EXCERPT

The following is an excerpt from the FUND TRANSPARENCY: EXPLORING THE ESG QUALITY OF FUND HOLDINGS paper published by MSCI ESG Research in March 2016.

You can obtain a copy of the full report from ESG Manager or by contacting ESG Client Service at **esgclientservice@msci.com**.

FUND TRANSPARENCY: EXPLORING THE ESG QUALITY OF FUND HOLDINGS

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EXECUTIVE SUMMARY

In the next two decades, an estimated USD 30 trillion will be transferred between baby boomers and millennials in the US, and women are estimated to control more than two thirds of investment decisions in the retail space.[1] These same investors are likely to be younger and more likely to believe investments are a method to express social, political, or environmental values than their baby boomer counterparts.[2] To solve for the next generation of investors' demands for greater transparency around the ESG characteristics of their investments, MSCI ESG Research is introducing the concept of ESG Quality with the calculation of a Fund ESG Quality Score across over 21,000 mutual funds and ETFs. Funds with higher scores are comprised of companies managing their ESG risks relative to industry peers.

KEY FINDINGS[3]

- We found that **government bond funds and European equities scored highest** on ESG Quality, while **small-cap US, emerging market equity, and high yield bond funds scored lowest**. Variation also existed within peer sets – for example, we found that Target Date funds with shorter time horizons tended to exhibit higher ESG quality, while **longer-horizon funds exhibited lower ESG quality**.
- We found that **146 diversified US equity funds** had over 10% exposure to companies owning high-impact fossil fuel reserves like coal or oil sands at potential risk should climate regulations change.
- Meanwhile, **1,051 US equity funds (USD 825 bn NAV) were virtually 'fossil fuel free',** even though very few of these funds – if any – were marketed as such.
- We identified **3,158 funds across asset classes** with significant exposure to sustainable impact themes (like alternative energy, health care, nutrition), representing nearly **USD 1.8 trillion in net asset value**. Of these, only 14% were identified by MSCI ESG Research as specialized thematic or sector funds.
- **Over 6,900 equity funds representing 46% of equity funds analyzed had exposure to companies that manufacture controversial weapons**, such as cluster bombs and land mines. The average exposure to these companies across all funds was 2.9%.

[1] Accenture. The "Greater" Wealth Transfer – Capitalizing on the Intergenerational Shift in Wealth, 2012

[2] US Trusts' Insights on Wealth and Worth 2014

[3] All fund data used was provided by Lipper and are as of March 1, 2016. US equity funds defined by Lipper as Equity US, Equity US Income, and Equity US Sm&Mid Cap. MSCI defined "Fossil fuel free" as less than 1% of fund allocations to companies with fossil fuel reserves and "significant" sustainable impact exposure as greater than or equal to 10%.

INTRODUCTION

In 2014, there were 10,671 ETFs[4] and mutual funds[5] combined in the US alone, up more than 24% since 2004. To follow Peter Lynch's advice, "know what you own and why you own it"[6], is increasingly difficult, particularly for a new generation of investors with demand for instant access to information that meets their specific preferences. The convergence between demographic, technological, and ideological shifts, particularly for wealth investors, is likely at least partially responsible for the shift in demand for more granular portfolio transparency.

However, not all transparency is created equal. As technology enables investors to both ask deeper questions of their managers and tailor investments to meet their specific preferences, providing new depths of information will take new tools. Where wealth advisors have traditionally relied on definitions of risk tolerance, time horizon, and liquidity requirements with, potentially, some market capitalization, geographic market exposure, or return preferences, ESG data can open the door for evolution in decision-making processes to create a wider degree of options to meet investor preferences.

MSCI ESG Fund Metrics are designed to help clients identify ESG risks and opportunities of their funds and compares them with industry peers and benchmarks. The scores and metrics provide insights across three dimensions:

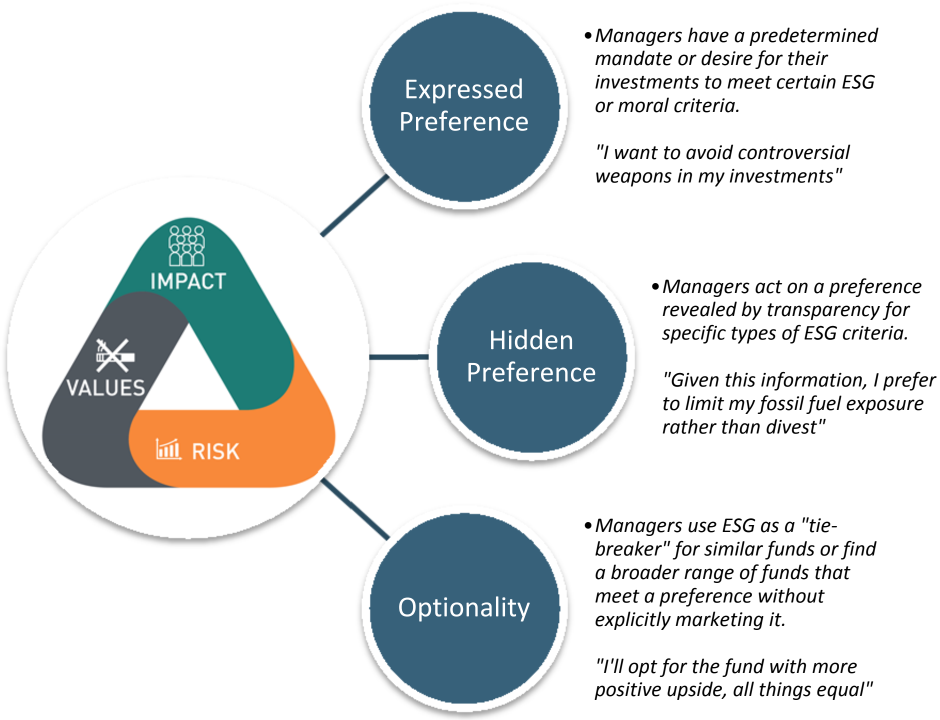
- Sustainable Impact; to measure fund exposure to companies that address core environmental & social challenges,
- Values Alignment; to screen funds for investments that align with ethical, religious or political values
- Risk; to understand fund exposure to ESG-related risks,

[4] http://www.icifactbook.org/fb_ch3.html

[5] http://www.statista.com/statistics/255590/number-of-mutual-fund-companies-in-the-united-states/

[6] http://www.marketwatch.com/story/peter-lynch-25-years-later-its-not-just-invest-in-what-you-know-2015-12-28

EXHIBIT 1: ESG TRANSPARENCY FRAMEWORK



UNCOVERING PREFERENCE BY SOLVING THE TRANSPARENCY PROBLEM

ESG-themed funds may already meet the needs of some investors who wish to align their investments with their worldview, whether regarding the materiality of ESG trends, the role of markets in financing solutions to world problems, or the alignment of investments with ethical or religious values. However, a deficit of objective measurements of the ESG characteristics of fund holdings leaves investors facing several important gaps.

Investors with expressed preferences have limited visibility in evaluating whether stated ESG strategies translate into practice, or may find their options limited and may require additional tools to identify eligible opportunities. A manager could ask, “does this fund successfully avoid companies generating revenue from tobacco?” Other investors may have hidden preferences, wherein visibility uncovers an investment strategy or tilt the investor didn’t realize was possible. To wit, a manager with a desire to divest from fossil fuels could find an alternate method to limit fossil fuel exposure, one they didn’t realize was possible. While each of these cases illustrate how greater transparency can create a new decision point for a wealth manager, transparency also serves as a tool for creating a wider pool of options where product availability may be a limitation (for investors with preferences) or as a differentiator for investors (for investors without preferences).

While the growth of ESG investing continues apace for institutional investors – estimated by the Global Sustainable Investment Association (GSIA) at 61% globally from 2012 to 2014, (USD 13 trillion to USD 21 trillion) – the product options and reporting tools for wealth investors have to date been limited. The GSIA estimated that the number of US mutual funds explicitly using environmental, social, and governance factors stood at 456 by year end 2014[7], which would represent just 5% of total available mutual fund product in the US according to the Investment Company Fact Book.[8] ESG data transparency may serve to backfill this product option gap simply by "knowing what you own", and more importantly, what you could.

CREATING A USABLE TOOL FOR INSTITUTIONAL INVESTORS

To meet both the growing demand for data transparency and tools to improve reporting and uncover investor preferences, MSCI ESG Research developed a scoring and metrics-based data set to communicate the overall "ESG quality" and specific ESG characteristics of a given fund's underlying holdings. In the process of doing so, we conducted client consultations to understand use cases and concerns. Exhibit 2 highlights the clients we met by type and location, and Exhibit 3 highlights a summary of our consultations.

[7] http://www.ussif.org/Files/Publications/GSIA_Review.pdf

[8] http://www.icifactbook.org/pdf/2015_factbook_1.pdf

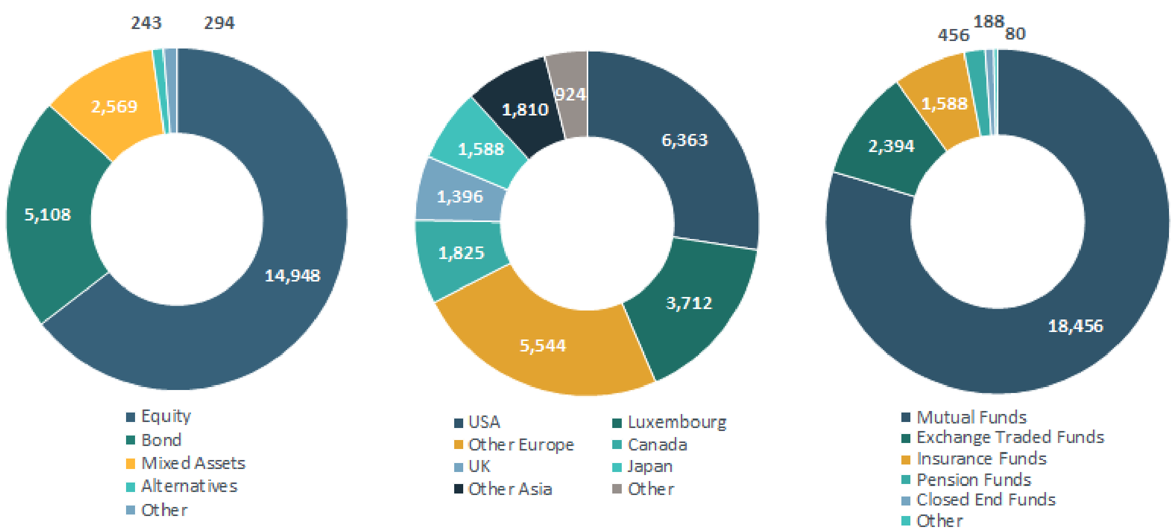
MEASURING THE ESG QUALITY OF FUNDS

We introduce MSCI's **Fund ESG Quality Score**, which aggregates issuer-level ESG scores to provide an analysis of the **overall ESG Quality of a fund's underlying holdings**.

*We define **ESG Quality** as the **ability of an issuer to manage key medium- to long-term risks and opportunities arising from environmental, social, and governance factors**.*

We analyzed the ESG exposures of over 21,000 funds, all of which had at least ten holdings, 65% ESG ratings coverage, and holdings data provided within the last 12 months. The average net asset value of funds analyzed was USD 469 million and the maximum was USD 175 billion. In total, mutual funds and ETFs constituting over USD 6.6 trillion were analyzed.[9]

EXHIBIT 4: THE UNIVERSE OF FUNDS IN COVERAGE



Source: MSCI ESG Research, results as of 3/1/2016, n = 23,164 funds. Coverage is subject to change based on the availability of holdings data and matching ESG scores.

[9] Data provided by Lipper as of March 1, 2016

ESG QUALITY OF HOLDINGS VS ESG QUALITY OF MANAGER

Transparency around the ESG Quality of a fund's holdings may be used by institutional investors to complement their evaluation and due diligence of fund managers, for example by providing them with objective tools and meaningful comparisons to facilitate a concrete dialogue around a manager's approach toward ESG incorporation.

However, ESG Quality Scores **do not** provide an indication of the quality of a fund manager's ESG strategy, capabilities, process, or intentionality. A high ESG Quality Score may be accidental and may not indicate a consistent ESG integration approach or continued high ESG quality of holdings going forward.

EXHIBIT 10: MANAGER VS. HOLDINGS ESG QUALITY

MANAGER ESG QUALITY*

- ESG capabilities, experience, processes
- ESG integration strategy
- ESG track record of manager
- Engagement strategy

** Not covered by MSCI's ESG Fund Metrics*

HOLDINGS' ESG QUALITY

- ESG Quality of underlying holdings:
- Ability of underlying holdings to manage medium- to long-term risks and opportunities related to ESG issues

Furthermore, it is not always the case that an investor's objectives are best met by a high ESG quality portfolio. For example, it is possible that high ESG quality names are overvalued and would not meet an investor's financial objectives. Exhibit 11 illustrates archetypes of common ESG investment approaches and suggests how they might be reflected in the ESG Quality scores and supplemental data.

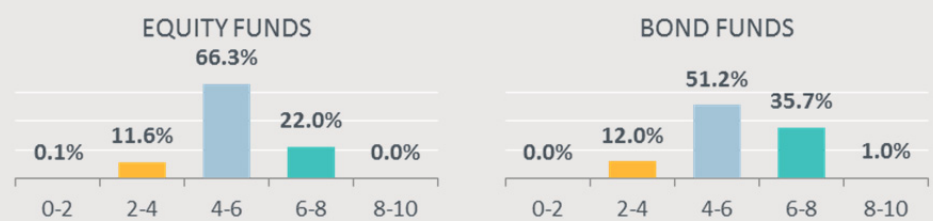
EXHIBIT 5: UNDERSTANDING MSCI'S ESG QUALITY SCORE

The **ESG Quality Score** measures the ability of underlying holdings to manage key medium- to long-term risks and opportunities arising from environmental, social, and governance factors.

SCALE: **0-10 Score**

8-10	**Very high ESG quality** – underlying holdings largely rank best in class globally based on their exposure to and management of key ESG risks and opportunities
6-8	**High ESG quality** – underlying holdings largely rank above average globally based on their exposure to and management of key ESG risks and opportunities
4-6	**Average ESG quality** – underlying holdings rank near the global peer average, or ESG quality of underlying holdings is mixed
2-4	**Low ESG quality** – underlying holdings largely rank below average globally based on their exposure to and management of key ESG risks and opportunities
0-2	**Very low ESG quality** – underlying holdings largely rank worst in class globally based on their exposure to and management of key ESG risks and opportunities

ESG Quality Score Distribution



Source: MSCI ESG Research and Lipper, as of 3/1/2016, n = 14,949 equity funds, 5,108 bond funds.

Methodology: Weighted average ESG Score of underlying issuers. Short positions, cash, and unrated positions are excluded from consideration in the overall score.

Percentiles: Percentiles are calculated based on the fund's ESG Quality Score relative to all global funds receiving a score, as well as relative to fund's peer set as determined by the Lipper Global category.

Underlying Issuer-Level ESG Scores

- 0-10 score relative to global same-industry peers
- Data-driven model measures exposure to and management of Key ESG Issues covering the following themes:
  - **Environment**: Climate Change, Natural Capital, Pollution & Waste, Env Opportunities
  - **Social**: Human Capital, Product Liability, Stakeholder Opposition, Soc Opportunities
  - **Governance**: Corporate Governance, Corporate Behavior
- Based on industry-specific weighting of Key ESG Issues
- Updated annually or when triggered by a significant event
- Covers over 6,000 issuers (including 198 sovereign countries), and 280,000 securities

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