenses of a fund before investing. To obtain a summary prospectus or prospectus for this and other information, visit harborcapital.com or call 800-422-1050. Read it carefully before investing.

Aristotle Capital Management, LLC is an independent subadvisor to the Harbor Large Cap Value Fund.

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Attribution Disclosures

Linked Performance by Sectors data is produced from FactSet using data supplied by State Street Bank and Trust Company.

Active Currency Contribution is the Currency Contribution of the portfolio minus the Currency Contribution of the benchmark.

Allocation Effect is the portion of portfolio excess return that is attributable to taking different group bets from the benchmark. (If either the portfolio or the benchmark has no position in a given group, allocation effect is the lone effect.) A group's allocation effect equals the average percent capitalization of the portfolio's group minus the average percent cap of the benchmark's group times the total return of the benchmark group minus the total return of the benchmark.

Average Weight is the dollar value (price times the shares held) of the security or group, divided by the total dollar value of the entire portfolio displayed as a percentage. It is calculated as the simple arithmetic average of daily values.

Contribution to Return is the contribution of a security or group to the overall portfolio return. It is calculated as the security weight multiplied by the daily security return linked daily across the reporting period.

Currency Contribution is Total Return in USD subtracting out the Local Returns.

Local Returns are the Total Return of the portfolio or benchmark using the local currency.

Selection Effect is the portion of portfolio excess return attributable to choosing different securities within groups from the benchmark. A group's security selection effect equals the average weight of the benchmark's group times the total return of the portfolio's group minus the total return of the benchmark's group.

Total Effect is the sum of Allocation Effect and Selection Effect. The total effect represents the opportunity cost of what was done in a group relative to the overall portfolio. It is not just the difference between percent contribution in the portfolio and benchmark. At the overall portfolio level, the two numbers are equal. At the group level, they can be different.

Total Return is the price change of a security or group including dividends accrued over the report period (or the in-portfolio return) which includes only the time period that each security was in the portfolio.

Definitions

Beta is a measure of systematic risk, or the sensitivity of a fund to movements in the benchmark. A beta of 1 implies that the expected movement of a fund's return would match that of the benchmark used to measure beta.