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BROADER HORIZONS

An Approach to ESG Strategic Tilting

By Neeraj Kumar, Veronique Menou, Stuart Doole, DPhil, and Laura Nishikawa



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Institutional investors increasingly are looking for ways to integrate environmental, social, and governance (ESG) considerations into their investment decisions. By doing so, they may aim to mitigate long-term risks, generate higher long-term risk-adjusted performance, and align investments with broader societal objectives. As ESG investment guidelines become more commonplace among asset owners, and as many continue to build capabilities in engagement and risk management, we have seen a small but growing set of institutional investors focus on long-termism by adopting investment strategies that explicitly build in their holistic views of the future.

Historically, investors have relied on either exclusionary or selection-based ESG benchmarks or strategies, whereby companies would be screened out from an investment universe due to their involvement in controversial activities or selected due to strong ESG performance against sector peers. However, both approaches can significantly reduce the investable universe and have proven to be challenging for the largest asset owners, often termed “universal owners,” whose portfolios span the entire equity market. Additionally, approaches that exclude companies altogether may preclude opportunities to engage or incentivize progress—and be problematic for advisors managing fiduciary mandates.

In this article, we examine a potential approach to ESG tilting designed to

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target companies demonstrating both a robust ESG profile and a positive ESG trend while maintaining minimal exclusions. Such a strategy can be illustrated by the MSCI ESG Universal Index. We start by defining an investable universe minus a core set of exclusions that includes involvement in controversial weapons and violations of international norms. We then use both static and dynamic ESG performance indicators to weight the remaining stocks in a way that preserves diversification and balances the concerns of universal owners.

Our findings highlight that the MSCI ESG Universal Index, which is designed to represent the returns of this strategy, demonstrated an annualized outperformance of 10 basis points (bps) and a risk reduction of 20 bps compared to the parent MSCI ACWI Index for the period ranging from November 2009 to September 2017, while exhibiting a low tracking error with modest sector and country bets using backtested data.¹ The index demonstrated a significantly higher ESG profile overall and across each of the three ESG pillars. Finally, the carbon footprint of the index was reduced by 11 percent, as of September 2017.

As more investors integrate ESG into their investment processes globally, such an index potentially could be used by asset owners as they determine their strategic asset allocations or to implement their ESG investment strategies.

UNDERSTANDING THE MOTIVATIONS, OBJECTIVES, AND CONSTRAINTS OF ESG INVESTING

UNDERSTANDING INVESTOR MOTIVATIONS

Institutional investors increasingly are looking for ways to account for ESG signals in their investment decision-making process. The rise in the number of Principles for Responsible Investment (PRI) signatories from 100 (accounting for less than US\$10 trillion) in 2006 to more than 1,700 (representing more than US\$70 trillion) in April 2017 is strong evidence of the trend toward greater ESG awareness.²

No longer restricted to ethical screening, the term “ESG investing” now encompasses a wide range of investment objectives and beliefs. Different institutional investors may pursue different objectives when addressing global ESG

issues, including managing long-term risks, generating positive societal impact, and aligning their investments with their beliefs (see figure 1).

Integration: A growing body of research suggests that ESG factors have contributed to better long-term risk-adjusted performance, in particular when focused on industry-relevant issues (Khan et al. 2015; Friede et al. 2015; Hitchens et al. 2015; Northern Trust 2014). Institutional investors increasingly are looking to ESG factors as a way to manage these long-term risks and to achieve long-term sustainable financial performance.

Values: Some investors may consider ESG issues a means for aligning their investments with their ethical, religious, or political beliefs. They typically have used exclusionary approaches that screen out controversial activities such as tobacco, weapons, alcohol, gambling, or fossil fuels from their investment universe. Unlike the ESG integration goals described above, where ESG factors are considered on the basis of their potential economic impact, values-based goals are intentionally aligned to match an investor's beliefs.

Impact: Increasingly, some investors are focused on the impact of their investments on the world around them. These investors may aim to direct their capital toward companies that provide solutions to environmental and social challenges, monitor the alignment of their investments to formal frameworks such as the United Nations Sustainable Development Goals (SDGs), and generate positive social or environmental impacts alongside financial returns.

A growing body of literature suggests that macro societal and environmental trends—ranging from climate change and rising sea levels to social inequality and demographic shifts—pose potentially overlooked risks for long-term institutional investors (Investment Leaders Group 2016; FCLT 2015; Warren 2014a,b; Barton et al. 2017).

Traditionally, such risks were considered exogenous, but for the universal³ owner or long-term investor, all portfolio risks could be considered endogenous. We observe a growing awareness, arising potentially from the negative impact of environmental externalities or the social costs of aggressive corporate tax avoidance, that a long-term institutional investor cannot always afford to take short-term gains at the expense of long-term costs to the economic system as a whole. These long-term investors essentially own both outcomes.

As a result, there may be increasing value for institutional investors in understanding their exposure to ESG headwinds and tailwinds, and also in gauging how portfolio companies strategically place themselves to innovate, adapt, or see their business models go extinct. As ESG investment guidelines become more commonplace among asset owners in general, and as many continue to build capabilities in engagement and risk management, we have seen a small but growing set of institutional investors focus on long-termism by adopting investment strategies that explicitly build in their

holistic views of the future (for example, AP4 2016).

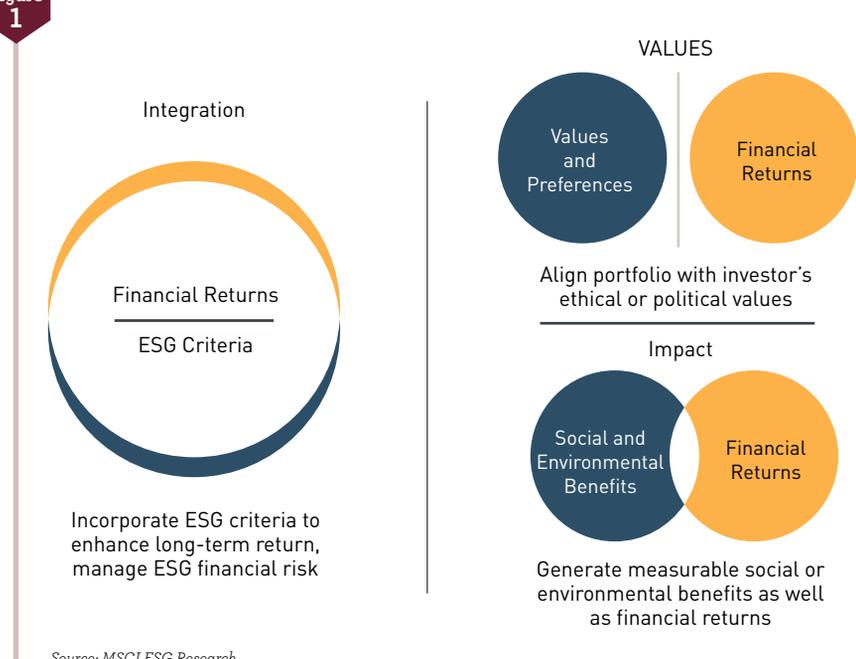
This article focuses on the ESG integration approach. It provides an example of a strategy that aims to enhance exposure to companies demonstrating a robust ESG profile, a positive ESG trend, and maintaining a broad and diversified investment universe.

KEY CONSIDERATIONS FOR ESG INVESTING

Institutional investors across regions typically differ in their investment beliefs, objectives, and constraints when it comes to addressing ESG. However, we see the following areas of convergence among those that are most advanced in articulating their approaches to ESG investing:

Incorporating ESG factors into investment decisions: Several institutional investors explicitly consider ESG factors in their decisions to buy, sell, overweight, or underweight securities. These considerations may include divesting from companies whose long-term ESG risk profile is considered intolerable (for example, Norges Bank 2017),

Figure 1 A FRAMEWORK FOR ESG INVESTMENT STRATEGIES



prioritizing investments in ESG leaders and companies demonstrating improvements (for example, ABP 2016), or favoring investments that create long-term sustainable value (for example, CalPERS 2015). Rarely do such approaches apply a uniform minimum standard; rather, they tend to favor a more nuanced weighting of ESG factors alongside financial considerations.

Exercise influence over companies as an active owner: Many institutional investors actively engage in dialogue with companies to enhance long-term value. This may include targeted unilateral engagement, collaborative engagement with other asset owners, or informed proxy voting. Exclusionary approaches to ESG investing may prove challenging to investors focused on engagement, who may prefer to retain ownership and use their influence as shareholders to encourage improvements. These approaches to engagement are no longer the sole province of active managers. Increasingly we can observe passive index managers following an active ownership approach, sometimes as a direct consequence of asset owner requirements in mandates.

Uphold international norms, laws, and regulations: Divestment policies or exclusion lists are common among large institutional investors. Although adoption of specific screens may vary (e.g., tobacco, coal, or faith-based divestments), we now see some convergence around divestment from companies that are in breach of global norms and regulations. Exclusions may include product-based divestment, such as companies involved in the production of controversial weapons (cluster munitions, landmines, biological, and chemical weapons). But exclusions are more likely to be based on corporate-level conduct-based divestment, such as companies in breach of global norms and standards for human rights, labor rights, the environment, and corruption. Policies reflecting the latter clearly are very different from traditional exclusions

of entire economic sectors or industries but are still aligned with principles of ESG integration.

Demonstrate leadership to promote responsible investment: Finally, leading institutional investors may aim to influence others by setting standards, promoting collaboration, seeding ESG-informed investment strategies, or publicizing their investment policies and beliefs. In other words, market signaling is an important objective in its own right, driving an increasing number of institutional investors to consider shifting to ESG-informed policy benchmarks (AP4 2016).

Institutional investors also typically balance these objectives against some common constraints:

Short-term risk: Institutional investors may have a different appetite toward short-term risks and their willingness to deviate from the market benchmark. How much tracking error they are willing to bear can be a major factor in determining how to gain exposure to companies with a robust ESG profile.

Diversification: Many large institutional investors consider themselves as universal owners and are looking for a broad and diversified universe to invest in. Constraints relating to size and liquidity may be a key component to consider when integrating ESG.

Reputational risk: Investors may face pressure from stakeholders that may affect their approaches toward ESG. Minimizing reputational risks associated with controversial investments may be an important driver for institutional investors.

IDENTIFYING THE CHALLENGES OF ESG INTEGRATION FOR UNIVERSAL OWNERS

Historically, ESG integration index strategies have relied on either exclusionary approaches whereby controversial activities and companies would be screened

from an investment opportunity set, or selection approaches whereby only the above-average or best-in-class companies on ESG criteria would be included. As a result of these approaches, the investment universe easily could be reduced by more than half. However, for large asset owners whose portfolios tend to include the entire equity market, these types of strategies may be too narrow. Additionally, exclusionary approaches tend to focus on the negative impact of companies, and investors we have consulted increasingly have expressed interest in focusing on the positives and incentivizing progress.

An alternate approach to enhancing exposure to good ESG performers would be to strategically tilt the weight of securities with a high ESG rating and upward trend while maintaining minimal exclusions. Relying on re-weighting techniques rather than exclusion or selection allows for investment in a broad and diversified universe that is suitable for universal owners. In addition, re-weighting keeps the door open for engagement with poor ESG performers.

Typically, ESG investment strategies rely on companies' current ESG profiles and often fail to reward companies for making progress. Complementing the static ESG profile metric with one that measures ESG momentum may enable investors to incentivize companies that have improved their ESG profiles. Further, several studies have indicated that ESG momentum was associated with financial outperformance, as highlighted in our recent research (Nagy et al. 2015; Melas et al. 2016).

CONSTRUCTING THE INDEX

We present an approach to constructing an index that aims to target those companies demonstrating a robust ESG profile and positive ESG trend as they maintain minimal exclusions. We illustrate such a strategy using the MSCI ESG Universal Index as a practical example of this approach.

The approach relies on three steps. First, we identify the worst ESG performers, those companies that likely are not acceptable for institutional ESG investors to invest in, as a bare minimum. Second, we define a set of simple and transparent metrics aimed at maintaining a robust current ESG profile and a positive trend. Third, we re-weight securities using a combined ESG score to create the MSCI ESG Universal Index.⁴

DEFINING A MINIMAL COMMON CORE FOR EXCLUSIONS

Investors typically have different definitions of unacceptable investments. Some may consider excluding companies because of their own ethical beliefs. Others might focus on excluding companies to avoid reputational risks. In an attempt to limit the number of exclusions, we focused on identifying a common core among institutional investors for exclusion. That exclusionary core includes companies involved in controversial weapons and violations of international norms. Other exclusions such as companies that are engaged in tobacco or alcohol, or those that are poorly ESG-rated (i.e., rating of CCC by MSCI ESG Research),⁵ were considered and discussed during consultations with market participants but not implemented due to a lack of consensus among consultees.

The following exclusions were considered:

Controversial weapons: Companies with involvement in land mines, cluster munitions, depleted uranium, and biological and chemical weapons were excluded from the prospective index universe. In the MSCI ACWI Index, there were seven companies involved in controversial weapons accounting for 0.71-percent weight as of September 2017 (see table 1).

International norms: Companies that have been found in violation of international norms (i.e., those that have faced very severe and often structural controversies pertaining to ESG issues) were excluded.⁶ In the MSCI ACWI Index, as

of September 2017, 36 securities faced very severe ESG-related controversies accounting for 3.15 percent of the index weight (see table 2).

TILTING SECURITIES' WEIGHTS

In an attempt to increase the index's exposure to high ESG performers, we decided to move away from a free-float market-cap-weighted index and tilt securities' weights based on both ESG rating and ESG trend. The rationale for using both signals combined was to maximize the weight of those companies that are maintaining a strong current

ESG profile and those companies that have improved their ESG performance.

ESG rating: Using the seven-point MSCI ESG Ratings scale, which measures the ability of an issuer to manage key medium- to long-term risks and opportunities arising from ESG factors relative to industry peers, we assign an ESG score to each company in the parent universe.

- Leaders (AAA and AA) = 2
- Neutral (A, BBB, BB) = 1
- Laggards (B and CCC) = 0.75

Table 1

COMPANIES INVOLVED IN CONTROVERSIAL WEAPONS

Company	Type of involvement
THE BOEING COMPANY	Cluster Munitions
LOCKHEED MARTIN CORPORATION	Cluster Munitions
GENERAL DYNAMICS CORPORATION	Cluster Munitions Depleted Uranium
HANWHA CORP	Cluster Munitions Landmines
HANWHAT TECHWIN CO., LTD.	Cluster Munitions
LARSEN AND TOUBRO LIMITED	Cluster Munitions
TEXTRON INC.	Cluster Munitions Landmines
KOREA AEROSPACE INDUSTRIES, LTD.	Cluster Munitions

Source: MSCI ESG Research as of September 2017

Table 2

EXAMPLES OF COMPANIES THAT FACED VERY SEVERE ESG CONTROVERSIES

Name	Sector	Controversy Type
WELLS FARGO & CO.	Financials	Governance
ROYAL DUTCH SHELL PLC	Energy	Environment & Human Rights
WAL-MART STORES, INC.	Consumer Staples	Governance & Labor Rights
CHEVRON CORP.	Energy	Environment & Human Rights
BHP BILLITON LIMITED	Materials	Environment & Human Rights
GENERAL MOTORS CO.	Consumer Discretionary	Customers
ENI S.P.A.	Energy	Governance
MONSANTO CO.	Materials	Environment
VALE S.A.	Materials	Environment & Human Rights
VOLKSWAGEN AG	Consumer Discretionary	Governance & Environment

Source: MSCI ESG Research as of September 2017

Table 3

PERFORMANCE OF MSCI ACWI ESG UNIVERSAL SIMULATED HISTORY INDEX

Key Metrics	MSCI ACWI Index	MSCI ACWI ESG Universal Index
Total Return* (%)	9.5	9.6
Total Risk (%)	13.3	13.1
Return/Risk	0.72	0.73
Sharpe Ratio	0.69	0.71
Active Return (%)	0.0	0.1
Tracking Error (%)	0.0	1.0
Information Ratio	NaN	0.12
Historical Beta	1.00	0.99
Number of Stocks***	2,452	1,921
Turnover** (%)	2.8	14.1
Price to Book***	1.9	2.0
Price to Earnings***	16.8	16.8
Dividend Yield*** (%)	2.6	2.7

Period: November 30, 2009 to September 29, 2017
 *Gross returns annualized in USD
 **Annualized one-way index turnover over index reviews from November 2014
 *** Monthly averages
 Source: MSCI

(for ESG rating of A) × 1.25 (for Positive Trend) = 1.25.

- If the ESG Rating of the company stays stable at B, then the company's Combined ESG score = 0.75 (or ESG rating of A) × 1 (for Flat Trend) = 0.75.
- If the ESG Rating of the company changes from AA to AAA, then the company's Combined ESG score = 2 (for ESG rating of AA) × 1.25 (for Positive Trend) = 2.5. Because the Combined ESG score is greater than 2.5, it is winsorized to 2.

In an attempt to fully represent the effect of ESG signals, we decided not to include any constraint on sector, country, or region weights. Nor did we apply optimization techniques to maintain a low tracking error to the parent index.

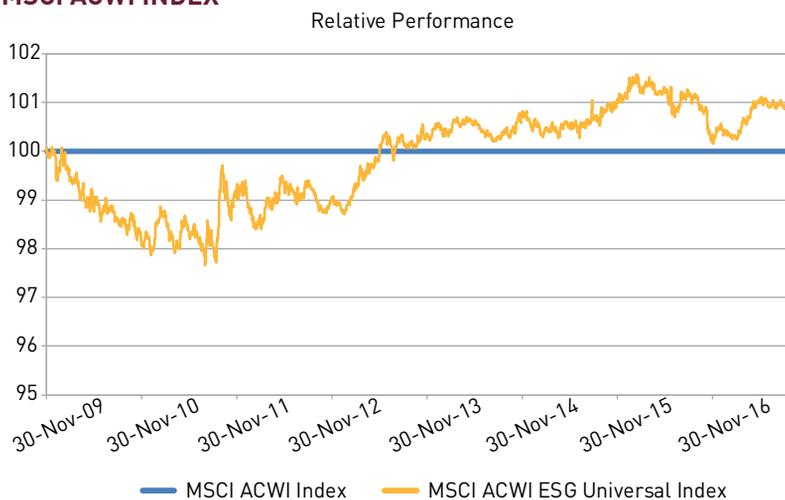
INDEX CHARACTERISTICS

Overall, the resulting MSCI ESG Universal Index demonstrated superior risk and return characteristics within a reasonable tracking error during the backtested time period of November 2009 through September 2017. At the same time, it demonstrated notable improvement in the ESG profile relative to the parent benchmark. The MSCI ESG Universal Index is an example of an index that can be used by large asset owners at a policy level for the purpose of strategic asset allocation or at an investment strategy implementation level in accordance with their ESG integration goals.

In table 3 and figure 2, we use back-tested data to show that the MSCI ESG Universal Index outperformed the MSCI ACWI Index by 10 bps per annum over an eight-year period.⁷ The MSCI ESG Universal Index also outperformed the MSCI ACWI Index on a risk-adjusted basis with an information ratio of 0.12 during that same period. The active exposures on factors, countries, and sectors contributed to the overall out-performance of the MSCI ESG Universal Index and varied from the index only modestly.⁸

Figure 2

PERFORMANCE OF MSCI ACWI ESG UNIVERSAL INDEX VS. MSCI ACWI INDEX



Source: MSCI

ESG trend: Using MSCI ESG Trend, which indicates the ESG rating change from prior period to current, we assign an ESG trend score to each company in the parent universe.

- Positive Trend = 1.25
- Flat Trend = 1
- Negative Trend = 0.75

Combined ESG score: Combining both ESG rating and ESG trend, we assign

an ESG score to each company: ESG combined score = ESG rating score × ESG trend score. The combined ESG Score is winsorized between 2 and 0.5. Winsorization is required to prevent a drop in weight of an AAA-rated company and an increase in weight of a CCC-rated company. For example:

- If the ESG Rating of the company changes from B to A, then the company's Combined ESG score = 1

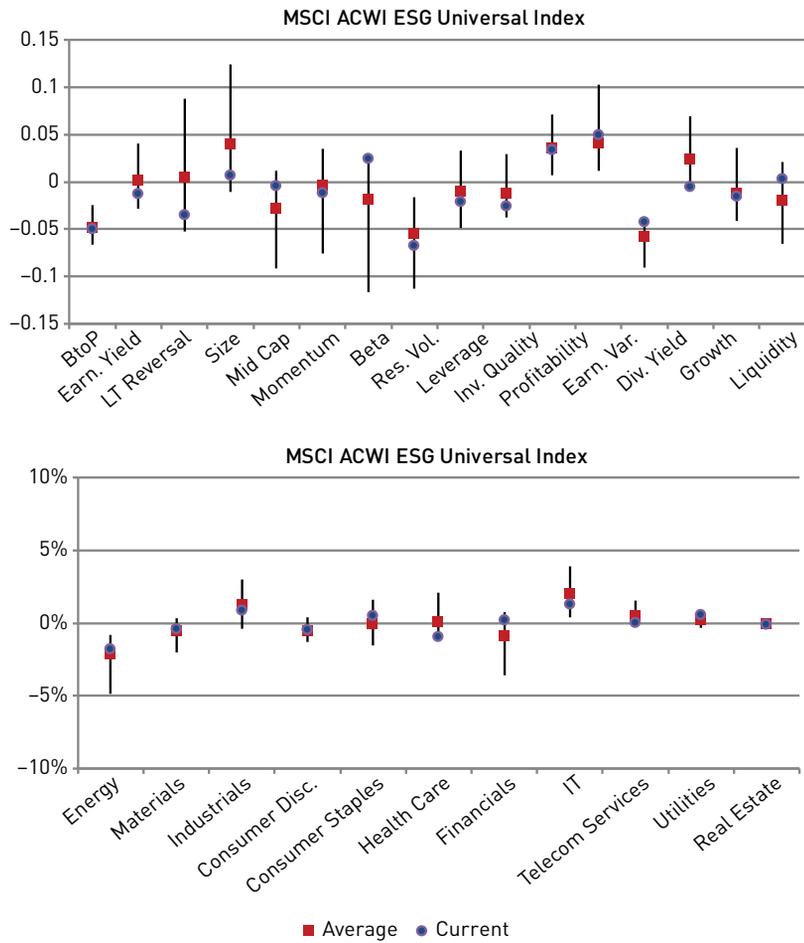
Overall, the ESG Universal Index retained the style characteristics of the MSCI ACWI Index. The active style factor exposures are very small, within ± 0.1 standard deviations. Although the active factor exposures are small, we can see in figure 3 that, when analyzed using the MSCI GEM LT model, the MSCI ESG Universal Index was overweight on Profitability and Investment Quality and underweight on Earning Variability. The MSCI ESG Universal Index was also less weighted in volatile stocks (underweight on Residual Volatility) compared to the MSCI ACWI Index. We can see in figure 4 that both exposures, i.e., overweight on quality factors and underweight on volatile stocks, contributed positively to the out-performance of MSCI ESG Universal Index. Figure 4 also shows that the active exposure of the ESG Universal Index to countries, industries, and style factors result in active outperformance of 75 bps per annum over the backtest period.

In terms of sector exposures, except in the case of the GICS® Energy Sector, the MSCI ESG Universal Index maintained very similar exposure compared to the MSCI ACWI Index (see figure 3).⁹ Because the MSCI ESG Rating is a sector-relative metric, sector exposures were maintained after reweighting of constituents.

In terms of geographical exposure (see figure 5), the size of active exposures was more pronounced. The MSCI ESG Universal Index was underweight in emerging markets (EM) before 2012 because a large proportion of companies in the MSCI Emerging Markets Index were not included in MSCI ESG Rating coverage universe. The overall weight of EM stocks increased in the MSCI ESG Universal Index from June 2012 through September 2016. The active exposure to countries was relatively small; the MSCI ESG Universal Index maintained a small overweight in U.K. securities and underweight in U.S. securities.

Figure 3

STYLE AND INDUSTRY EXPOSURE OF ESG UNIVERSAL INDEX, DECEMBER 2009– SEPTEMBER 2017



Source: MSCI

From an ESG perspective, the MSCI ESG Universal Index demonstrated an enhanced ESG profile compared to the MSCI ACWI Index as of September 29, 2017, as shown by the following:

Higher exposure in ESG leaders: MSCI ESG Universal Index included 37.3 percent of ESG leaders as opposed to 21.9 percent in the MSCI ACWI Index. In addition, the MSCI ESG Universal Index demonstrated better performance on each of the underlying E, S, and G pillars (see figure 6).

Higher exposure to companies with a positive ESG trend: About one-fifth (19.1 percent) of the MSCI ESG Universal Index constituents were companies that had experienced an ESG

upgrade, as opposed to 18.4 percent in the MSCI ACWI Index. The MSCI ESG Universal Index was also less exposed to companies that had experienced an ESG downgrade, which accounted for 5.4 percent of the MSCI ESG Universal index versus 8.4 percent for the MSCI ACWI Index.

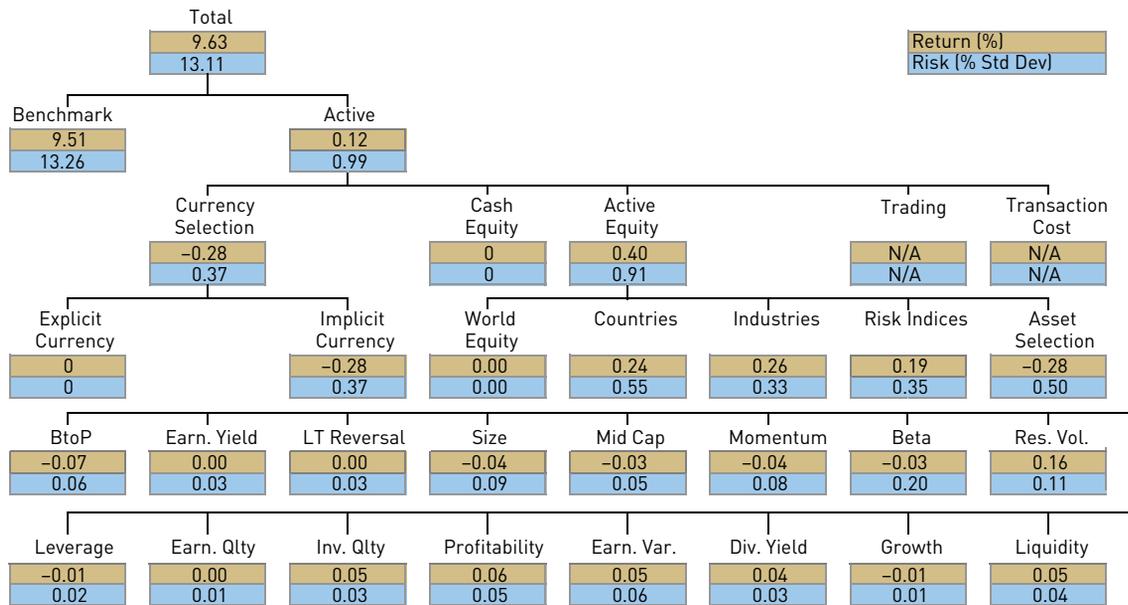
No exposure to ESG worst performers: These companies are defined by their involvement in controversial weapons and companies in breach of international norms.

Lower carbon footprint: MSCI ESG Universal Index was 11-percent less carbon-intensive than the MSCI ACWI Index.

Figure 4

PERFORMANCE ATTRIBUTION OF MSCI ESG UNIVERSAL INDEX USING MSCI GEM LT

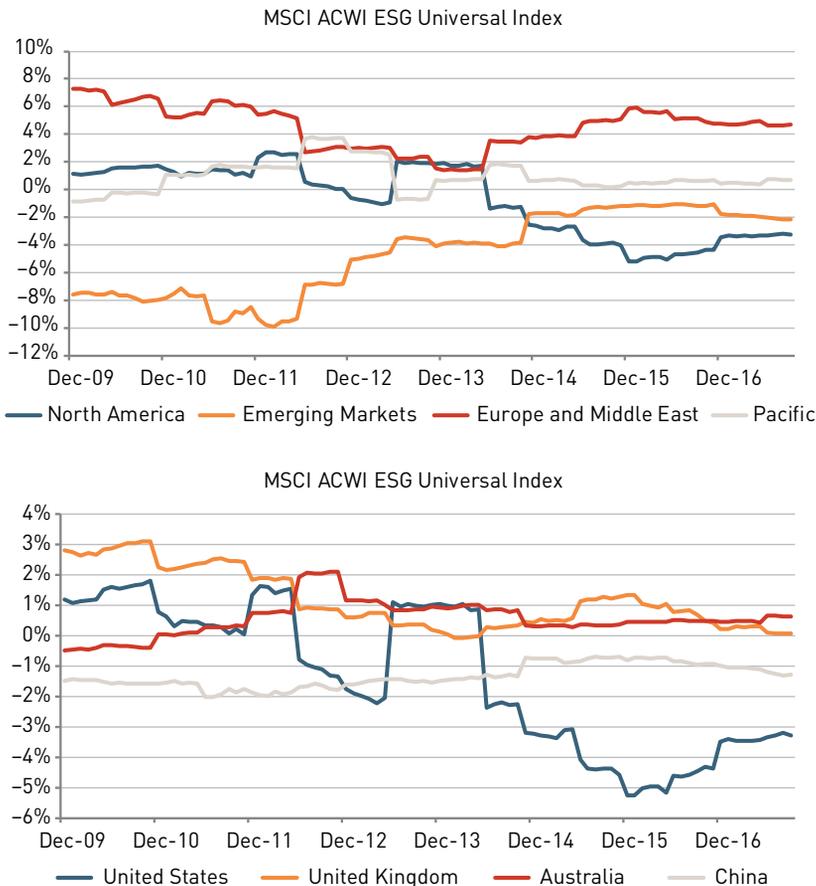
Index: MSCI ACWI ESG Universal Index Period: November 30, 2009 to September 29, 2017 Annualized Gross Returns



Source: MSCI

Figure 5

REGION AND COUNTRY EXPOSURE OF THE MSCI ESG UNIVERSAL INDEX



Source: MSCI

CONCLUSION

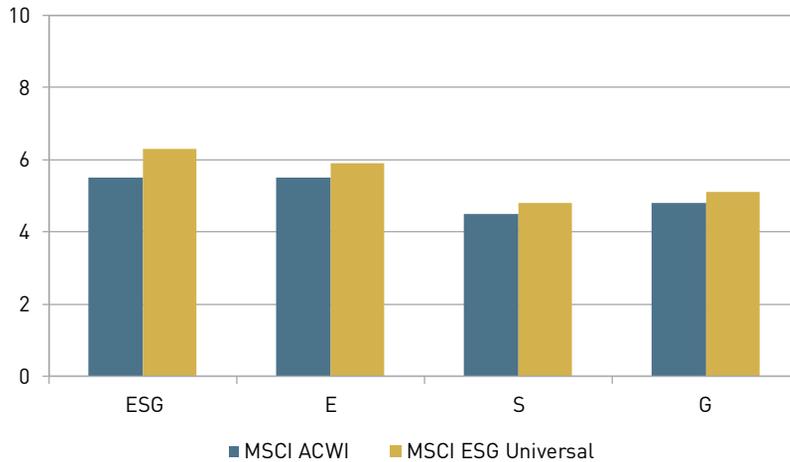
Institutional investors are searching for ways to account for ESG issues in their investment decision-making processes as a way to enhance long-term returns, mitigate long-term risks, or advance societal objectives. Many large asset owners may need to enhance their exposures to ESG for these reasons while still maintaining a broad and diversified universe in which to invest. In this article, we outlined a scalable approach to increase exposure to high ESG performers and maintain minimal exclusions.

We defined an index methodology that aims first to identify the minimal core for exclusion among investors and second, tilt the weight of companies demonstrating leading ESG practices and positive ESG momentum. The resulting index demonstrated superior risk and return characteristics with a reasonable tracking error using backtested data during an eight-year period. It also demonstrated higher ESG scores overall and on each E, S, and G pillar.

As more investors look to integrate ESG considerations into their investment decisions, new approaches that thoughtfully

Figure
6

ESG PERFORMANCE COMPARISON, MSCI ACWI VS. MSCI ESG UNIVERSAL, SEPTEMBER 2017



Source: MSCI

balance both short- and long-term ESG and financial considerations can help make ESG investment strategies more appealing to a broader and increasingly mainstream audience. ●

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ENDNOTES

1. Simulated or backtested data is not indicative of current or future returns, which may differ materially. Please see the disclosures at the end of this article.

- See <https://www.unpri.org/about>.
- A universal owner is defined as a long-term owner of a diversified investment portfolio that is spread across the entire market or all markets. As a result, universal owners collectively own a share of the economy and are effectively tied into this share in the longer term. They depend on the global markets to produce economic growth on a sustainable basis and thus manage their longer-term risk through asset allocation and active ownership practices.
- For more details on the methodology, please see the MSCI ESG Universal Index Methodology at <https://www.msci.com/index-methodology>.
- For more details on the MSCI ESG Rating methodology, see https://www.msci.com/eqb/methodology/meth_docs/Executive_Summary_MSCI_ESG_Ratings_Methodology.pdf.
- International norms include the Universal Declaration of Human Rights, the International Labour Organisation Declaration on Fundamental Principles and Rights at Work, and the United Nations Global Compact. For more information on the definition of MSCI ESG controversies, please refer to <https://www.msci.com/esg-integration>.
- Reference period is limited by data availability for certain ESG metrics.
- This analysis used backtested data. Backtested performance is not actual performance but is hypothetical. There are frequently material differences between backtested performance results and actual results subsequently achieved by any investment strategy. Such results are not indicative of future results or performance, which also may differ materially. Please see the disclosures at the end of this article.
- The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and Standard & Poor's. "Global Industry Classification Standard (GICS)" is a service mark of MSCI and Standard & Poor's.

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Continued on page 63 →

ESG STRATEGIC TILTING

Continued from page 47

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