Harbor
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Harbor International Core Fund

STANDARD RFI

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HARBOR CAPITAL ADVISORS, INC.

BACKGROUND INFORMATION

Harbor Capital Advisors, Inc. (“Harbor Capital”) was founded in 1983 to manage the pension and retirement plan assets of our former parent company, Owens-Illinois. In 1986, we introduced Harbor Funds, a family of no-load mutual funds featuring our manager-of-managers business model. In June of 2001, Harbor Capital was acquired by Robeco Groep N.V. (“Robeco”), a financial holding company located in the Netherlands, a wholly-owned subsidiary of Rabobank Nederland (“Rabobank”). On July 1, 2013, ORIX Corporation acquired 90% plus one share of the outstanding shares of Robeco from Rabobank. On October 21, 2016, ORIX Corporation acquired the remaining interest that Rabobank held in Harbor Capital's parent company, Robeco (10% less one share). As a result, Robeco is wholly-owned by ORIX Corporation. Effective January 2018, Robeco’s name changed to ORIX Corporation Europe N.V. (“ORIX Europe”). Harbor Capital remains an indirect, wholly-owned subsidiary of ORIX Corporation.

Harbor Funds is a family of subadvised mutual funds that offers access to a lineup of respected institutional investment firms sourced worldwide. Recognizing that no single firm can excel in managing all types of asset classes, Harbor utilizes a “manager-of-managers” approach where we seek to identify experienced portfolio managers with proven track records, who specialize in a particular asset class. These managers are responsible for making the day-to-day investment decisions and effecting the purchase and sale of the securities held by the individual mutual fund portfolios.

Our arrangements with third-party investment teams, combined with our internal philosophy of closely managing costs, allow us to offer a family of funds that we believe delivers long-term value to our shareholders.

SUBADVISER & INVESTMENT TEAM

SUBADVISER STRUCTURE

The subadviser for the Harbor International Core Fund is Acadian Asset Management LLC (“Acadian”).

Acadian is a U.S. Securities and Exchange Commission-registered investment adviser and Boston-headquartered investment management firm that, along with its wholly owned Australia, Singapore, and U.K. affiliates, specializes in systematic investment management.

Acadian is a subsidiary of BrightSphere Affiliate Holdings LLC, which is an indirectly wholly-owned subsidiary of US-based BrightSphere Investment Group Inc. (“BSIG”), a Delaware corporation publicly listed on the NYSE.

HISTORY

Since its founding in 1986, Acadian has steadily evolved from its roots as a systematic manager of non-US equities, applying their active approach in new and exciting ways to nascent markets around the world. 1992 saw the launch of their Global strategy, expanding in the subsequent years to include regional approaches. In 2002, they began to apply their stock selection process to attempt to find the poorest-performing companies as well as the strongest, opening the doors for Acadian's initial entry into long/short strategies. In 2017 they launched their Multi-Asset Class strategy, allowing them to apply their philosophy, infrastructure and experience in a systematic macro capacity.

Their commitment to research, the flexibility of their process, and the collaborative nature of their relationships underlie the potential for Acadian’s offerings to continue to grow and evolve in an effort to meet the investment outcomes required by their clients.

Acadian is a subsidiary of BrightSphere Affiliate Holdings LLC, which is an indirectly wholly-owned subsidiary of U.S.-based BrightSphere Investment Group Inc., a Delaware corporation publicly listed on the NYSE. Acadian exercises complete discretion over its investment philosophy, people and process, and Acadian is operated as a single independent entity. Acadian has been owned by BSIG since 2000 (previously called Old Mutual), when Old Mutual purchased Acadian’s former parent United Asset Management. Acadian had been acquired by UAM in 1992.

TEAM BIOGRAPHIES

Brendan O. Bradley, Ph.D. – Executive Vice President, Chief Investment Officer
Brendan O. Bradley joined Acadian in 2004 and is the Chief Investment Officer. Mr. Bradley has served as the firm’s director of portfolio management, overseeing portfolio management policy, and was also previously the director of Acadian’s Managed Volatility strategies. He is a member of the Acadian Executive Committee. Prior to Acadian, he was a Vice President at Upstream Technologies, where he designed and implemented investment management systems and strategies. His professional background also includes work as a research analyst and consultant at Samuelson Portfolio Strategies. Mr. Bradley earned a Ph.D. in applied mathematics from Boston University and a B.A. in physics from Boston College.

Ryan Taliaferro, Ph.D. – Senior Vice President, Director, Equity Strategies
Ryan Taliaferro joined Acadian in 2011 and currently serves as Director of Equity Strategies. Previously, he was the lead portfolio manager for Acadian’s Managed Volatility strategies. Prior to joining Acadian, Mr. Taliaferro was a faculty member in the finance unit at Harvard Business School, where he taught corporate finance and asset pricing. Earlier, he was a consultant at the Boston Consulting Group. Mr. Taliaferro earned a Ph.D. in business economics (finance) from Harvard University and an M.B.A. in finance and economics from the University of Chicago. He also holds an A.M. in economics, and an A.M. and A.B. in physics from Harvard University.

DECISION MAKING AUTHORITY

Acadian uses a disciplined decision-making process driven by multi-factor models to manage accounts, with input from the investment team at both ends of the process. Thus, the final portfolio is more a product of the disciplined investment process than one of judgmental determination. However, their entire investment team has input into the valuation frameworks that drive the creation of client portfolios, and decisions are made and executed by the team as a whole. At the back end, the team reviews portfolios in an effort to ensure adherence to client guidelines. Prior to trading, all portfolio positions chosen by the model must be reviewed by members of both the Portfolio Management and Portfolio Construction and Trading teams in an effort to ensure data accuracy and guideline compliance, though an override of a portfolio is highly unlikely because the model itself embodies their best thoughts and ideas regarding stock selection. Their investment team is comprised of portfolio managers assisted by a staff of research, trading and data associates. Ultimate authority and accountability lies with Acadian's Chief Investment Officer.

COMPENSATION & RETENTION OF INVESTMENT PROFESSIONALS

Acadian works hard to maintain a workforce of highly motivated and long-term oriented investment professionals. This is underscored by their low employee turnover and consistent leadership. Compensation structure varies among professionals, although the basic package involves a generous base salary, strong bonus potential, profit sharing participation, various benefits, and, among the majority of senior investment professionals and certain other key employees, equity interest in the firm as part of the Acadian Key Employee Limited Partnership.

Compensation is highly incentive-driven, with Acadian often paying in excess of 100% of base pay for performance bonuses. Bonuses are tied directly to the individual's contribution and performance during the year. It is important to note that portfolio management in Acadian's strategies is team-based. While members of the investment team have specific functions and areas of responsibility, the overall process is collegial and collaborative. As a result, compensation for each team member is not explicitly linked to the performance of specific accounts but rather to the individual's overall contribution to their investment process, overall performance, and the success of the team as a whole. This helps to ensure an "even playing field" as investment team members are strongly incentivized to strive for the best possible portfolio performance for all clients rather than for select accounts.

While investment team compensation is not based directly on the performance of individual accounts, it is tied to investment performance in various ways to foster the alignment of firm and client interests. The overall bonus pool is determined based on Acadian's performance, so there is an indirect linkage between account performance and compensation in that regard. In addition, significant weight is given to aggregate firm-wide performance when evaluating the CIO's and other senior investment team members' performance. Individual researchers are also rewarded in part on the quality of the research they initiate and complete; frequent, impactful innovations result in improvements in their compensation over time. Acadian's goal is to reward investment professionals for the part of their performance they have control or influence over. Given that they have a model-driven process, they attempt to measure the impact that each individual has on the aggregate performance based on their particular work, since their model efficacy and implementation approaches are the key sources of value-added as opposed to individual PM decisions.

Since inception, the company has succeeded in attracting and retaining a talented and dedicated team of investment professionals. They believe the outstanding reputation of their key employees, unique culture, innovative research effort, and 'blue-chip' client base will continue to attract top-level candidates to the firm, and that their attractive employment incentives will induce them to stay. Key parts of the incentive package include deferred compensation and the opportunity to earn equity in the firm's future growth. They strive to offer an atmosphere that is collegial, intellectually challenging, and open to new ideas. They are very supportive of employees pursuing the skills and projects that are of greatest interest to them, and they foster a supportive and congenial atmosphere.

In addition to competitive salaries, Acadian offers:

- Generous health insurance, including dental and vision care
- Paid time off with further leave accrued by seniority
- Profit sharing and 401(k) plans
- Reimbursement towards continuing education and/or professional designations
- Life insurance
- Backup childcare
- Health club reimbursement

SUCCESSION PLANNING

Acadian has a formal succession plan in place that identifies key individuals who would succeed the current senior leadership. The succession plan contemplates an immediate contingency event, the next 1-3 years, and beyond 3 years, and covers key senior positions throughout the company. They evaluate their succession plan as the organization evolves to ensure it continues to address the critical positions necessary to deliver the investment performance and service their clients expect.

The 12-person Executive Committee comprises a broad cross-section of senior management that encompasses the CEOs and key leaders in the areas of investment management and research, finance, business development, compliance, client service, information technology, and global human resources. These senior managers provide further involvement and consistency in firm leadership should any key business leaders depart.

Acadian works on succession planning with all of their senior leadership personnel to ensure that managers across the organization have identified potential successors and are mentoring and preparing those individuals for future leadership roles. A strong continuity plan also exists at the portfolio management level, where, because of their team approach and quantitative process, there is an excellent diversification of knowledge. The process, the portfolios, and the research are not dependent upon any single portfolio manager, ensuring minimal disturbance if a team member departs.

HARBOR INTERNATIONAL CORE FUND

INVESTMENT PHILOSOPHY

Acadian believes that market inefficiencies are caused by behaviorally-based mispricings, information asymmetry, and market frictions. They attempt to systematically exploit these inefficiencies by leveraging data and technology to apply their fundamental and market insights.

Acadian's investment philosophy is founded on these observations:

- Markets are inefficient because many investors act irrationally and with incomplete information.
- Markets are adaptive, which changes the relationships between risk and reward through time.
- Investors have "mental models" that neglect relevant information and changing dynamics and thus perpetuate these market inefficiencies.

They believe that alpha is best generated by:

- Applying information and technology in a disciplined and systematic investment process.

- Knowing the value of different information at different points in time.
- Recognizing that a robust research culture is integral to achieving enduring, superior risk-adjusted client returns.

INVESTMENT UNIVERSE

Acadian's broad global equity universe covers 43,500 stocks in more than 100 countries. Due to liquidity considerations, they generally do not consider securities with market capitalizations of under $100 million. Beyond this, however, they believe in evaluating a broad pool of opportunities and seek to include all institutionally investable companies in their universe, except for those with insufficient liquidity or data availability. To be included in the universe, they must have adequate timely and historical data on a stock for meaningful valuation, and therefore IPOs are typically not considered. Given full discretion, they will often invest in non-benchmark securities to maximize the number of investment opportunities for the portfolio.

SECURITY SELECTION

Acadian uses an objective, disciplined, and systematic process designed to attempt to exploit mispricings within global equity markets. To apply their investment strategy, they focus on using sophisticated methods to evaluate stocks and produce a portfolio tailored to the individual requirements of each portfolio. State-of-the-art technology and data analysis allow them to evaluate and project expected returns, risk, and transaction costs for 43,500 stocks globally. Their investment insights are applied to generate a predicted market-relative return forecast for every investible stock in the universe after each regional market cycle close.

The valuation process for stock selection examines stocks from a bottom-up peer-relative perspective, a stock-specific peer group perspective, and a top-down macro perspective.

In the bottom-up peer-relative framework, they generate forecasts for over 100 region-industry "peer groups" (e.g., Japanese automobiles, for example, or European durables) and seek to predict how well each stock in their universe will perform relative to its applicable peer group. They use a wide range of more than 100 signals synthesizing qualitative and quantitative information systematically. The signals are grouped into approximately twenty distinct proprietary Acadian aggregate factors that they label as Value, Growth, Quality and Technical based on their behavioral justification.

In their stock-specific peer group framework, they evaluate a stock relative to a custom set of peers. These non-obvious peer groups for each stock are based on proprietary similarity measures (economic links, for example) – connections that are not fully appreciated and hence not properly priced in by market participants. These relationships yield important information that they believe can enhance the overall alpha forecast.

At the top-down macro level, they apply three separate models – country, industry, and country-industry intersection – covering (depending on the mandate) developed, emerging, or frontier markets across 24 GICS industry groups. These models utilize valuation, quality, risk, growth, technical, and economic indicators, with the specific factors varying by model. The industry model assigns the same forecast to every stock in an industry group in the same economic market, e.g., developed, emerging, or frontier; for example, every stock in the developed markets energy industry receives the same forecast. However, energy stocks can be priced very differently in different countries; thus, the intersection model assigns a negative score for expensive country-industry intersections. In other words, the country and industry models aim to forecast assets globally, while the intersection model seeks to adjust forecasts for local conditions, enabling them to gain exposure to signals from a number of perspectives and potentially emphasize the richest and most predictive.

The final step in their forecasting framework is to properly combine the outputs from each of their forecast models to arrive at a holistic total return forecast for each stock. They update these views continuously, enabling them to construct portfolios from their real-time and objective views on global stocks.

They then utilize a proprietary portfolio optimization system to combine return, transaction costs, and risk forecasts with the objective of producing a portfolio with the highest expected returns relative to risk, net of transaction costs.

Prior to trading, all portfolios are independently reviewed by a member of both the Portfolio Management and Portfolio Construction and Trading teams to confirm that each portfolio meets its specific objectives and risk parameters. The Compliance Team also performs a separate pre-trade compliance review. Subsequent to these approvals, they utilize a systematic allocation process to build trading programs that efficiently source liquidity and limit their market footprint.

Since they are a quantitative firm, they do not research stocks in the traditional sense; rather they research factors. Their portfolio management process is based on a continual flow of new information – such as prices, earnings, analyst forecasts and other data – which is incorporated into their return forecasts. They recalculate their expected return forecast for each security after each major regional close.

RESEARCH PROCESS

Since Acadian is not a traditional, fundamental firm, they are not primarily focused on qualitative research and do not produce in-house analyst estimates for any of the stocks they follow. Their research effort is focused instead on enhancing their factor-based bottom-up, top-down, and peer models. That being said, they continually incorporate fundamental information in their database in the form of security analysts' earnings estimates and recommendation changes and other related data. This information enables them to consider recent trends in earnings estimates and recommendation changes in their valuation frameworks. In this way, they can capture the collective research of a broad universe of analysts while at the same time maintaining the disciplined and impartial approach that they feel is essential to adding value in world equity markets.

Research plays a critical role in their investment process. Rather than performing fundamental research on individual securities, their focus is on monitoring the existing set of predictive variables and searching for new ideas to potentially increase their return forecasting ability. This entails continual analysis of portfolio returns and factor behavior, research into potential new factors, and efforts to enhance the overall structure of the investment process in terms of factor weightings and methodology.

That being said, research in their equity process is primarily focused on enhancements to their top-down, bottom-up, and peer forecasting frameworks. Specific projects include improved ways to de-noise raw input data, researching new factors using novel data sources, seeking to improve the performance of existing factors, improving the ways they combine signals, and enhancing transaction cost forecasting and portfolio construction methodology.

PROPRIETARY SECURITIES DATABASE

All of Acadian's research is quantitatively oriented and data-driven, and a major tool in the process is their software interface to an extensive proprietary securities database. The database holds historical data on 43,000 stocks in more than 100 countries. This information is updated automatically several times daily, and they have a full-time team in their Investment Processes and Database group to ensure that they identify and maintain the highest quality data. Acadian uses dozens of live feeds and industry vendors to collect data under the following broad categories:

- Risk model data
- Fundamental company data
- Liquidity data
- Price, dividend, corporate action and bond yield data
- Expectational and sentiment data
- Country data

Acadian has three types of asset selection models: a bottom-up, stock-specific model as well as peer and top-down macro models.

The bottom-up model selects stocks within region and industry groups in developed markets and within countries in emerging and frontier markets. The top-down model evaluates the relative attractiveness of countries, industries, and country-industry intersections in all markets (developed, emerging, and frontier).

The peer model has both bottom-up and top-down elements but is sufficiently different from both models and thus is additive to the final forecast. While the bottom-up model selects stocks within static groups and the top-down model finds opportunities across static groups, the peer model incorporates both within and across group dimensions. The process then forms a total stock return forecast combining the views of all of these models.

At the individual stock level, Acadian utilizes a wide range of stock-specific signals focused on valuation, earnings, quality, and price movements. At the peer level, they apply factors focused on peer fundamentals (value and quality), peer growth, and peer momentum. At the top-down level, they utilize valuation, quality, risk, growth, technical, and economic indicators.

Although the bottom-up, stock-specific forecast factors are the same for all stocks in Acadian's universe, the weight of each factor is assigned uniquely for each region and industry group that they cover in their broad global framework. Acadian recognizes that there is no "one-size-fits-all" solution, and what drives returns for a U.S. software company will be different from what drives returns for a Japanese bank. Thus, their valuation process draws upon their extensive global experience, informed additionally by the peer and top-down model views, to arrive at the combination and weight of factors that they believe will be most effective in each market.

IDEA GENERATION

Acadian draws on ideas from many different sources, including sell-side and academic literature, clients and consultants, new statistical and machine-learning techniques, and interesting new data sources the team spots. Regular internal factor and portfolio reviews are also a rich source of investment ideas. Most projects for enhancing the investment process come from ongoing discussions with every member of the research and broader investment team. Usually, because of these discussions, they will have rough agreement on major research areas. In some cases, senior investment leaders identify broad research priorities and coordinate the efforts of the team towards those goals. They also dedicate significant bandwidth to finding unique sources of data.

The research team continually reviews the behavior of the model and its components. Although there is no fixed schedule for factor changes, Acadian expects enhancements several times a year. These changes include adding new factors that they have been researching as well as removing factors that have proven ineffective or been rendered redundant by refinements elsewhere. Acadian decides to introduce new factors based on both past empirical evidence and the team's judgment about market conditions and future performance. The general approach is to develop economically intuitive hypotheses regarding links between quantifiable stock-level, top-down, and peer information and future returns or risk. The process is collegial, collaborative, and team-driven. Acadian tests the efficacy of all factors using in-sample and out-of-sample statistical techniques and critically review and vet results as a group.

Prior to implementation, the Investment Policy Committee ("IPC") reviews any recommended changes to the investment models or processes. The IPC is comprised of all Acadian's senior investment staff, with the CIO having ultimate authority over whether a proposal will be implemented, and oversight over the investment and research process as a whole. Once approved by the CIO, factors are incorporated into the model.

SELL DISCIPLINE

Acadian's sell discipline is driven by their systematic and dispassionate investment process. This process objectively considers the return forecasts for all stocks within a given portfolio, along with their diversification characteristics (risk, correlation, liquidity, country, and sector/industry representation) to determine which have a place in the current optimal portfolio mix.

To this end, they will automatically sell a stock if its expected return deteriorates to the point where it can be replaced by a more attractive stock that plays an equally useful or more attractive role in the portfolio. Importantly, since markets are not frictionless, the expected excess return of any stock added to the portfolio must more than cover the expected transaction costs of selling the original position and buying the new stock.

BENCHMARK

The MSCI EAFE Index is most commonly utilized for comparative purposes.

TRACKING ERROR PARAMETERS

Benchmark tracking error is very important in Acadian's portfolio construction process. The client's desired degree of benchmark-relative risk, value-added target and any other risk considerations, such as volatility and beta factors, are established at inception. They then apply advanced third-party optimization software and proprietary risk models to construct portfolios, which enables them to target the overall level of portfolio risk relative to the chosen benchmark and to manage individual risk factors, including country and industry exposure, and size orientation versus the portfolio's benchmark. These exposures are generally relatively narrow as most of the risk budget is allocated to stock selection. They monitor all of these factors during portfolio construction and ensure they are appropriately controlled relative to the benchmark.

The Fund generally targets a residual risk level of 4-6% per year. Because their process is specifically designed to deliver a tracking error that is closely in line with the client's expectation, their portfolios typically do not exhibit significant variance between targeted and actual residual risk over time.

INVESTMENT GUIDELINES

The Fund invests at least 80% of its assets in a diversified portfolio of non-U.S. equity securities. The Fund invests primarily in the stocks of foreign companies located in developed markets, but it may also invest up to 15% of its assets in the securities of companies located in emerging markets. The Fund invests in stocks across the market capitalization spectrum.

Investment Guidelines	
Maximum Position Size	Acadian sets active position weights dynamically based on the recent volatility of each stock. This is intended to limit uncompensated risk from the short-term price movements of individual stocks. Under this system, active position sizes may range up to the current maximum of 225 basis points.
Sector Allocations	Sector weights are typically within 8% of the benchmark weight.
Industry Allocations	Industry weights are typically within 6% of the benchmark weight.
Emerging Markets	Typically cap exposure at 7% of portfolio value (with a 5% tolerance to exceed this if opportunities warrant).
# of Holdings	While the number of holdings in Acadian's Non-U.S. Equity strategy can range between 200-1,000 securities, the average number of holdings in the Fund since its inception has been ~350.
Country Allocations	Country weights are typically within 6% of the benchmark.
Maximum Cash Allocation	Generally, Acadian's equity portfolios have "fully invested" mandates, with a maximum of 5% cash.

RISK MANAGEMENT

Risk management is an integral part of Acadian's investment process. Since they believe that their greatest skill lies in active stock selection, the majority of their risk budget is devoted to that aspect of their process.

Benchmark tracking error plays an important role in the portfolio construction process for most strategies. The client's desired degree of benchmark-relative risk, value-added target and any other risk considerations, such as volatility and beta factors, are established at inception. They then apply advanced third-party optimization software and proprietary risk models to construct portfolios, which enables them to target the overall level of portfolio risk relative to the chosen benchmark and to manage individual risk factors, including country and industry exposure, and size orientation versus the portfolio's benchmark. These exposures are generally relatively narrow as most of the risk budget is allocated to stock selection. They monitor all of these factors during portfolio construction and ensure they are appropriately controlled relative to the benchmark.

They use many metrics to measure risk. In terms of political and economic risk, particularly important to their clients with emerging markets exposure, they use a number of factors at the country and stock level that have been effective at signaling potential market implosions. These factors include market volatility, interest rate trends and earnings estimate measures, which they have found to be very effective measures of country-level risk. In addition to macro-level risks, they also control for specific-stock risk. Portfolio exposure to their proprietary risk and return measures across factor groups is monitored continuously. They also apply dynamic active stock weight bounds, based upon recent stock volatility, in an effort to limit uncompensated risk from the short-term price movements of individual stocks.

In addition, they attempt to control specific-stock risk by keeping a detailed database of daily trading volume of all the covered securities in their universe and monitoring firm-wide holdings of illiquid positions. When they rebalance a portfolio, the estimated liquidity of each security and its expected transaction costs are explicitly considered. During the rebalancing process, they may also include additional stock- and factor-based constraints at the recommendation of the Investment Policy Committee. Their process is designed to limit their firm-wide transactions to no more than 20% of the average daily trading volume of a given stock, although they may occasionally exceed those limits when placing orders for illiquid securities. They also typically stop increasing exposure when firm-wide holdings exceed 12 days of trading volume, and trim positions exceeding 20 days of trading volume. They find that in addition to controlling security-specific risk, this leads to significantly lower market impact when trading, which helps to minimize their trading costs and allows them to quickly adjust positions as new opportunities arise.

In an effort to ensure that a portfolio meets its target active portfolio risk (defined as standard deviation relative to a chosen benchmark index), each portfolio is regularly rebalanced within their proprietary framework. The risk level is customized portfolio by portfolio, according to each client's investment goals. They track realized residual risk over rolling periods in an effort to ensure they are delivering a portfolio that meets the client's risk expectations.

The investment management team oversees the risk controls utilized in the investment process. All mandated, firm, and regulatory restrictions applicable to a client's portfolio are coded into their portfolio construction software and applied automatically to the account during each rebalance. The optimized portfolio undergoes a detailed review by members of both the Portfolio Management and Portfolio Construction and Trading teams before it is approved for trading. This review focuses explicitly on sources of risk and compliance with stated risk targets. Once approved, the portfolio is traded and then continuously monitored for compliance using a suite of internally developed software tools and an automated third-party pre and post-trade and daily compliance system offered through Charles River IMS Compliance System.

CAPACITY

Acadian regularly estimates strategy capacity based on rigorous analysis of such variables as current market liquidity and value-added targets and are disciplined in closing strategies before these constraints can impair their efforts to meet client return expectations. At this time there are no plans to limit asset growth in the Harbor International Core Fund.

ENVIRONMENTS OF OUT/UNDER-PERFORMANCE

Acadian's approach seeks to quantify all demonstrable aspects of outperforming companies, including valuation, earnings, financial quality, and price movements. The rigor and objectivity of the process enables them to efficiently interpret a large and diverse array of stock data points across a broad range of global markets and is flexible enough to perform well in a range of market conditions. They do have a value tilt in their portfolios, and value generally does better in falling, flat and moderately rising markets. The stocks they hold are typically stimulated by an environment in which companies with improving business prospects, quality balance sheets with improving/strong cash flow, attractive relative valuations, and increasing recognition by market participants are rewarded. Their overall goal is to outperform in many different types of market environments and to create portfolios that have the potential to see value unleashed during expansive periods, while incorporating good earnings growth and prudent risk control in an effort to protect asset values during periods of contraction and risk aversion.

Clearly, however, there is no investment process that will perform well in every environment, and a disciplined and quantitative investment process like Acadian's will likely see diminished return potential during periods of market dislocation and investor irrationality, as was the case in the tech-stock bubble of the late 1990s, the 2008 global financial crisis and subsequent "junk stock rally" in 2009, or in narrow market rallies like 2019-2020 and very sharp periods of factor rotations, as in November 2020.

One characteristic that might be perceived as a weakness in some situations is that, because of their quantitative process, their focus is on the factors that drive investment performance rather than on individual stocks. Thus, portfolio managers may be less able to discuss "stock stories" or visits with company management as that is not part of their investment process. Their focus on data may make for less vivid portfolio discussions than would be experienced with a fundamental manager. However, they believe their process captures all the information that would be found by a fundamental analyst, and more, and does so in an objective manner across a wide range of companies.

Another perceived weakness might be their strong focus on risk control, which, combined with their value orientation, could keep them away from markets experiencing strong short-term momentum. Acadian does not seek to have "hot numbers," but to produce steady, consistent value-added over time.

TRADING PROCESS

Acadian believes that cost-effective trading is essential to capture the full power of their stock valuation models. Acadian's experience with international program trading and long-term experience in equity investing have led them to develop what they believe to be effective methods for minimizing transaction costs in world markets. Their trading operation is focused on transmitting large program trades to the world's leading program trading desks for execution, and, in an effort to maximize efficiencies, they utilize a third-party Order Management System (currently the Charles River Investment Management System, or "CRIMS") to transmit orders to and receive executions from brokers via the Financial Information eXchange ("FIX") protocol.

COMPETITIVE ADVANTAGES

Acadian believes key competitive strengths of their strategy include its use of:

- *A broad universe.* Acadian believes that the larger the pool of potential investments, the greater the potential opportunity an active manager has to add value. The automation of their process allows them to evaluate and project expected returns for 43,000 securities globally, including approximately 18,000 securities in the Non-U.S. Equity strategy, after each regional market cycle close.

- *Multi-factored analysis.* Acadian believes that the qualities of outperforming stocks are multi-faceted, and that it requires a rich mix of factors to capture this. Rather than rely simply on a single dimension like price/book, they use a range of valuation factors and then enhance them by including data on earnings trends, price movement and other factors.

- *Disciplined process.* Given the size, scope and complexity of the global equity markets, Acadian believes a structured, disciplined approach is essential in their effort to add value over the long term.

- *Structured trading.* Cost-effective trading is necessary to capture the full power of their stock valuation models. Acadian is highly experienced in disciplined portfolio implementation.

- *Advanced research agenda.* A key focus is their proprietary stock factor attribution system, which tracks the monthly efficacy of specific stock factors, market by market, on an ongoing basis. Acadian uses this data in an effort to ensure that their models remain statistically robust and that they incorporate changing trends in the drivers of stock returns.

SHARE CLASS INFORMATION

The Harbor International Core Fund is currently offered as a no-load mutual fund.

Share Class	Ticker
Retirement	HAORX
Institutional	HAOSX
Administrative	HAOAX
Investor	HAONX

For complete details on fees and expenses, please contact your Harbor representative and/or refer to the Fund's prospectus available at harborcapital.com.

DISCLOSURE

Responses regarding the Harbor organization have been provided by Harbor Funds Distributors, Inc. Responses relating to the investment team of the Harbor International Core Fund, including the process for making portfolio decisions and effecting the purchase and sale of securities held by the Fund, or any specific operational aspects of the subadviser are provided by the subadviser to the Fund and, to the best of our knowledge, are accurate.

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

There is no guarantee that the investment objective of the Fund will be achieved. Stock markets are volatile and equity value can decline significantly in response to adverse issuer, political, regulatory, market and economic conditions.

Acadian Asset Management LLC is an independent subadviser to the Harbor International Core Fund.

The MSCI EAFE Index is an unmanaged index generally representative of major overseas stock markets. This unmanaged index does not reflect fees and expenses and is not available for direct investment.

The value of securities selected using quantitative analysis can react differently to issuer, political, market, and economic developments than the market as a whole or securities selected using only fundamental analysis. The factors used in quantitative analysis and the weight placed on those factors may not be predictive of a security's value. In addition, any model may contain flaws or the model may not perform as anticipated.

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.

Investors should carefully consider the investment objectives, risks, charges and expenses of a Harbor fund before investing. A summary prospectus or prospectus for this and other information is available at harborcapital.com or by calling 800-422-1050. Read it carefully before investing.

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