## Harbor Strategic Growth Fund

Mar Vista Investment Partners, LLC Subadviser Since 03/06/2017

Total Net Assets - All Classes	\$86,757,539
Equity Assets:	96.79%
Cash & Other Assets Less Liabilities:	3.21%
Benchmark Name:	Russell 1000 <sup>®</sup> Growth Index

## **Portfolio Managers**







Brian L. Massey, CFA



CFA

### **Investment Philosophy**

The Harbor Strategic Growth Fund, subadvised by Mar Vista Investment Partners, LLC, invests in equity securities that are determined to have strong growth characteristics and that are undervalued in the marketplace. The Fund invests primarily in equity securities of U.S. companies. The Fund tends to invest more significantly in larger companies, but may also invest in mid and small sized companies. The portfolio manager uses a bottom-up approach to identify businesses with a sustainable competitive advantage. The Fund maintains a portfolio of approximately 30-50 stocks. However, the actual number of portfolio holdings may vary due to market conditions. Holdings are generally spread across a number of industries/sectors but may have a higher percentage in sectors that the Subadviser believes have greater investment opportunities.

CHARACTERISTICS 8	& ALLOCATION
-------------------	--------------

As of 03/31/2022

Portfolio Char	acteristics		Economi	c Sectors	
	Portfolio	Benchmark		Portfolio %	Benchmark %
Number of Holdings	34.00	499	Information Technology	30.22	46.16
Wtd Avg Market Cap (\$Mil)	513936.90	988,999.40	Financials	20.18	2.47
Med Cap - # Stocks (\$Mil)	130886.00	16,862.00	Industrials	13.57	6.09
Price/Book Ratio	7.20	14.45	Consumer Discretionary	7.71	18.49
Adjusted Trailing P/E Ratio	30.50	32.80	Materials	7.34	0.93
% EPS Growth - Past 3 Yr	20.50	25.50	Health Care	6.57	8.88
Return on Equity (%)	26.86	32.07	Communication Services	5.75	10.47
Beta vs. Fund Benchmark	0.90		Real Estate	3.37	1.72
Forecasted P/E Ratio	27.30	28.40	Consumer Staples	2.08	4.24
Proj. Earnings Growth Rate (%)	14.30	17.10	Energy	0.00	0.47
			Utilities	0.00	0.03

Top 10 Holdings					
Portfolio % Benchmark %					
Alphabet Inc. Class C	4.66	3.09	Soft		
Markel Corporation	4.28	0.02	Cher		
Microsoft Corporation	4.24	10.81	Capit		
Microchip Technology In	4.23	0.16	Inter		
Adobe Incorporated	4.16	1.00	Indu		
Amazon.com Inc.	4.15	6.58	Bank		
TransDigm Group Incorpo	4.09	0.05	Insu		
Apple Inc.	4.04	12.54	Semi		
Air Products and Chemic	3.96	0.00	Inter		
Johnson & Johnson	3.85	0.00	Aero		
Total	41.66	34.25	Tota		

	Top 10 Industries							
6		Portfolio %	Benchmark %					
9	Software	14.92	17.57					
2	Chemicals	7.34	0.67					
1	Capital Markets	7.25	1.56					
6	Interactive Media	5.75	9.07					
0	Industrial Conglomerates	5.22	0.19					
8	Banks	5.12	0.04					
5	Insurance	4.28	0.33					
4	Semiconductors	4.23	8.53					
0	Internet & Direct Market	4.15	6.91					
0	Aerospace & Defense	4.09	0.62					
5	Total	62.35	45.49					

	Market Capitalization	
		Portfolio %
Large	Above 25.0B	89.21
	10.0B - 25.0B	6.40
Mid	5.0B - 10.0B	2.43
	1.0B - 5.0B	1.96
Small	0.0 - 1.0B	0.00





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	MVSGX	411512353	-9.96%	-9.96%	7.50%	15.94%	14.78%	13.60%	14.49%	11/01/11	0.71	0.80
Administrative	HSRGX	411512338	-10.03%	-10.03%	7.18%	15.64%	14.48%	N/A	14.33%	03/06/17	0.96	1.05
Investor	HISWX	411512361	-10.02%	-10.02%	7.12%	15.53%	14.07%	N/A	13.91%	03/06/17	1.07	1.16
Retirement	HNGSX	411512346	-9.93%	-9.93%	7.58%	16.04%	14.88%	N/A	14.73%	03/06/17	0.63	0.72
Russell 1000 <sup>®</sup> Growth Index			-9.04%	-9.04%	14.98%	23.60%	20.88%	17.04%	17.82%	11/01/11		

### MANAGER COMMENTARY

As of 03/31/2022

# "In an investment environment with rapidly evolving expectations for interest rates, inflation, and economic growth, we will remain diligent, conservative, and patient as we deploy capital within our wide-moat universe."

Mar Vista Investment Partners, LLC

#### **Market in Review**

For the first time since the start of the COVID-19 pandemic, the stock market failed to climb a growing "wall of worry" during the first quarter of 2022. A generally favorable economic environment and a robust, post-pandemic reopening were not enough to usurp the confluence of inflationary, monetary, and geopolitical headwinds. The U.S. economy appears, at least temporarily, to have locked into a wage-price spiral with companies forced to raise prices in response to higher wages and escalating input costs, magnified by supply-chain pressures. In response, central banks have abruptly tightened the monetary reins after two years of unprecedentedly loose monetary policy. The Ukraine-Russia conflict has only added fuel to the inflationary fire as it disrupts the global commodity chain.

#### **Portfolio Performance**

During the first quarter, the Harbor Strategic Growth Fund (Institutional Class, "Fund") returned -9.96%, underperforming its benchmark, the Russell 1000<sup>®</sup> Growth Index, which returned -9.04%. The Fund's overweight in Financials and Industrials and underweight position in Communication Services helped relative performance, while the heavier exposure to Materials and no exposure to Energy detracted from short-term results.

Retirement Class shares commenced operations on March 6, 2017. The performance attributed to the Retirement Class shares prior to that date is that of the Institutional Class shares. Performance prior to March 6, 2017 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 potentially 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.

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.

### **Contributors & Detractors**

Berkshire Hathaway contributed to Fund returns as it reported a strong quarter, beating earnings-per-share estimates and growing revenue 11.5% year-over-year. The company experienced an annual increase in operating earnings across all its major businesses. Berkshire continues to present investors with a unique combination of sustainable growth and economic sensitivity (industrials and stock portfolio), plus defensiveness (\$145B in cash and sizable utilities businesses), as well as an option value from deploying excess cash.

Markel was another positive contributor as it reported a strong quarter with earnings per share, operating revenue (+12%), and earned premiums (+18%) significantly increasing year-over-year. Despite a challenging period for underwriters, Markel compounded book value by 10%-11% over the last 5, 10, and 15 years. In addition to Markel's specialty insurance business, its broad portfolio of wholly owned businesses is further expanding shareholder value by generating low-teens return on invested capital.

Intuit detracted from performance. Its shares declined during the first quarter as the broader market was pressured, and investors rotated away from higher-growth software stocks. The company continues to execute well as fiscal quarter one results were strong and driven by the small business segment, which reported organic growth of 24% year-over-year. The QuickBooks Online ecosystem is thriving as small businesses continue to adopt more Intuit applications, such as accounting, payroll, payment, and digital marketing solutions. As customers adopt more applications, the customer lifetime value increases while churn decreases. Credit Karma continues to post strong results as its offering benefits from the reopening of the economy and more aggressive marketing from consumer-oriented financial services companies. Turbo Tax is well positioned for another year of strong growth; however, the trend in recent years is for filers to file tax returns later in the year. The 2022 tax season saw a continuation of this trend as Intuit witnessed a slow start to the tax year. We expect Turbo Tax to take share in the overall tax market while increasing average selling prices, as filers continue to migrate to premium stock keeping units (SKUs). We continue to maintain a high degree of confidence in Intuit's competitive position and believe it will compound intrinsic value per share in the upper teens over our investment horizon.

Meta Platforms also detracted from Fund returns. Facebook is seeing a slowdown in advertising growth while embarking on an expensive, multiyear transition to the Metaverse. TikTok competition and iOS privacy changes are negative headwinds, and stronger engagement in Reels is cannibalistic to advertising monetization. These issues are occurring while the user base is plateauing. These factors are causing stock price underperformance as uncertainty around long-term growth rates increases.

#### **Buys and Sells**

We established a position in GXO Logistics, a provider of supply-chain management solutions for multinational and blue-chip market leaders in the areas of consumer-packaged goods, e-commerce, food & beverage, retail, technology, and consumer electronics industries. The company spun out of XPO Logistics in August 2021; and now, GXO is focused on Industrial 4.0, helping customers with automation for faster, leaner, and smarter supply chains. In other words, connecting robotics, advanced analytics, and smart transportation solutions to service its customers as they try to "Amazon" their business. The company has strong tailwinds from post-pandemic consumer growth and an accelerated shift to e-commerce increasing the need for warehouse automation and outsourcing. The company currently holds only 5% of the \$430 billion, potentially addressable logistics market in Europe and North America, representing significant opportunity to expand. The average tenure of its top 20 clients is 15 years, and 93% of clients sign multiyear contracts with an average contract of 5+ years. Client retention levels are in the mid-90% range, and not one client represents more than 4% of its total revenue. 95% of its warehouses are co-terminus leases, meaning the contract ends when the warehouse lease ends, so GXO is not obligated to hold onto a warehouse if a client ends the contract. All these factors combine to provide strong, future earnings and margin visibility.

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.

## MANAGER COMMENTARY As of 03/31/2022



We had the opportunity to buy the GXO stock early in the year, as the stock sold off due to the chairman selling a small portion of his shares. The company has one of the strongest returns on capital in the industry and is trading at a valuation that is equivalent to competitors with lower returns on invested capital.

During the quarter, we sold PayPal. Our investment thesis in PayPal was centered around the company's enormous scale benefits from its two-sided network that were becoming more valuable as 400 million consumers increased their utilization rates. The company is knitting together a critical mass of payments, e-commerce, and financial services to create a more lucrative ecosystem. The combination of 10-15% e-commerce growth and merchant adoption of contactless payments provided substantial revenue tailwinds.

Furthermore, at the time of purchase, PayPal's stock price had already depreciated over 40%. We originally thought the decline of eBay revenue and the pull-forward of cashless-payment demand caused by the pandemic were reasonably discounted. However, incremental data points related to PayPal's key business drivers adversely affected our estimate of intrinsic value in early January 2022. E-commerce data revealed a greater-than-anticipated slowdown, and PayPal's active customer growth was decelerating. These developments represented additional downside risks to our already conservative forecast. Additionally, higher probabilities of tighter credit conditions in 2022 will pressure PayPal's profitability more than anticipated. Since PayPal is a long-duration growth asset, lowering the free-cash-flow base and extending the timeline of subdued growth materially reduced the investment's margin of safety, or discount to intrinsic value. Ultimately, our investment process is designed to be nimble, and our estimates of intrinsic value maintain a fluid nature as information is uncovered and integrated into our analysis. When we are led to different conclusions, we act accordingly. Those realizations compelled us to exit our minor investment in PayPal.

#### Outlook

Over time, the expected returns of the Fund should reflect two components: (1) the compounding nature of our businesses, and (2) the discount we are paying relative to fair value. There will be times when the sentiment pendulum swings toward optimism; Fund returns exceed the underlying intrinsic value growth; and margins of safety contract. Conversely, fear, skepticism, and lower stock prices can provide opportunities for both higher expected returns and less risk. As the capital markets shift from an era of historically low, real interest rates and benign inflation to one with decidedly higher, risk-free hurdles and eroding purchasing power from inflation, we will reflect these new realities in our valuation analysis.

Mar Vista claims no special skill in predicting the market's direction but, in the fullness of time, we believe a patient, high-conviction Fund comprised of competitively advantaged, serial compounders with stock prices that represent an appropriate margin of safety, or discount to fair value, should generate excess, risk-adjusted returns. In an investment environment with rapidly evolving expectations for interest rates, inflation, and economic growth, we will remain diligent, conservative, and patient as we deploy capital within our wide-moat universe.

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.



### **Best & Worst Performers**

Best Performers	Average Weight %	Return %
Markel Corporation	3.71	19.55
Berkshire Hathaway Inc. Class B	5.40	18.03
Johnson & Johnson	3.34	4.27
Visa Inc. Class A	2.81	2.51
TransDigm Group Incorporated	3.85	2.40

Worst Performers	Average Weight %	Return %
Netflix Inc.	0.54	-40.29
Meta Platforms Inc. Class A	1.80	-33.89
Intuit Inc.	3.50	-25.16
Ecolab Inc.	1.16	-24.50
Starbucks Corporation	0.99	-21.83

### **Contributors & Detractors**

Greatest Contributors	Return %	Contribution to Return %
Berkshire Hathaway Inc. Class B	18.03	0.93
Markel Corporation	19.55	0.74
Johnson & Johnson	4.27	0.18
TransDigm Group Incorporated	2.40	0.10
Visa Inc. Class A	2.51	0.06
Total		2.01

Greatest Detractors	Return %	Contribution to Return %
Intuit Inc.	-25.16	-1.05
Meta Platforms Inc. Class A	-33.89	-0.95
Netflix Inc.	-40.29	-0.89
First Republic Bank	-21.40	-0.82
Adobe Incorporated	-19.65	-0.74
Total		-4.45

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.



#### **Quarterly Attribution:**

Harbor Strategic Growth Fund vs Russell 1000® Growth

#### Performance

	Portfolio	Benchmark	Active
Return Ex Currency	-9.78	-9.04	-0.74
Currency Contribution	0.00	0.00	0.00
Total Return	-9.78	-9.04	-0.74

Sector Attribution	Average Weight			Total Return			Contribution to Return		Attribution Analysis		
								Bench.			
			Variation in Avg.	Port. Total	Bench. Total	Variation in Total	Port. Contribution	Contribution To			
	Port. Avg. Wgt.	Bench. Avg. Wgt.	Wgt.	Return	Return	Return	To Return	Return	Allocation Effect	Selection Effect	Total Effect
Financials	21.21	2.47	18.74	0.44	-4.97	5.41	0.30	-0.11	0.70	1.11	1.81
Utilities	0.00	0.03	-0.03	0.00	-4.17	4.17	0.00	0.00	0.00	0.00	0.00
Health Care	5.99	8.72	-2.73	-6.95	-7.52	0.57	-0.38	-0.57	-0.02	0.01	-0.01
Communication Services	7.00	11.01	-4.01	-21.22	-17.29	-3.93	-1.97	-2.14	0.36	-0.39	-0.03
Consumer Staples	2.27	4.23	-1.96	-6.82	-2.49	-4.33	-0.19	-0.11	-0.07	-0.06	-0.12
Real Estate	3.11	1.71	1.40	-14.11	-10.95	-3.16	-0.41	-0.19	-0.03	-0.09	-0.13
Energy	0.00	0.41	-0.41	0.00	37.33	-37.33	0.00	0.12	-0.14	0.00	-0.14
Consumer Discretionary	7.57	18.31	-10.74	-10.79	-8.86	-1.93	-0.82	-1.69	-0.01	-0.15	-0.16
Materials	6.42	0.99	5.43	-15.70	-16.99	1.29	-0.95	-0.19	-0.46	0.17	-0.30
Industrials	12.68	6.11	6.57	-8.18	-3.33	-4.85	-1.05	-0.19	0.30	-0.69	-0.39
Information Technology	31.78	46.02	-14.24	-12.47	-8.88	-3.59	-4.32	-3.97	-0.08	-1.14	-1.22
Total	100.00	100.00	0.00	-9.78	-9.04	-0.74	-9.78	-9.04	0.49	-1.23	-0.74

#### Trailing 1 Year Attribution:

Harbor Strategic Growth Fund vs Russell 1000® Growth

#### Performance

	Portfolio	Benchmark	Active
Return Ex Currency	8.36	14.98	-6.62
Currency Contribution	0.00	0.00	0.00
Total Return	8.36	14.98	-6.62

	Average Weight			Total Return			Contribution to Return		Attribution Analysis		
Sector Attribution								Bench.			
			Variation in Avg.	Port. Total	Bench. Total	Variation in Total	Port. Contribution	Contribution To			
	Port. Avg. Wgt.	Bench. Avg. Wgt.	Wgt.	Return	Return	Return	To Return	Return	Allocation Effect	Selection Effect	Total Effect
Financials	20.68	2.32	18.36	20.55	20.24	0.31	4.10	0.41	0.86	0.14	1.00
Communication Services	8.75	12.00	-3.25	1.82	0.77	1.05	0.35	0.49	0.51	0.17	0.68
Utilities	0.00	0.02	-0.02	0.00	7.35	-7.35	0.00	0.00	0.00	0.00	0.00
Consumer Discretionary	8.17	17.86	-9.69	0.94	8.96	-8.02	0.39	1.44	0.50	-0.55	-0.04
Energy	0.00	0.28	-0.28	0.00	76.72	-76.72	0.00	0.16	-0.16	0.00	-0.16
Real Estate	3.25	1.76	1.49	7.16	12.65	-5.49	0.30	0.24	-0.05	-0.15	-0.21
Consumer Staples	3.12	4.05	-0.93	3.69	17.68	-13.99	0.17	0.61	-0.03	-0.36	-0.39
Health Care	6.71	9.99	-3.28	3.66	12.71	-9.05	0.30	1.73	0.06	-0.79	-0.73
Industrials	9.52	5.70	3.82	-0.88	8.40	-9.28	-0.27	0.41	0.10	-1.16	-1.06
Materials	6.26	0.95	5.31	-4.14	-1.39	-2.75	-0.16	-0.03	-0.96	-0.11	-1.06
Information Technology	30.98	45.06	-14.08	13.10	22.36	-9.26	3.18	9.50	-1.08	-2.83	-3.91
Total	100.00	100.00	0.00	8.36	14.98	-6.62	8.36	14.98	-1.00	-5.63	-6.62

#### **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. At times, a growth investing style may be out of favor with investors which could cause growth securities to underperform value or other equity securities. 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.

#### **Disclosures**

On March 15, 2022, the Board of Trustees of Harbor Funds approved the reorganization of the Harbor Strategic Growth Fund into the Mar Vista Strategic Growth Fund, a newly created series of Manager Directed Portfolios. A shareholder meeting for the purpose of voting on the agreement and plan of reorganization is scheduled to be held in June 2022. Assuming shareholders approve the reorganization, the closing of the reorganization is expected to occur in July 2022.

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

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.

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.

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 subadviser 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.

Mar Vista Investment Partners, LLC is an independent subadviser to the Harbor Strategic Growth Fund.

Distributed by Harbor Funds Distributors, Inc.

#### **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.

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.