

Harbor Disruptive Innovation Fund

Harbor Capital Advisors, Inc.

Manager Since 09/01/2021

Total Net Assets - All Classes	\$122,444,374
Equity Assets:	97.13%
Cash & Other Assets Less Liabilities:	2.87%
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 06/30/2022

Portfolio Characteristics				Economic Sectors			
	Portfolio	Bench 1	Bench 2		Portfolio %	Bench 1 %	Bench 2 %
Number of Holdings	94	503	1,656	Information Technology	51.72	26.85	42.11
Wtd Avg Market Cap (\$Mil)	232,328.70	483,543.10	686,857.60	Health Care	20.25	15.12	12.76
Med Cap - # Stocks (\$Mil)	15,406.00	27,160.00	2,091.00	Consumer Discretionary	11.36	10.53	15.07
Price/Book Ratio	5.98	5.65	11.16	Communication Services	10.72	8.86	7.71
Adjusted Trailing P/E Ratio	38.80	23.10	26.80	Materials	2.46	2.61	1.52
% EPS Growth - Past 3 Yr	35.30	18.80	23.10	Utilities	0.44	3.12	0.15
Return on Equity (%)	9.34	25.19	32.07	Financials	0.18	10.83	3.07
Beta vs. Fund Benchmark	1.17			Industrials	0.00	7.80	7.51
Forecasted P/E Ratio	34.70	20.10	23.80	Consumer Staples	0.00	7.00	5.73
Proj. Earnings Growth Rate (%)	23.10	12.40	17.00	Energy	0.00	4.35	1.70
				Real Estate	0.00	2.93	1.78

Top 10 Holdings				Top 10 Industries			
	Portfolio %	Bench 1 %	Bench 2 %		Portfolio %	Bench 1 %	Bench 2 %
Lam Research Corporation	3.78	0.19	0.31	Software	24.29	8.99	16.58
ServiceNow Inc.	3.77	0.30	0.51	It Services	14.52	4.38	6.52
Microsoft Corporation	3.55	6.02	10.23	Semiconductors	12.91	5.18	6.80
Salesforce Inc.	3.37	0.51	0.18	Biotechnology	9.57	2.21	3.47
Adyen NV	3.36	0.00	0.00	Internet & Direct Market	6.72	3.01	5.22
Amazon.com Inc.	3.31	2.91	5.03	Interactive Media	6.22	5.25	6.57
Okta Inc. Class A	3.10	0.00	0.01	Life Sciences Tools	4.78	1.88	1.33
Microchip Technology Incorporated	2.95	0.10	0.14	Health Care Equip	3.09	2.76	2.14
Tesla Inc	2.57	1.77	3.04	Automobiles	2.57	2.06	3.10
Ball Corporation	2.46	0.07	0.05	Containers & Packaging	2.46	0.32	0.24
Total	32.22	11.87	19.50	Total	87.13	36.04	51.97

Market Capitalization		
		Portfolio %
Large	Above 25.0B	63.82
	10.0B - 25.0B	18.38
Mid	5.0B - 10.0B	5.66
	1.0B - 5.0B	7.33
Small	0.0 - 1.0B	4.81



Trusted Partnerships > Trusted Solutions



Performance

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	-30.16%	-41.57%	-45.68%	-0.93%	6.89%	10.21%	4.84%	11/01/00	0.58	0.88
Administrative	HRMGX	411511793	-30.23%	-41.56%	-45.78%	-1.18%	6.62%	9.93%	9.96%	11/01/02	0.83	1.13
Investor	HIMGX	411511785	-30.21%	-41.64%	-45.88%	-1.29%	6.50%	9.81%	9.82%	11/01/02	0.94	1.24
Retirement	HNMGX	411512510	-30.14%	-41.52%	-45.63%	-0.84%	6.97%	10.26%	4.86%	03/01/16	0.50	0.80
S&P 500 Index			-16.10%	-19.96%	-10.62%	10.60%	11.31%	12.96%	6.64%	11/01/00		
Russell 3000 [®] Growth Index			-20.83%	-28.15%	-19.78%	11.84%	13.63%	14.41%	6.21%	11/01/00		
Russell Midcap [®] Growth Index			-21.07%	-31.00%	-29.57%	4.25%	8.88%	11.50%	6.01%	11/01/00		

MANAGER COMMENTARY

As of 06/30/2022

“The shift in market leadership over the course of 2021 through the second quarter of 2022 illustrates how unpredictable markets can be in the short term. Exogenous factors and sentiment can have an outsized influence in short-term price movements.”

Harbor Capital Advisors, Inc.

Market in Review

U.S. equities finished the second quarter of 2022 sharply lower, with the S&P 500 falling the most since the COVID-19 pandemic’s onset in the first quarter of 2020. Growth in all its forms came under pressure during the period, with big tech and other risk-on investments trailing value stocks and other defensive pockets of the market. Inflation fears and an increasingly aggressive Federal Reserve (“Fed”) were the main headwinds over the quarter, with surging energy and food prices continuing to demand a larger portion of consumers’ wallets. Negative real-wage growth and tightened financial conditions weighed on investor and consumer sentiment alike.

Following a hotter-than-expected inflation reading in May, the Fed announced a 0.75% rate hike in June, as they sought to make good on their promise to contain inflation at all costs. All these factors led to a challenging environment for risk and long-duration assets, pressuring the Harbor Disruptive Innovation Fund (“Fund”) returns versus the broad market during the quarter. The investment team’s broad outlook did not change and remains centered on capturing long-term asset returns from disruptive and innovative companies.

Portfolio Performance

During the quarter, the Harbor Disruptive Innovation Fund (Institutional Class) returned –30.16%, underperforming its benchmark, the Russell 3000[®] Growth Index, which returned –20.83%, and the S&P 500 Index, which returned –16.10%.

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.

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.



The Fund faced headwinds from both a stock-specific and factor perspective. The Fund's higher-growth tilt proved to be a meaningful drawback, given its greater exposure to growth-oriented sectors, particularly within Information Technology, a sector which lagged the overall benchmark in terms of performance. Investments within the information technology services and software segments experienced declines, as investor preference shifted away from companies with duration growth toward those with lower-volatility and higher-liquidity profiles. Within Consumer Discretionary, challenging stock selection within the internet & direct marketing, retail, and specialty retail industries weighed on returns versus the Index. In addition, biotechnology investments within the Health Care sector detracted from returns during the quarter. Lastly, the Fund's lack of exposure to the value-oriented Energy and Consumer Staples sectors posed performance headwinds as both sectors outperformed the broader index during the quarter.

Contributors & Detractors

Two of the Fund's largest contributors to performance during the second quarter were SailPoint Technologies and T-Mobile. SailPoint received a buyout offer, boosting the stock price. T-Mobile continued to show improvements in line with the investment team's thesis about cash generation and business rationalization. T-Mobile's industry, telecommunication services, was also a relatively strong performer during the quarter, although T-Mobile performed even better.

Block, Inc. was the Fund's largest detractor as shares traded lower on growing fears that an economic slowdown will adversely affect the revenues of the business's suite of financial services. Despite the shorter-term setback, Block's shares trade at a discount to relevant peers despite higher, top-line growth. Carvana also pressured relative returns, with shares trading sharply lower during the quarter as inflationary pressures in used cars and changing investor sentiment ultimately led to the stock's repricing.

Buys & Sells

During the quarter, we established a position in Samsara, a leading developer of connected hardware and software for industrial operations. The business sells its hardware (i.e., cameras and sensors) and software to thousands of fleet owners across the U.S. and Europe. Samsara's end market is large, fragmented, and lags in digital penetration. The investment team's research indicates that Samsara's technology helps to reduce costs, increase operational transparency, improve safety, and better enable automation relative to legacy fleet-telematics software providers. The team expects that Samsara's integrated-suite approach and easy-to-use, closed-loop system will enable the business to capture significant market share, as this market increasingly looks to digitize physical operations. Longer term, the company's vision is to become the central operating system for various industrial operations globally, as its end customers use a combination of advanced sensors and software to give them a real-time view into how their assets and people are performing in the field.

During the quarter, the Fund sold its position in Ironwood Pharmaceuticals, a biotechnology company, focused on developing and commercializing drugs for IBS, chronic constipation, and uncontrolled gout. The team had been trimming its position in Ironwood during the past year as the stock was a relatively strong outperformer. We ultimately decided to sell the position as a source of funds for other names, which we believe have more upside over the next 12 months.



Outlook

The shift in market leadership over the course of 2021 through the second quarter of 2022 illustrates how unpredictable markets can be in the short term. Exogenous factors and sentiment can have an outsized influence in short-term price movements. Despite these shorter-term impacts, enterprises remain early in their digital transformation efforts; new technological offerings are enabling 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 much of the value created by these trends.

QUARTERLY ATTRIBUTION

As of 06/30/2022

Best & Worst Performers

Best Performers	Average Weight %	Return %
Allogene Therapeutics, Inc.	0.53	25.14
SailPoint Technologies Holdings, Inc.	0.62	22.74
T-Mobile US, Inc.	2.21	4.82
uniQure N.V.	0.25	3.15
Replimune Group, Inc.	0.33	2.94

Worst Performers	Average Weight %	Return %
Carvana Co. Class A	0.46	-81.07
Coinbase Global, Inc. Class A	0.86	-75.23
MicroStrategy Incorporated Class A	0.98	-66.22
Peloton Interactive, Inc. Class A	1.12	-65.25
Cloudflare Inc Class A	0.91	-63.45

Contributors & Detractors

Greatest Contributors	Return %	Contribution to Return %
SailPoint Technologies Holdings, Inc.	22.74	0.33
Turning Point Therapeutics, Inc.	106.72	0.26
Allogene Therapeutics, Inc.	25.14	0.17
T-Mobile US, Inc.	4.82	0.12
uniQure N.V.	3.15	0.03
Total		0.91

Greatest Detractors	Return %	Contribution to Return %
Amazon.com, Inc.	-34.84	-1.69
Block, Inc. Class A	-54.68	-1.67
Coinbase Global, Inc. Class A	-75.23	-1.13
Tesla Inc.	-37.51	-1.09
MicroStrategy Incorporated Class A	-66.22	-1.03
Total		-6.61

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	-29.76	-16.10	-13.66
Currency Contribution	-0.19	0.00	-0.19
Total Return	-29.95	-16.10	-13.85

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
Real Estate	0.38	2.84	-2.46	-7.53	-14.72	7.19	-0.07	-0.42	-0.05	0.05	0.00
Industrials	0.00	7.79	-7.79	0.00	-14.89	14.89	0.00	-1.18	-0.09	0.00	-0.09
Materials	2.25	2.73	-0.48	-23.37	-15.90	-7.47	-0.50	-0.46	0.00	-0.16	-0.17
Utilities	0.35	2.93	-2.58	-8.06	-5.09	-2.97	-0.01	-0.14	-0.25	-0.01	-0.26
Energy	0.00	4.48	-4.48	0.00	-5.17	5.17	0.00	-0.36	-0.43	0.00	-0.43
Communication Services	13.49	8.95	4.54	-23.63	-20.71	-2.92	-3.14	-1.87	-0.20	-0.30	-0.51
Consumer Staples	0.00	6.62	-6.62	0.00	-4.62	4.62	0.00	-0.32	-0.68	0.00	-0.68
Financials	0.86	11.03	-10.17	-75.23	-17.50	-57.73	-1.13	-1.94	0.12	-0.85	-0.74
Health Care	16.53	14.33	2.20	-23.65	-5.91	-17.74	-3.35	-0.71	0.25	-2.69	-2.44
Consumer Discretionary	14.29	11.18	3.11	-42.39	-16.23	-26.16	-6.74	-3.15	-0.25	-2.79	-3.04
Information Technology	49.41	27.12	22.29	-31.03	-20.20	-10.83	-15.01	-5.53	-0.78	-5.18	-5.96
Total	100.00	100.00	0.00	-29.95	-16.10	-13.85	-29.95	-16.10	-1.90	-11.94	-13.84

Quarterly Attribution:
Harbor Disruptive Innovation Fund vs Russell 3000® Growth Index

Performance

	Portfolio	Benchmark	Active
Return Ex Currency	-29.76	-20.83	-8.93
Currency Contribution	-0.19	0.00	-0.19
Total Return	-29.95	-20.83	-9.12

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
Communication Services	13.49	9.52	3.97	-23.63	-25.68	2.05	-3.14	-2.43	-0.19	0.36	0.17
Utilities	0.35	0.06	0.29	-8.06	-5.77	-2.29	-0.01	0.00	0.03	0.00	0.03
Real Estate	0.38	1.96	-1.58	-7.53	-10.93	3.40	-0.07	-0.20	-0.13	0.04	-0.09
Materials	2.25	1.20	1.05	-23.37	-16.05	-7.32	-0.50	-0.22	0.06	-0.16	-0.10
Energy	0.00	0.80	-0.80	0.00	-8.17	8.17	0.00	-0.08	-0.12	0.00	-0.12
Industrials	0.00	6.94	-6.94	0.00	-17.52	17.52	0.00	-1.23	-0.23	0.00	-0.23
Consumer Staples	0.00	4.80	-4.80	0.00	-4.13	4.13	0.00	-0.20	-0.70	0.00	-0.70
Financials	0.86	2.71	-1.85	-75.23	-19.34	-55.89	-1.13	-0.52	-0.03	-0.80	-0.83
Health Care	16.53	10.27	6.26	-23.65	-12.61	-11.04	-3.35	-1.13	0.48	-1.70	-1.21
Consumer Discretionary	14.29	17.37	-3.08	-42.39	-28.39	-14.00	-6.74	-5.21	0.25	-2.42	-2.17
Information Technology	49.41	44.36	5.05	-31.03	-21.84	-9.19	-15.01	-9.60	-0.04	-4.41	-4.45
Total	100.00	100.00	0.00	-29.95	-20.83	-9.12	-29.95	-20.83	-0.03	-9.09	-9.12

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

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 08/31/2022.

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.

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.

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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.