

Harbor Disruptive Innovation Fund

Harbor Capital Advisors, Inc.

Manager Since 09/01/2021

Total Net Assets - All Classes	\$106,455,913
Equity Assets:	96.32%
Cash & Other Assets Less Liabilities:	3.68%
Benchmark 1 Name:	S&P 500 Index
Benchmark 2 Name:	Russell 3000® Growth Index

Portfolio Managers



Spenser Lerner, CFA



Kristof Gleich, CFA

Investment Philosophy

The Fund invests primarily in equity securities, principally common and preferred stocks of all cap companies. Under normal market conditions, the Fund invests at least 80% of its net assets, plus borrowings for investment purposes, in securities of U.S. domiciled companies. The Fund employs a multi-manager approach to achieve its investment objective. As the Fund's investment advisor, Harbor Capital Advisors, Inc. ("Harbor Capital") assumes responsibility of selecting and overseeing underlying managers for the Fund. Each underlying manager is responsible for submitting a model portfolio to Harbor Capital which the portfolio managers will implement in their discretion. The Fund seeks to invest in companies that are innovative and disruptive. The Fund defines innovation and disruption by those companies that are generating secular growth - that growth is typically tied to accelerating shifts in the global economy. The Fund may invest up to 20% of its total assets in the securities of foreign issuers, including issuers located or doing business in emerging markets.

CHARACTERISTICS & ALLOCATION

As of 09/30/2022

Portfolio Characteristics				Economic Sectors			
	Portfolio	Bench 1	Bench 2		Portfolio %	Bench 1 %	Bench 2 %
Number of Holdings	91	503	1,639	Information Technology	49.32	26.39	41.16
Wtd Avg Market Cap (\$Mil)	225,865.40	468,653.70	664,644.80	Health Care	21.50	15.10	12.71
Med Cap - # Stocks (\$Mil)	15,089.00	27,072.00	2,002.00	Consumer Discretionary	13.10	11.72	16.55
Price/Book Ratio	7.60	5.04	10.13	Communication Services	9.50	8.06	7.24
Adjusted Trailing P/E Ratio	56.30	22.80	24.10	Materials	2.22	2.50	1.54
% EPS Growth - Past 3 Yr	34.20	18.80	22.90	Utilities	0.46	3.07	0.16
Return on Equity (%)	15.77	25.19	31.25	Financials	0.22	11.02	3.17
Beta vs. Fund Benchmark	1.18			Consumer Staples	0.00	6.86	5.51
Forecasted P/E Ratio	40.40	19.70	22.70	Energy	0.00	4.55	1.82
Proj. Earnings Growth Rate (%)	25.70	12.20	17.30	Real Estate	0.00	2.81	1.61
				Industrials	0.00	7.90	7.61

Top 10 Holdings				Top 10 Industries			
	Portfolio %	Bench 1 %	Bench 2 %		Portfolio %	Bench 1 %	Bench 2 %
Amazon.com Inc.	3.99	3.33	5.56	Software	23.51	8.59	15.59
Lam Research Corporation	3.35	0.17	0.28	Semiconductors	13.39	4.82	6.27
Tesla Inc.	3.34	2.35	3.74	It Services	12.42	4.37	6.46
Microchip Technology Inc.	3.19	0.11	0.16	Biotechnology	10.07	2.25	3.43
Workday Inc. Class A	3.14	0.00	0.17	Internet & Direct Marketing	7.82	3.44	5.72
ServiceNow Inc.	3.08	0.25	0.42	Interactive Media	5.35	4.78	6.00
Adyen NV	3.05	0.00	0.00	Life Sciences Tools	5.30	1.89	1.18
Salesforce Inc.	3.03	0.48	0.16	Automobiles	3.34	2.66	3.79
Microsoft Corporation	3.01	5.77	9.65	Health Care Equip	3.17	2.68	2.18
Atlassian Corp. Plc	2.64	0.00	0.16	Containers & Packaging	2.22	0.26	0.23
Total	31.82	12.46	20.30	Total	86.59	35.74	50.85

Market Capitalization		Portfolio %
Large	Above 25.0B	65.97
	10.0B - 25.0B	16.13
Mid	5.0B - 10.0B	5.06
	1.0B - 5.0B	8.21
Small	0.0 - 1.0B	4.63



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	HAMGX	411511876	-3.00%	-43.32%	-45.81%	-0.43%	5.36%	9.25%	4.64%	11/01/00	0.88	0.88
Administrative Investor	HRMGX	411511793	-3.00%	-43.31%	-45.88%	-0.66%	5.11%	8.98%	9.66%	11/01/02	1.13	1.13
Investor	HIMGX	411511785	-3.05%	-43.42%	-45.97%	-0.77%	4.98%	8.85%	9.52%	11/01/02	1.24	1.24
Retirement	HNMGX	411512510	-2.97%	-43.26%	-45.74%	-0.34%	5.45%	9.31%	4.66%	03/01/16	0.80	0.80
S&P 500 Index			-4.88%	-23.87%	-15.47%	8.16%	9.24%	11.70%	6.32%	11/01/00		
Russell 3000® Growth Index			-3.37%	-30.57%	-23.01%	10.16%	11.57%	13.36%	5.97%	11/01/00		
Russell Midcap® Growth Index			-0.65%	-31.45%	-29.50%	4.26%	7.62%	10.85%	5.90%	11/01/00		

MANAGER COMMENTARY

As of 09/30/2022

“The market remains macro-focused—impacted by expectations for interest rate policy, inflation numbers, and economic growth.”

Harbor Capital Advisors, Inc

Market in Review

U.S. equities finished the third quarter of 2022 on the lows of the year, marking the largest decline during the first nine months of any year since 2002. After rallying to start the quarter, indexes turned sharply negative on the heels of higher-than-expected inflation data in August and a stern commitment by the Federal Reserve (the “Fed”) at its annual symposium in Jackson Hole, to tamp down inflation, even if it means inflicting some “pain” and job losses on the U.S. economy. The steep trajectory of rate hikes by the U.S. roiled already unsettled markets and forced other central banks across the globe to follow suit or risk having their currencies devalued. Once again, we witnessed most asset classes falling in tandem, with one exception being commodities—and that outperformance was largely driven by strong returns in the energy markets. This unusual correlation further strained financial markets and even drove some policymakers to intervene to prevent more widespread disruptions.

Growth indexes performed slightly better than value indexes, helped by strong July returns. August and September were much less favorable for growth indexes than value indexes. Interest rate-sensitive areas, such as real estate, generally lagged as rates rose during the quarter.

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 expense.

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 quarter, the Harbor Disruptive Innovation Fund (Institutional Class, "Fund") returned -3.00%, outperforming its benchmark, the Russell 3000® Growth Index, which returned -3.37%, and the S&P 500 Index, which returned -4.88%. The macro factors roiling markets also impacted the Fund, which rose sharply during the strong market in July but gave up ground on an absolute basis in August and September.

Stock selection within the Health Care sector, particularly within biotechnology, positively impacted relative returns. In addition, investments within Information Technology and Consumer Discretionary aided performance, compared to the Index. Conversely, investments within Materials and the lack of exposure to the Energy sector dampened the Fund's outperformance during the quarter.

Contributors & Detractors

Latin American e-commerce company MercadoLibre was the top relative contributor during the quarter. Shares of the stock traded higher after the company reported better-than-expected second-quarter results. Specifically, the company beat street expectations for revenue, margins, and earnings per share. We continue to believe that MercadoLibre should be able to deliver strong revenue growth and margin expansion despite a challenging macro environment.

Wolfspeed, a manufacturer in the semiconductor industry, was a positive contributor to performance, rising after markets rallied in July and continuing to rise on the heels of a strong earnings report.

Meaningful detractors included Ball Corp and Okta, both falling on disappointing results. Ball, a manufacturer of aluminum containers, signaled weaker-than-expected demand, while Okta dropped after the company lowered its revenue guidance and commented on disruptions associated with a recent acquisition.

Buys & Sells

During the quarter, we purchased Eli Lilly, a global pharmaceutical company that has announced it's on the cusp of a massive drug launch in the obesity therapeutics market. The Fund's investment team believes the drug is a best-in-class compound that could help Eli Lilly generate strong, future earnings growth.

We sold the position in Avalara, a provider of tax compliance software, following the news that the company is being acquired by Vista Equity Partners at a premium.

Outlook

The market remains macro-focused—impacted by expectations for interest rate policy, inflation numbers, and economic growth. Macro conditions can have an outsized influence on short-term price movements. Despite these shorter-term impacts, businesses are still early in their digital transformation efforts; new technological offerings are facilitating access to commerce and financial services; and life-sciences innovations continue to change how we define, diagnose, and treat disease. Over the long term, we believe we will be successful in identifying businesses that will extract most of the value created by these trends, as well as others.



QUARTERLY ATTRIBUTION

As of 09/30/2022

Best & Worst Performers

Best Performers	Average Weight %	Return %
Wolfspeed Inc	1.15	62.90
Bicycle Therapeutics Plc Sponsored ADR	0.88	38.62
Blueprint Medicines Corp.	0.33	30.45
Avalara Inc	1.10	30.28
MercadoLibre Inc.	2.43	29.98

Worst Performers	Average Weight %	Return %
Okta Inc. Class A	2.69	-37.09
Catalent Inc	0.46	-32.56
Zoom Video Communications Inc. Class A	0.34	-31.84
Ball Corporation	2.21	-29.49
Peloton Interactive Inc. Class A	0.27	-24.51

Contributors & Detractors

Greatest Contributors	Return %	Contribution to Return %
MercadoLibre Inc.	29.98	0.47
Avalara Inc	30.28	0.38
Wolfspeed Inc	62.90	0.34
Tesla Inc	18.17	0.32
Cloudflare Inc Class A	26.42	0.31
Total		1.82

Greatest Detractors	Return %	Contribution to Return %
Okta Inc. Class A	-37.09	-0.91
ServiceNow Inc.	-20.59	-0.71
Ball Corporation	-29.49	-0.64
Lam Research Corporation	-13.76	-0.44
Salesforce Inc.	-12.85	-0.34
Total		-3.04

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 Disruptive Innovation Fund vs S&P 500 Index

Performance

	Portfolio	Benchmark	Active
Return Ex Currency	-2.37	-4.88	2.51
Currency Contribution	-0.32	0.00	-0.32
Total Return	-2.69	-4.88	2.19

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
Health Care	20.64	14.47	6.17	0.42	-5.18	5.60	-0.11	-0.69	0.09	1.00	1.10
Information Technology	51.40	27.39	24.01	-4.47	-6.21	1.74	-1.86	-1.58	-0.27	1.06	0.78
Consumer Discretionary	12.94	11.43	1.51	9.07	4.36	4.71	0.61	0.31	0.09	0.51	0.60
Communication Services	9.91	8.49	1.42	-9.17	-12.72	3.55	-0.76	-0.99	-0.11	0.39	0.28
Real Estate	0.00	2.86	-2.86	0.00	-11.03	11.03	0.00	-0.30	0.18	0.00	0.18
Consumer Staples	0.00	6.76	-6.76	0.00	-6.62	6.62	0.00	-0.46	0.11	0.00	0.11
Utilities	0.44	3.08	-2.64	1.72	-5.99	7.71	0.00	-0.23	0.01	0.03	0.05
Industrials	0.00	7.82	-7.82	0.00	-4.72	4.72	0.00	-0.40	-0.03	0.00	-0.03
Financials	0.22	10.81	-10.59	37.15	-3.10	40.25	0.06	-0.38	-0.21	0.07	-0.15
Energy	0.00	4.36	-4.36	0.00	2.35	-4.36	0.00	0.01	-0.34	0.00	-0.34
Materials	2.21	2.52	-0.31	-29.49	-7.13	-22.36	-0.64	-0.18	-0.02	-0.55	-0.57
Total	100.00	100.00	0.00	-2.69	-4.88	2.19	-2.69	-4.88	-0.32	2.51	2.19

Quarterly Attribution:

Harbor Disruptive Innovation Fund vs Russell 3000® Growth Index

Performance

	Portfolio	Benchmark	Active
Return Ex Currency	-2.37	-3.37	1.00
Currency Contribution	-0.32	0.00	-0.32
Total Return	-2.69	-3.37	0.68

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
Health Care	20.64	12.37	8.27	0.42	-3.48	3.90	-0.11	-0.36	0.12	0.66	0.78
Information Technology	51.40	42.29	9.11	-4.47	-5.36	0.89	-1.86	-2.12	-0.15	0.55	0.41
Consumer Staples	0.00	5.51	-5.51	0.00	-6.82	6.82	0.00	-0.37	0.19	0.00	0.19
Real Estate	0.00	1.73	-1.73	0.00	-11.99	11.99	0.00	-0.20	0.15	0.00	0.15
Utilities	0.44	0.15	0.29	1.72	-2.98	4.70	0.00	-0.01	0.00	0.02	0.02
Consumer Discretionary	12.94	16.32	-3.38	9.07	5.91	3.16	0.61	0.66	-0.33	0.33	0.00
Financials	0.22	3.11	-2.89	37.15	-0.82	37.97	0.06	-0.05	-0.08	0.06	-0.02
Communication Services	9.91	7.55	2.36	-9.17	-10.53	1.36	-0.76	-0.70	-0.17	0.13	-0.04
Energy	0.00	1.74	-1.74	0.00	4.23	-4.23	0.00	0.02	-0.14	0.00	-0.14
Industrials	0.00	7.68	-7.68	0.00	-1.33	1.33	0.00	-0.18	-0.17	0.00	-0.17
Materials	2.21	1.54	0.67	-29.49	-3.92	-25.57	-0.64	-0.07	-0.04	-0.62	-0.66
Total	100.00	100.00	0.00	-2.69	-3.37	0.68	-2.69	-3.37	-0.45	1.14	0.68

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 may hold foreign securities, it may be subject to greater risks than funds invested only in the U.S. Investing in REITs will subject the Fund to additional risk. Investing in international and emerging markets poses special risks, including potentially greater price volatility due to social, political and economic factors, as well as currency exchange rate fluctuations. These risks are more severe for securities of issuers in emerging market regions.

Benchmarks

The Standard & Poor's 500 Index is an unmanaged index generally representative of the U.S. market for large capitalization equities. The Russell 3000[®] Growth Index measures the performance of the broad growth segment of the US equity universe. It includes Russell 3000 Index companies with higher price-to-book ratios and higher forecasted growth values. It is market-capitalization weighted. The Russell Midcap[®] Growth Index is an unmanaged index generally representative of the U.S. market for medium capitalization growth stocks. These unmanaged indices do not reflect fees and expenses and are not available for direct investment. The Russell 3000[®] Growth Index, Russell Midcap[®] Growth Index and Russell[®] are trademarks of Frank Russell Company.

Effective September 1, 2021, the Fund's benchmark index changed from the Russell Midcap[®] Growth Index to the S&P 500 Index as the Adviser believes this index is a more appropriate comparison in light of the Fund's new name and investment strategy.

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.

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.

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.

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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.