

Long-Term Conviction in a Short-Term World

ACTIVE FUNDAMENTAL EQUITY | GLOBAL OPPORTUNITY TEAM | FUND INVESTMENT INSIGHT | 2018

By extending an academic study to global and international growth equities, we show that high active share portfolios have outperformed and discuss the importance of maintaining a long-term ownership mindset to focus on high-conviction, bottom-up ideas for client portfolios.

How Do You Measure Conviction?

A manager's conviction in the thesis underlying each portfolio company is key to long-term outperformance because conviction enables concentrating capital in big ideas. Additionally, conviction reduces the possibility of being shaken out of undervalued ideas based on short-term noise. A helpful tool to measure conviction is active share, which was developed in academia to quantify differentiation from the benchmark through stock selection.

What Is Active Share?

Active share was developed in 2006 as a simplistic measure of stock selection, calculated as the size of positions that differ from the benchmark as a percentage of the total portfolio.¹ Active share was conceived as a complement to tracking error, a measure of systematic risk that measures the volatility of a portfolio not explained by movements in its benchmark.²

AUTHORS



KRISTIAN HEUGH

*Managing Director
Global Opportunity Team*



MARC FOX

*Executive Director
Global Opportunity Team*

KEY HIGHLIGHTS

Active share

Stock selection versus factor timing

The short-term focus of markets

The benefits of taking a long-term view

¹ Cremers, Martijn and Petajisto, Antti. "How Active is Your Fund Manager? A New Measure That Predicts Performance," Yale ICF Working Paper No. 06-14 (2006). Available at SSRN. **Past performance is no guarantee of future results.** A portfolio with a high degree of active share does not assure relative outperformance.

² Tracking error is the standard deviation of the difference between the portfolio and the benchmark returns.

Academic analysis of portfolio data from 1980 to 2009 found that managers have become less active over time,³ in part due to the rise of passive index investing. Average active share declined and the proportion of portfolios with high active share above 80% halved since 1980.

In contrast, the authors found that the active share of individual portfolios was persistent over time. Moreover, portfolios with the highest active share outperformed their benchmarks annually by an average of 1.13% net of fees. Their analysis concludes, “Funds with the highest active share outperform their benchmarks, while funds with the lowest active share underperform.”⁴

High Active Share Portfolios Have Outperformed

Since Cremers and Petajisto focused on U.S. equity portfolios, we recreated the academic study for global and international growth equity portfolios to see if the relationship between high active share and outperformance holds true for managers accessing a broader universe. Consistent with the academic study, **we have found that both global and international growth equity portfolios with high active share have outperformed.**

As of September 30, 2017, global equity portfolios with high active share in the top

quartile (over 93%) delivered annualized outperformance of 1.55% and 1.15% net of fees over the past three and five years.⁵ Over the same respective time periods, global equity portfolios with low active share in the bottom quartile (below 84%) underperformed while those with average active share between 84% and 93% had mixed results (*Display 1*).

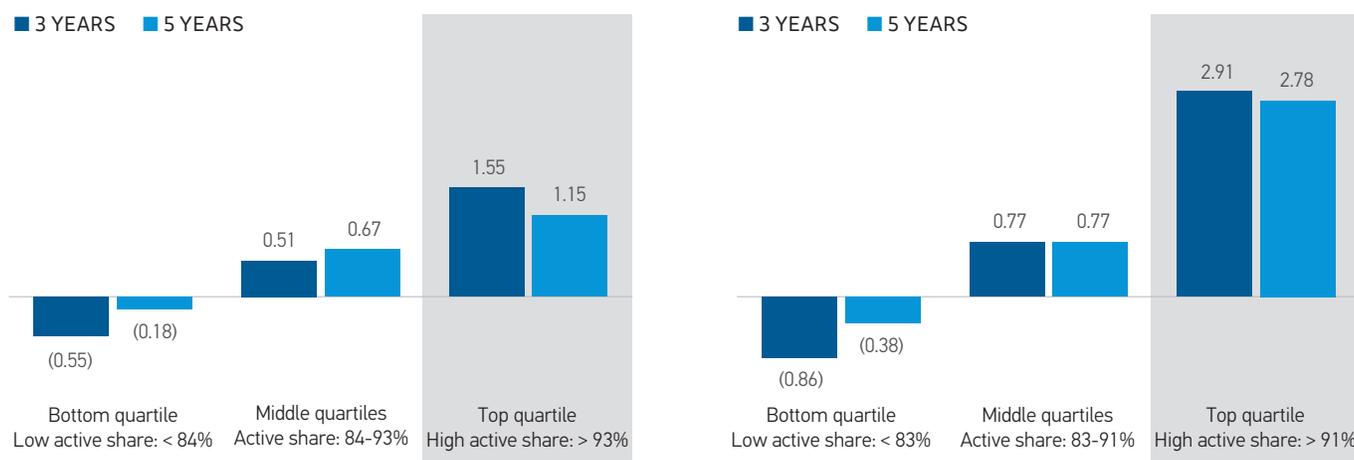
We have observed a similar pattern in international growth as portfolios with high active share in the top quartile (over 91%) delivered annualized outperformance of 2.91% and 2.78% net of fees over the past three and five years (*Display 2*).⁶ Portfolios with low active share in the bottom quartile underperformed.

DISPLAYS 1 AND 2

For both global and international portfolios, high active share is a key driver of performance

Annualized excess return for global portfolios (%)

Annualized excess return for international growth portfolios (%)



Source: Morgan Stanley Investment Management, Morningstar. Data as of September 30, 2017.

³ Cremers and Petajisto, 18.

⁴ Ibid, 28.

⁵ Morgan Stanley Investment Management, Morningstar. Data as of September 30, 2017. **Past performance is no guarantee of future results.** Based on analysis of 112 global equity funds out of 842 funds in the Morningstar World Large Stock Category, excluding duplicate fund share classes. Average returns versus category median are shown above for 82 funds over three years and 62 funds over five years. Active share is computed versus prospectus benchmark as of September 30, 2014.

⁶ Morgan Stanley Investment Management, Morningstar. Data as of September 30, 2017. **Past performance is no guarantee of future results.** Based on analysis of 53 international growth funds out of 396 funds in the Morningstar Foreign Large Growth Category, excluding duplicate fund share classes. Average returns versus category median are shown above for 41 funds over three years and 38 funds over five years. Active share is computed versus prospectus benchmark as of September 30, 2014.

Intuitively, the results of our analysis make sense: active managers must invest differently from the benchmark to outperform. The challenge lies in separating the sources of outperformance.

Stock Selection Can Help Drive Outperformance

The foundation of modern performance attribution was established by Eugene Fama who in 1972 articulated the conceptual difference between the two ways an investment manager may outperform a benchmark: selectivity and factor timing.⁷ Selectivity “measures how well the chosen portfolio did relative to a naively selected portfolio at the same level of risk.” Factor timing, on the other hand, refers to time-varying allocations to systematic risk factors such as size, sector or geography. In simple terms, an equity manager can add value through factor allocation or stock selection (*Display 3*). Active share seeks to capture the latter.

Market rotations based on factors such as size, sector, geography and value metrics have been shown in several studies to explain short-term performance, typically over time periods under 12 months. Based on our experience, over periods of three years or more, we believe that stock selection drives performance.

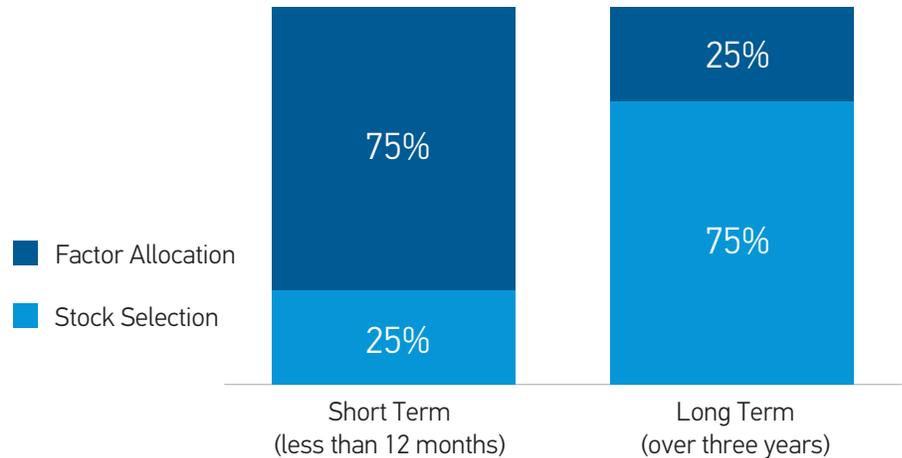
Market Participants Are Increasingly Short Term

We believe that the short-termism of market participants creates opportunities for long-term investors willing to extend their time horizon out three to five years. Economies and markets have benefited immeasurably from advancements in technology over the past half century that have boosted productivity and enabled communications that instantly bridge the world. But these benefits have not come without unintended

DISPLAY 3

For longer time horizons, stock selection tends to drive returns

Estimated share of excess return attributable to factor allocation and stock selection



Source: Morgan Stanley Investment Management. Data as of September 30, 2017. For illustrative purposes only.

consequences, particularly when we examine the shrinking attention span and time horizon of our financial markets. Consider the following three long-term market trends:

- 1. THE MACHINES ARE WINNING.** The rise of passive investing, algorithmic and high-frequency trading means that the majority of trading volume on the world’s largest stock exchanges is now by machines rather than humans.⁸ Programmed trading by definition shortens the time horizon of the market by focusing less on underlying company fundamentals and more on short-term price movements and correlations between securities.
- 2. BUY-SIDE TENDS TO HOLD STOCKS FOR JUST ONE YEAR.** Over time, the composition of equity market participants has shifted to shorter-term investors, such as hedge funds and programmed trading. As a result,

the implied average holding period of mutual funds has fallen to less than one year from seven years in 1960.⁹ In parallel, the implied average holding period on the NYSE dropped from eight years to one year in 2010 (*Display 4*).¹⁰

- 3. SELL-SIDE ESTIMATES TEND TO FOCUS ON NEXT 2-3 YEARS.** Wall Street analysts typically focus on the next quarterly earnings event rather than long-term intrinsic value. The average large-cap company has over 20 published earnings estimates over the next two years (*Display 5*), but only three brave souls, on average, publish estimates five years out.¹¹ The result is greater informational asymmetry for investors able to extend their time horizon and focus on long-term value creation.

⁷ Fama, Eugene, “Components of Investment Performance,” *Journal of Finance*. Volume 27, Issue 3 (1972): 551-567.

⁸ Securities Exchange Act Release No. 34-61358, 75 FR 3594, 3606 (January 21, 2010) (“Concept Release on Equity Market Structure”).

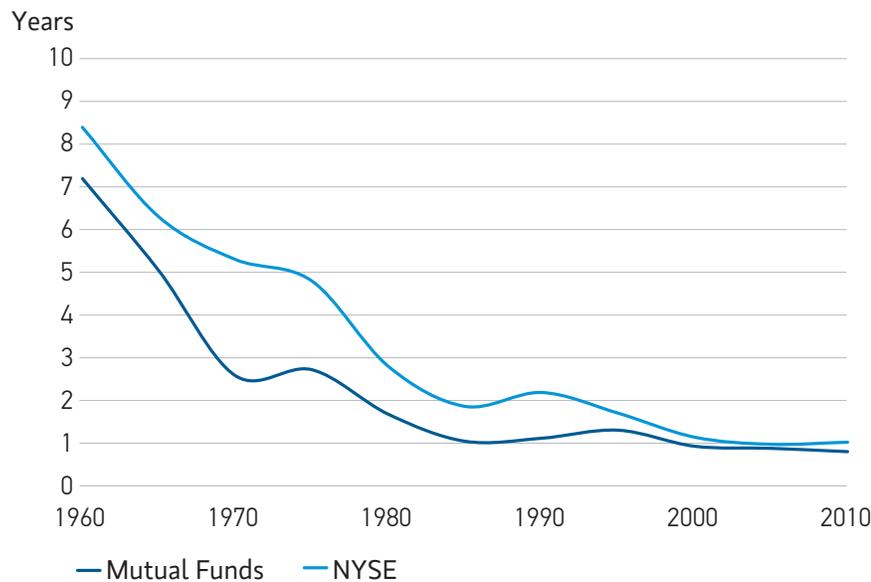
⁹ Morningstar.

¹⁰ New York Stock Exchange. Annual reported volume, calculated inverse of turnover ratio. Data as of December 31, 2010.

¹¹ Bloomberg estimates for 4,601 companies over US\$ 1 billion in market capitalization. Data as of September 30, 2016.

DISPLAY 4

Average holding periods have fallen

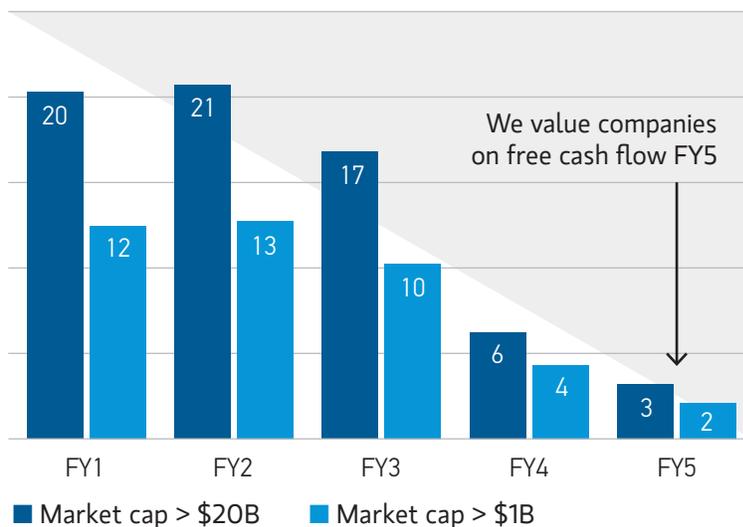


Source: New York Stock Exchange, Morningstar. Calculated as inverse of turnover ratio. Data as of December 31, 2010.

DISPLAY 5

Analysts typically focus on the next quarter's earnings rather than long-term intrinsic value

Average number of published earnings estimates



Source: Morgan Stanley Investment Management, calculations based on Bloomberg estimates for 4,601 companies over \$1 billion in market capitalization. Data as of September 30, 2016.

Concentration in Highest-Convection Ideas Can Lead to High Active Share

As illustrated in *Displays 6 and 7*, one of the primary drivers of high active share is the concentration of global and international growth portfolios in their top 10 holdings.¹² The top right quadrant contains a small minority of funds in which the top 10 holdings account for over 40% of the portfolio. Conversely, funds with less than 20% of the portfolio in the top 10 holdings are associated with lower active share. One potential explanation is the size of the low active share funds. “Closet Indexers,” as labeled by Cremers and Petajisto, refer to large portfolios that invest similarly to their benchmark (*Display 8*).

Global Opportunity Team portfolios

The MSIF Global Opportunity Portfolio, MSIF International Opportunity Portfolio and MSIF International Advantage Portfolio are each constructed with active share over 95% different from their respective benchmarks¹³ as of September 30, 2017.

To outperform across equity market cycles, investors must possess long-term conviction despite the short-term myopic focus of participants in the equity markets. Such conviction can only be built upon a foundation of core values.

- **INTELLECTUAL CURIOSITY AND FLEXIBILITY** enable a worldview capable of pursuing a diversity of new ideas.
- **PERSPECTIVE** frees investors from overspecialization and tunnel vision to make objective investment decisions.
- **SELF-AWARENESS** and introspection are crucial tools for learning from mistakes and evolving over time.
- **PARTNERSHIP** builds trust, accountability and a strong sense of ownership.

¹² Morgan Stanley Investment Management. Data as of September 30, 2016. Size of bubble indicates assets under management.

¹³ The benchmark for MSIF Global Opportunity Portfolio is the MSCI All Country World Index. The benchmark for the MSIF International Opportunity Portfolio and the MSIF International Advantage Portfolio is the MSCI All Country World ex USA Index.

These intangibles, while difficult to quantify, establish the culture of an investment team—something far more difficult to replicate than performance outcomes. We invest significant time and resources in our investment team to build

a partnership culture and align incentives with client interests by linking pay with three-year performance.

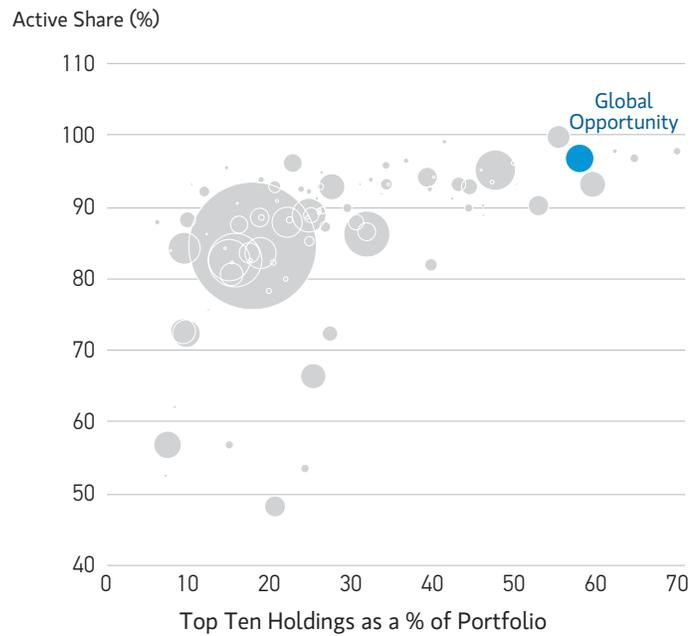
In stark contrast, the investment management industry has embraced

statistical concepts developed in academia that seek to measure the skill of investment managers by using quantitative measures of risk. Tracking error, attribution analysis and other measures in common use add to the

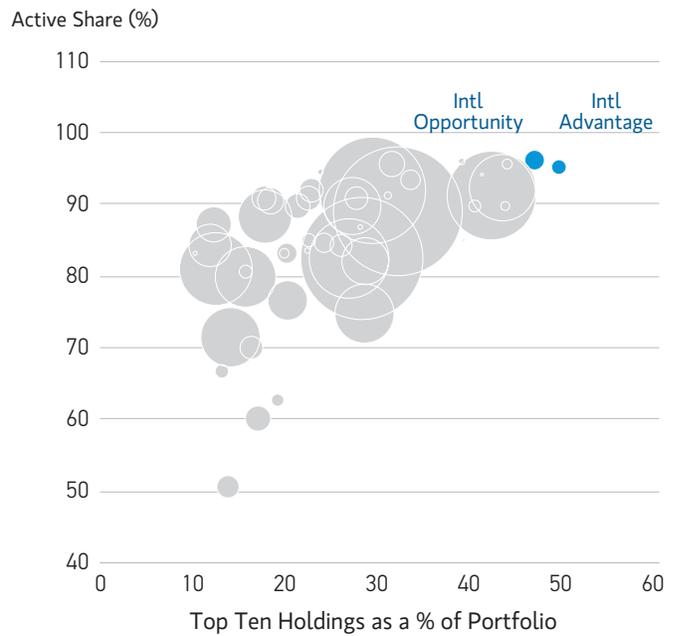
DISPLAYS 6 AND 7

Greater concentration in top 10 holdings typically translates into higher active share

Global portfolios



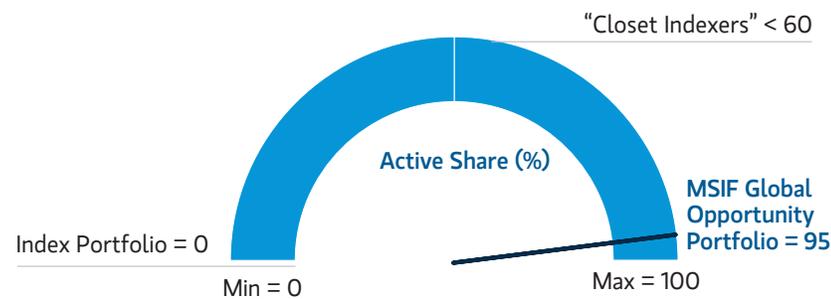
International growth portfolios



Source: Morgan Stanley Investment Management, Morningstar. Data as of September 30, 2017.

DISPLAY 8

Active share indicates the size of active positions as a percentage of the portfolio



Source: Morgan Stanley Investment Management. Adapted from Cremers and Petajisto.

mosaic of information available to asset allocators attempting to differentiate between investment managers in competition for scarce assets. However, each of these measures is based on historical performance and therefore can only provide limited insight into manager skill, selectivity or future outcomes. Rather than rely on the industry axiom *past performance is no guarantee of future results*, we prefer the words of ice hockey legend Wayne Gretzky: **“I skate to where the puck is going to be, not where it has been.”**

DISPLAY 9**Long holding periods demonstrate an ownership mindset**

Top 10 holdings for MSIF Global Opportunity Portfolio as of September 30, 2017.

COMPANY	DESCRIPTION	COMPETITIVE STRATEGY	% OF PORTFOLIO	INITIAL PURCHASE	MONTHS HELD
Facebook	Social Network	Network Platform	9.0	03/08/12	66
TAL Education	Education Services	Brand Name Focus	6.9	10/23/12	59
Amazon.com	E-commerce	Cost Leadership	6.3	05/30/08	112
MasterCard	Payment Network	Network Effect	4.7	10/10/08	107
Priceline	Online Travel Agent	Differentiation	4.7	12/23/11	69
DSV A/S	Freight Forwarding	Cost Focus	4.6	05/30/08	112
EPAM Systems	Business Services	Cost Focus	4.4	10/14/14	35
Alphabet	Search	Network Platform	4.0	05/30/08	112
Tencent	Social Network	Network Platform	3.9	12/31/15	21
Hermès	Luxury Goods	Brand Name	3.8	12/31/15	21
Total/Average			52.3		> 5 years

Source: Morgan Stanley Investment Management.

Long-Term Ownership Mindset

Investing as long-term owners allows us to concentrate capital in our highest-conviction ideas for typical holding periods of three to five years. For example, as of September 30, 2017, the top 10 holdings of MSIF Global Opportunity Portfolio accounted for over 50% of net assets with an average holding period exceeding five years (*Display 9*).¹⁴

We believe that by applying a price discipline to investments in high-quality companies—strictly defined as those with sustainable competitive advantages and long-term growth that creates value—we can best capture opportunities and manage risk for clients. We view our conviction-based concentration as a source of long-term outperformance.

Our stock selection focuses on finding high-quality companies, developing insights around competitive advantage and uniqueness that can make them successful over time, and having the perspective to hold them through short-term disruptions, as long as those disruptions do not affect the thesis. We typically expect that 75% or more of the value added, over time, will come from stock selection.

We continue to explore new ideas to further develop our portfolios in line with our strict criteria for quality and long-term value creation.

ABOUT GLOBAL OPPORTUNITY¹⁴

Morgan Stanley Investment Management's (MSIM) Global Opportunity Team manages highly differentiated, concentrated portfolios that invest across geographies, sectors and market capitalizations. Our Opportunity Strategies—managed by Kristian Heugh, and available on a Global, International and Asia ex Japan basis—seek long-term capital appreciation by investing in high-quality companies that the investment team believes are undervalued at the time of purchase.

Our investment process integrates analysis of sustainability with respect to disruptive change, financial strength, environmental and social externalities and governance (also referred to as ESG); and fundamental analysis of competitive advantages that can be monetized through growth.

Our portfolios are concentrated in our highest conviction ideas. We seek to hold 30 to 45 positions with our top 10 holdings generally accounting for 50% of our portfolios. The result is a suite of portfolios that look very different from the benchmark, with active share generally 90% or higher, and tracking error ranging from 5 to 10%.

¹⁴ Morgan Stanley Investment Management. Information shown is based on the MSIF Global Opportunity Portfolio. Subject to change daily. Provided for informational purposes only and should not be deemed as a recommendation to buy or sell the securities shown. This portfolio is actively managed, therefore, holdings may not be current.

Annualized Performance (Class I, % net of fees) as of September 30, 2017

PRODUCT	INCEPTION DATE	1 YEAR (%)	3 YEARS (%)	5 YEARS (%)	SINCE INCEPTION ANNUALIZED (%)
MSIF Global Opportunity Portfolio	5/30/08	33.04	19.21	21.36	12.95
MSCI All Country World Index (%)	–	18.65	7.43	10.20	4.67
MSIF International Advantage Portfolio	12/28/10	32.71	16.52	14.26	12.11
MSIF International Opportunity Portfolio	3/31/10	36.73	16.78	16.85	12.97
MSCI All Country World ex USA Index	–	19.61	4.70	6.97	4.53

Performance data quoted represents past performance, which is no guarantee of future results, and current performance may be lower or higher than the figures shown. For the most recent month-end performance figures, please visit morganstanley.com/im or call 1-800-548-7786. Investment returns and principal value will fluctuate and fund shares, when redeemed, may be worth more or less than their original cost.

Performance and fund information is as of September 30, 2017, unless otherwise noted. Returns are net of fees and assume the reinvestment of all dividends and income. Returns for less than one year are cumulative (not annualized). Performance of other share classes will vary.

Please keep in mind that double-digit returns are highly unusual and cannot be sustained. Investors should also be aware that these returns were primarily achieved during favorable market conditions.

The gross expense ratios for Class I shares are 1.07%, 2.26% and 1.34% for the Global Opportunity Portfolio, International Advantage Portfolio and International Opportunity Portfolio, respectively. The net expense ratios for Class I shares are 0.81%, 1.00% and 1.00% for the Global Opportunity Portfolio, International Advantage Portfolio and International Opportunity Portfolio, respectively. Where the net expense ratio is lower than the gross expense ratio, certain fees have been waived and/or expenses reimbursed. These waivers and/or reimbursements will continue for at least one year from the date of the applicable fund's current prospectus (unless otherwise noted in the applicable prospectus) or until such time as the fund's Board of Directors acts to discontinue all or a portion of such waivers and/or reimbursements. Absent such waivers and/or reimbursements, returns would have been lower. Expenses are based on the fund's current prospectus. The minimum initial investment is \$5,000,000 for Class I shares.

IMPORTANT DISCLOSURES

The views and opinions are those of the author as of the date of publication and are subject to change at any time due to market or economic conditions and may not necessarily come to pass. Furthermore, the views will not be updated or otherwise revised to reflect information that subsequently becomes available or circumstances existing, or changes occurring, after the date of publication. The views expressed do not reflect the opinions of all portfolio managers at Morgan Stanley Investment Management (MSIM) or the views of the firm as a whole, and may not be reflected in all the strategies and products that the Firm offers.

Certain information herein is based on data obtained from third party sources believed to be reliable. However, we have not verified this information, and we make no representations whatsoever as to its accuracy or completeness.

The document is a general communication which is not impartial and has been prepared solely for informational and educational purposes and does not constitute an offer or a recommendation to buy or sell any particular security or to adopt any specific investment strategy. The material contained herein has not been based on a consideration of any individual client circumstances and is not investment advice, nor should it be construed in any way as tax, accounting, legal or regulatory advice. To that end, investors should seek independent legal and financial advice, including advice as to tax consequences, before making any investment decision.

ERISA plan investment committee or plan sponsor only:

Morgan Stanley believes that you, as a fiduciary of the Plan, hold or have under management or control total assets of at least \$50,000,000 and are capable of evaluating investment risk independently, both in general and with regard to particular transactions and investment strategies.

The **MSCI All Country World Index (ACWI)** is a free float-adjusted market capitalization weighted index designed to measure the equity market performance of developed and emerging markets. The term "free float" represents the portion of shares outstanding that are deemed to be available for purchase in the public equity markets by investors. The performance of the Index is listed in U.S. dollars and assumes reinvestment of net dividends. The index is unmanaged and does not include any expenses, fees or sales charges. It is not possible to invest directly in an index.

Please consider the investment objective, risks, charges and expenses of the fund carefully before investing. The prospectus contains this and other information about the fund. To obtain a prospectus, download one at morganstanley.com/im or call 1-800-548-7786. Please read the prospectus carefully before investing.

RISK/RETURN DEFINITIONS

Active share is the fraction of the portfolio or fund that is invested differently than its benchmark as of the last day of the reporting period. A portfolio with a high degree of Active share does not assure a fund's relative outperformance.

RISK CONSIDERATIONS

There is no assurance that a portfolio will achieve its investment objective. Portfolios are subject to **market risk**, which is the possibility that the market value of securities owned by the portfolio will decline. Accordingly, you can lose money investing in this fund. Please be aware that this fund may be subject to certain additional risks. Changes in the worldwide economy, consumer spending, competition, demographics and consumer preferences, government regulation and economic conditions may adversely affect global franchise companies and may negatively impact the fund to a greater extent than if the fund's assets were invested in a wider variety of companies. In general, **equity securities'** values also fluctuate in response to activities specific to a company. Investments in **foreign markets** entail special risks such as currency, political, economic, and market risks. The risks of investing in **emerging market** countries are greater than risks associated with investments in foreign developed markets. **Privately placed and restricted securities** may be subject to resale restrictions as well as a lack of publicly available information, which will increase their illiquidity and could adversely affect the ability to value and sell them (liquidity risk). **Derivative instruments** may disproportionately increase losses and have a significant impact on performance. They may also be subject to counterparty, liquidity, valuation, correlation and markets risks.

Charts and graphs provided herein are for illustrative purposes only. Past performance is no guarantee of future results.

The indexes are unmanaged and do not include any expenses, fees or sales charges. It is not possible to invest directly in an index. Any index referred to herein is the intellectual property (including registered trademarks) of the applicable licensor. Any product based on an index is in no way sponsored, endorsed, sold or promoted by the applicable licensor and it shall not have any liability with respect thereto.

This communication is not a product of Morgan Stanley's Research Department and should not be regarded as a research recommendation. The information contained herein has not been prepared in accordance with legal requirements designed to promote the independence of investment research and is not subject to any prohibition on dealing ahead of the dissemination of investment research.

This communication is only intended for and will be only distributed to persons resident in jurisdictions where such distribution or availability would not be contrary to local laws or regulations.

There is no guarantee that any investment strategy will work under all market conditions, and each investor should evaluate their ability to invest for the long-term, especially during periods of downturn in the market.

**NOT FDIC INSURED | OFFER NO BANK GUARANTEE | MAY LOSE VALUE
NOT INSURED BY ANY FEDERAL GOVERNMENT AGENCY | NOT A DEPOSIT**

Morgan Stanley Investment Management (MSIM) is the asset management division of Morgan Stanley.

Morgan Stanley Distribution, Inc. serves as the distributor for Morgan Stanley Institutional Funds.

Explore our site at
www.morganstanley.com/im