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# Barclays MSCI ESG Fixed Income Indices

A New Market Standard for Environmental, Social, and Governance Investing



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### Barclays MSCI ESG Fixed Income Index Series

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Remy Briand +41 22 817 9303 remy.briand@msci.com Barclays, a global leader in fixed income indexing, and MSCI, a leading provider of ESG (environmental, social, and governance) research, have collaborated on the development of a new family of rules-based fixed income benchmark indices that incorporate measures of ESG risk and involvement.

This new Barclays MSCI ESG Fixed Income Index Series includes a range of investmentgrade Aggregate and corporate index benchmarks reflecting three different ESG investment themes.

- Barclays MSCI Socially Responsible (SRI) Indices negatively screen out issuers from existing Barclays indices that may be involved in business lines or activities that are in conflict with investment policies, values, or social norms. These indices use MSCI's Business Involvement Screening Research (BISR) to identify exposure to a number of different screened issues.
- Barclays MSCI Sustainability Indices positively screen issuers from existing Barclays indices based on MSCI's ESG Ratings, which are a "best in class" assessment of how well an issuer manages ESG risks relative to its industry or peer group. ESG ratings are available for corporate, sovereign, and government-related issuers. The minimum threshold applied to Barclays flagship indices is an ESG rating of BBB or better.
- Barclays MSCI ESG Weighted Indices use MSCI ESG ratings and MSCI ESG ratings momentum to overweight/underweight issuers within an existing Barclays index. These indices include the full universe of Barclays index eligible securities and then apply tilts to the natural market value weights in favor of higher rated/positive momentum issuers and against lower rated/negative momentum issuers.

Barclays MSCI ESG Fixed Income Indices are available for Global, USD, EUR, and GBP fixed-rate, investment-grade bond universes.

<sup>&</sup>lt;sup>1</sup> The authors wish to acknowledge others from both Barclays and MSCI who were involved in the collaboration and development of this index family including (but not limited) to Tatyana Perlina, Tony Marenghi, Jack Lau, Rod Martin, Sanjay Rao, Eric Moen, Hewson Baltzell, Mike Langlais, and Sergio Schuchner

### Introduction

### **Defining ESG Investing**

"ESG" is an investment approach that takes into account the <u>environmental</u>, <u>social</u> and <u>governance</u> impact of investment decisions. ESG approaches range from screening out companies involved in specific restricted business activities to a more rigorous approach where investors incorporate ESG data as an integral component of their investment analysis, allocation, risk measurement, security selection, and performance attribution process.

### Growth of ESG as an Investment Theme

A number of factors have played a role in the increasing use of ESG criteria in global investment policies and processes, ranging from increased availability of data to a fundamental shift in they way investors think about responsible investing.

### 1. More ESG information is available to investors

One reason for increased attention is simply that more and better ESG information is becoming available to investors. Companies are disclosing more information on their extrafinancial impacts due to investor pressure and multi-stakeholder initiatives such as the Global Reporting Initiative (GRI). Third-party ESG research, available through both mainstream brokers and specialized research providers, has improved in quality, depth, and scope of coverage. For example, the number of issuers covered by MSCI's Intangible Value Assessment (IVA) ESG ratings has increased from around 1,000 issuers in 2003 to well over 5,000 issuers in 2013. Previously restricted to equities, ESG research and ratings are becoming increasingly available across other asset classes, such as fixed income.

### 2. Growing recognition of ESG factor materiality

There is mounting evidence that ESG factors are becoming more material to companies and investors based on stronger market reactions to short-term ESG events, such as environmental catastrophes or corruption scandals<sup>2</sup>. Evolving regulations to address externalities, ranging from carbon taxes and restrictions on toxic chemicals to stronger anti-bribery and privacy laws, are causing previously externalized impacts to become internalized by companies and investors. Similarly, the far-reaching consequences of the 2008 financial crisis have created mounting public pressure for corporate responsibility within several jurisdictions.

### 3. Increased formalization of accepted ESG market norms

Although far from standardized, accepted market norms are emerging around the meaning of ESG or "responsible investment" through a number of channels. A number of voluntary codes and principles have gained traction whereby investors have formally committed to integrate ESG factors throughout their investment process. For example, 1,100 investors with over USD34trn in assets are currently signatories to the UN Principals for Responsible Investing (PRI)<sup>3</sup>, demonstrating a significant expansion of the interest in integrating ESG factors into the investment process.

As signatories to the PRI, these investors publicly acknowledge the importance of ESG issues and their commitment to incorporating six ESG principles into their investment process. While the implementation of a PRI commitment remains investor specific and less well defined, it does not detract from the acceptance of a widespread aspirational norm of formal ESG integration.

1,100 investors with over \$34trn in assets are signatories to the UN Principals for Responsible Investing (PRI)

<sup>&</sup>lt;sup>2</sup> Dinah A. Koehler, Eric J. Hespenheide, "Finding the Value in Environmental, Social, and Governance Performance," Deloitte Review Issue 12, 2013.

<sup>&</sup>lt;sup>3</sup> United Nations Principles for Responsible Investment, www.unpri.org

Institutional investors have a duty to act in the best long-term interests of their beneficiaries. In this fiduciary role, they believe that environmental, social, and corporate governance (ESG) issues can affect the performance of investment portfolios (to varying degrees across companies, sectors, regions, asset classes and through time). They also recognize that applying these Principles may better align investors with broader objectives of society.

- UN Principles for Responsible Investment

### The Six Principles of Responsible Investment<sup>4</sup>

- 1. Incorporate ESG issues into investment analysis and decision-making processes.
- 2. Be active owners and incorporate ESG issues into our ownership policies and practices.
- 3. Seek appropriate disclosure on ESG issues by the entities in which we invest.
- 4. Promote acceptance and implementation of the Principles within the investment industry.
- 5. Work together to enhance our effectiveness in implementing the Principles.
- 6. Report on our activities and progress towards implementing the Principles.

ESG market norms are also now being recognized by other participants in the investment process. Pushed by asset owner demand, investment consultants have more formally started to track the ESG practices of asset managers, and many have set up ESG specialist teams.

ESG-related questions are also becoming increasingly standard and more specific in Requests for Proposals (RFPs), which are used in the investment manager selection and due diligence process. For example, questions often now ask for details on how ESG fits into the overall management plan, how ESG research or ESG benchmarks are being used, and the scope of ESG coverage (eg, across asset classes). Asset owners are also requiring formalized reporting, monitoring, and evidence of implementation of ESG principals.

### 4. Higher degrees of accountability expected from fiduciaries

Since the 2008 financial crisis, fiduciaries have demanded a higher threshold of accountability and transparency, and a better understanding of portfolio risk by investment managers. Losses incurred during the crisis have led fiduciaries to become more active and vigilant with their investments, and require greater levels of disclosure from asset managers regarding their holdings and risk exposures.

### 5. Rising investor activism

Investor activism has also increased, particularly surrounding ESG issues. According to Institutional Shareholder Services Inc. (ISS), the average 'for' votes on ESG proposals has tripled over the last two decades from 7.4% in 1999 to 20.6% in 2011.

Required due diligence on how an asset manager manages and monitors ESG risk is becoming much more specific in investment manager searches and RFPs

<sup>4</sup> http://www.unpri.org/about-pri/the-six-principles/

### 6. Growing acceptance of "universal owner" principles

Evidence of a shift in "world view" among asset owners has also been observed. Through Project Telos, Towers Watson and Oxford University surveyed 24 large investment institutions and eight Chief Investment Officers, finding that 59% believe ESG factors will impact short-term investment risks/returns. 100% of respondents in the survey believe that ESG factors will impact long-term investment risks/returns, 91% believe the market does not accurately price in ESG externalities, and 91% believe investors are over-sensitive to short-term risk factors<sup>5</sup>.

### 7. ESG migration across asset classes, especially into fixed income

There has been increased recognition that ESG issues are a cross asset consideration. A more established, yet still growing, investment theme in equity investing, ESG principles are growing in acceptance and formal usage for the fixed income asset class as well. With the size of the fixed income market far exceeding that of the equity market and a much more diverse set of issuers to evaluate, the overall volume of assets managed with ESG consideration is expected to grow considerably from this migration to fixed income alone.

### The ESG Opportunity

Macro level asset class shifts in ESG participation have spurred the usage, market understanding, and integration of ESG considerations in global investing, but any formalization of ESG investment standards is still in its early stages. Investors who are able to understand, quantify, and manage ESG risks may hold a strategic advantage over competitors that are unable to do so, offering an edge in their ability to attract assets, outperform their peer group and identify potentially "hidden" risks.

The Barclays MSCI ESG Fixed Income family is intended to serve established fixed-income investors that already incorporate ESG factors within their investment process, as well as investors that are beginning to expand or initiate their scope of ESG analysis for fixed income. How investors choose to use ESG data remains an investor-specific consideration, reflective of individual investment policies, firm-wide values, return objectives, and risk appetites, but this index family will offer a degree of market standardization that is currently absent in the asset class.

Investors who are able to understand, quantify, and manage ESG risks hold a strategic advantage over competitors that are unable to...in their ability to attract assets and in their ability to outperform their peer groups

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### Integrating ESG into Fixed Income Investing

### **Investor Perspectives on ESG issues**

### History of ESG Investing

The origins of modern ESG investing date back to the early 1970s, when investors began to engage with and divest from companies whose business practices were not in line with their ethical, religious, or political values. Under the name of 'Socially Responsible Investing' (SRI), this approach expanded over time to encompass inclusion- or exclusion-based approaches that set extra-financial considerations alongside financial considerations.

In recent years, a growing number of investors have begun to incorporate ESG factors into their traditional investment processes, based on the underlying thesis that ESG factors can have a material impact on financial risk and return. A number of voluntary codes and principles have gained traction, where investors commit to integrate ESG factors throughout the investment process.

### Values-Based Investing

A values-based approach to ESG issues is used to align investment portfolios with a particular investor's beliefs and values but is generally not driven primarily by financial considerations. These values can be based on religious views, international norms, institutional codes of conduct, legislative requirements, perception of controversial business activities, or political pressure. This approach has been historically associated with negative screening or exclusion of specific business activities (eg, tobacco, weapons, and alcohol) or geographies (eg, Sudan).

This values-based approach has evolved to further encompass divestment from companies that are perceived to be in breach of global norms and standards, such as the United Nations Global Compact<sup>6</sup>, or other companies that present a potential reputational risk to the investor.

### Thematic Investing

An alternate form of ESG investing is an inclusion-based approach that aims to enhance the positive environmental or social impact of an investment portfolio and is sometimes called 'green' or 'impact' investing. Although impact investing has been primarily limited to public and private equity strategies, the small but growing 'green bond' movement has developed to help fixed income investors meet impact investment objectives.

### Enhanced Risk Identification and Mitigation

A growing motivation to integrate ESG considerations into the investment process is to actively manage key ESG factors that are believed to be important drivers of long-term risk and return. This approach is based on the hypothesis that ESG factors present material short-, medium-, or long-term investment risks that are not currently accounted for in the financial markets.

The risks posed by extra-financial factors range from idiosyncratic risks affecting individual issuers (eg, oil spills, brand damage following a corruption scandal) to systemic risks affecting entire industries or asset classes (eg, the varied impacts of climate change across sectors). Some notable ones factors include the following:

• Climate change is likely to have material impacts on financial performance across various industries and asset classes. Financial costs from carbon regulations in different

A growing number of investors have begun to incorporate ESG factors into their traditional investment processes, based on the belief that these can have a material impact on financial risk and return

<sup>&</sup>lt;sup>6</sup> The United Nations Global Compact (UN GC) is a strategic policy initiative for businesses that are committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labor, environment and anti-corruption; http://www.unglobalcompact.org/

jurisdictions may hit high intensity industries, such as utilities, while volatile commodity prices stemming from changing weather patterns can raise input costs in industries ranging from food to apparel. The physical impacts of rising sea levels and changing storm patterns can affect the value of physical assets, such as real estate and infrastructure, while also posing unanticipated costs to local and national governments.

- Accessibility to scarce resources is a theme that affects companies and governments alike, as growth in the global population and economic activity increasingly strains finite natural resources, such as water or arable land. The effect is an increasing conflict between companies and local communities, which poses a threat to political stability, affects countries' trade balances and global competitiveness, and can increase input costs for a variety of downstream industries.
- From a social perspective, companies increasingly rely on a large global workforce, exposing them to heightened risks associated with labor disruptions across geographies and throughout the supply chain. In an increasingly service-driven global economy, intangible factors, such as **human and intellectual capital**, account for a rising proportion of the value of both companies and economies.
- In an information economy, new data are being generated at an exponential rate. Data have become a valuable new currency and are being stored, analysed, and leveraged in ways that are unprecedented. This presents tremendous new opportunities, but also raises serious concerns about privacy and data security. Breaches can result in substantial costs for affected companies, but the greater threat may lie in public concerns and increasing regulatory attention with respect to companies' use of personal data.
- **Corporate governance** defines how companies manage conflicts of interest between investors and management, and has been shown to influence credit fundamentals 7. Furthermore, **economic development and access to information** in countries such as China are leading to mounting public and regulatory pressure to combat corruption, which is changing the competitive landscape of companies doing business in emerging economies.

The aforementioned macro ESG trends may pose financially relevant risks to corporate issuers including *regulatory risks*, which could create new taxes, limit existing subsidies, or threaten a license to operate in specific jurisdictions; *operational risks*, including production disruptions, accidents, or cancellation of projects; product risks arising from changing market demand; *supply chain risks*, causing rising input costs or disruptions; *valuation risks*, such as those arising from the need to revalue portfolios of physical or financial assets; and *reputational risks*, which can impact a company's brand value and growth prospects.

ESG trends can also affect non-corporates entities, such as sovereigns, by impacting trade balances, economic growth, fiscal balances, or by increasing political uncertainty and risk.

### Universal Ownership

Some asset owners are starting to embrace the concept of the "Universal Owner," defined as a long-term owner of a diversified investment portfolio, who eventually will bear the long-term costs arising from the social and environmental externalities generated by their portfolio<sup>8</sup>. Universal Owners collectively own a share of the economy, and subscribe to the hypothesis that the long-term financial interest of their investments depends on the ability of global markets to produce economic growth on a sustainable basis. In particular, they see

The "Universal Owner," is expected eventually to bear the long-term costs arising from the social and environmental externalities generated by their portfolio

<sup>&</sup>lt;sup>7</sup> Lise Moret, Shade Duffy, AXA Investment Managers, "Can corporate governance take – partial – credit for fixed

income performance?" Investment Acumen: AXA Investment Managers Research Review, 2008.

<sup>&</sup>lt;sup>8</sup> Roger Urwin, "Pension Funds as Universal Owners: Opportunity Beckons and Leadership Calls," Rotman International Journal of Pension Management, Volume 4 Issue 1, Spring 2011.

externalities generated by companies as an integral part of the risk and returns of their investment portfolios. Mitigating risks based on exposure to ESG factors and dealing with externalities in order to produce higher sustainable long-term returns has become an integral part of the portfolio management process for many investors/asset owners.

For asset owners, integration of ESG factors into the investment process may help to address the disconnect between the long-term nature of their investments (30 years and longer for certain pension funds) and the short-term behavior of their agents. For asset managers, the integration of ESG factors into the investment process aims to better assess long-term risks or risks that have a high impact, but a low frequency of occurrence.

### ESG as possible source of portfolio outperformance

In recent years, certain investors have begun to view ESG information as a potential source of portfolio outperformance due to a perceived mispricing of material ESG factors in financial markets. Whereas a Universal Owner may aim to maximize ESG performance with minimal tracking error, investors seeking long-term outperformance using ESG investment approaches have a higher tolerance for tracking error versus standard non-ESG benchmarks.

### Incorporating ESG in the investment process

There are many different approaches that investors can take to implement ESG strategies depending on their specific investment objectives. A typical ESG integration framework may contain some or all of the following components:

- Setting ESG investment objectives: Investors may define the key ESG values to be reflected in a portfolio and the desired balance between financial and extra-financial considerations. ESG objectives range widely between formalized policies to informal frameworks and may include the use of ESG benchmark indices.
- **Incorporating ESG into portfolio construction**: Depending on their specific objectives, investors may take varied approaches to integrating ESG considerations into the investment decision-making process.
  - Security selection: ESG factors are commonly used to inform security selection, for instance, by using internal or third-party ESG ratings to flag poor ESG performers for deeper analysis, integrating ESG factors into quantitative models, tilting or optimizing a portfolio to capture positive ESG factors while minimizing negative ESG exposures and tracking error, or using ESG criteria to limit the investment choice set.
  - Asset allocation: For asset owners, ESG factors increasingly play a role in asset allocation and manager selection. For example, investors concerned with the potential threat of system-wide externalities may take a longer-term view by investing in sectors/companies that have business models generating positive externalities (eg, clean tech, renewable energy, or water companies). A typical implementation strategy involves carving out a dedicated allocation to these strategic investments.
  - Ex-Ante Risk Estimation/Ex-Post Performance Attribution: ESG factors can be aggregated at a portfolio level to monitor changing exposures or used to quantify systematic or idiosyncratic risk exposures and drivers of portfolio returns versus a portfolio benchmark
- Engagement: Some investors prefer to take an active approach by engaging with companies and encouraging them to behave in a way that is more in line with long-term sustainability objectives. This approach is far more common among equity investors who

use proxy voting as a tool to express active ownership, and has so far been limited among fixed income investors. A clearly defined best-in-class ESG fixed income benchmark may form the basis for engagement in the fixed income asset class between asset owners and private and public debt issuing entities, with asset owners being able to define eligibility within the ESG rated indices as a requirement for their asset managers.

• Monitoring and Reporting: Asset owners with ESG investment objectives increasingly require detailed monitoring and reporting of ESG positions at the manager and consolidated levels to ensure that managers are adhering to investment mandates.

### **INDEX DESIGN & METHODOLOGIES**

### Overview

### **Design Objectives**

The Barclays MSCI ESG Index Series was designed to meet the needs of the diverse SRI/ESG investment community. The three flagship ESG index variants (Socially Responsible (SRI), Sustainability, and ESG Weighted) correspond to diverse ESG investment themes utilized by different fixed income investors: values-based screening, ESG-driven risk mitigation, and ESG-integrated portfolio allocation.

The indices were designed with the goal of benchmark standardization for fixed income investors, while remaining flexible and adaptable enough to offer bespoke solutions to meet a specific investor's constraints, preferences, or guidelines. As such, the underlying eligibility criteria for bonds in the indices match those of Barclays' market-leading fixed income benchmarks, and adhere to design principles required for any good benchmark:

- **Representative** of the market being measured and the desired risk exposures of index users
- **Replicable**, offering a sufficiently sized universe without unnecessary turnover and transaction costs
- Objective & Transparent, with clearly-defined and objective rules, as well as daily visibility into current index composition and future composition during rebalancing periods
- Suitable as investment benchmarks for actively and passively managed portfolios

### **Index Rules**

Fixed income index rules generally consist of three design elements:

- 1. Identify the investment choice set you are trying to measure
- 2. Define which securities will be eligible from that universe
- 3. Determine how each eligible security will be weighted

For each of the Barclays MSCI ESG Fixed Income Indices, the eligible bond universes will start with existing Barclays fixed income indices. From these universes, additional ESG eligibility criteria and/or weighting schemes are applied to arrive at the final benchmark index families.

### **Index Variants**

The three main variants in the family are:

ESG Screened Indices

- Barclays MSCI Socially Responsible (SRI) Indices are a set of benchmarks that negatively screen out issuers from existing indices that may be involved in business lines or activities that are in conflict with investment policies, values, or social norms of acceptable investment. These indices use MSCI's Business Involvement Screening Research (BISR) to identify exposure to a number of different screened issues
- Barclays MSCI Sustainability Indices are a set of benchmarks that positively screen issuers from existing Barclays issuers based on MSCI's ESG Ratings, a "best in class"

assessment of how well an issuer manages the ESG risks relative to an issuer's industry or peer group. ESG ratings are available for corporate, sovereign, and governmentrelated issuers, and the minimum threshold for flagship indices is an ESG rating of BBB or better.

### ESG Alternative Weight

 Barclays MSCI ESG Weighted Indices are a set of benchmarks that use MSCI ESG ratings and ESG ratings momentum to overweight/underweight issuers within an existing Barclays index. These benchmarks include the full universe of Barclays index eligible securities and then apply tilts to the natural market value weights in favor of higher-rated/positive momentum issuers and against lower-rated/negative momentum issuers.

The following sections offer an overview of the respective data sets contributed by Barclays (fixed income indices) and MSCI (ESG research and measurement) and details on how they are jointly applied in the construction of the Barclays MSCI ESG Fixed Income Index Series. Detailed rules for specific indices are available in the index profiles in the appendices of this document.

### **Barclays Fixed Income Indices**

### **Eligible Bond Universe**

The eligible bond universe for each index in the Barclays MSCI ESG Index Series is one of four flagship Barclays Aggregate Indices: the Global Aggregate, US Aggregate, Euro Aggregate, or Sterling Aggregate. These broad-based, investment-grade indices include corporate, Treasury, government-related, and securitized bonds.

### Global Aggregate

The Global Aggregate Index is a market-value weighted, broad-based measure of the global investment-grade, fixed-rate debt market. The Global Aggregate Index contains three major components: the US Aggregate (\$300mn), the Pan-European Aggregate, and the Asian-Pacific Aggregate Index. In addition to securities from these three benchmarks, the Global Aggregate Index includes Global Treasury, Eurodollar, Euro-Yen, Canadian, and Investment Grade 144A index-eligible securities not already in the three regional aggregate indices.

To be included in the Global Aggregate Index, securities must meet the following criteria:

- **Eligible Local Currency**: Currencies eligible for inclusion must be freely tradable and hedgable. Eligible currencies include:
  - Americas: USD, CAD, CLP, MXN
  - EMEA: EUR, GBP, CHF, CZK, DKK, HUF, ILS, NOK, PLN, SEK, ZAR
  - Asian-Pacific: JPY, AUD, HKD, KRW, NZD, SGD, MYR, THB
- Amount Outstanding: Fixed minimum issue sizes are set for all local currency markets<sup>9</sup>:
  - USD, CAD , EUR, CHF, AUD: 300mn
  - GBP: 200mn
  - JPY: 35bn

<sup>&</sup>lt;sup>9</sup> Prior to April 2013, each index eligible currency was pegged to one of the G4 currency minimums on an annual basis using FX rates as of November month-end.

- DKK, NOK, PLN, ZAR, ILS, HKD, MYR: 2bn
- SEK: 2.5bn
- MXN, CZK, THB: 10bn
- NZD, SGD: 500mn
- CLP: 100bn
- HUF: 200bn
- KRW: 500bn
- **Credit Quality**: Must be rated investment grade (Baa3/BBB-/BBB-) or higher using the middle rating of Moody's, S&P, and Fitch. When a rating from only two agencies is available, the lower is used.
- Maturity: At least one year until final maturity.
- **Coupon:** Must be fixed-rate. Fixed to floating rate bonds are eligible up to one year prior to its floating rate date

Index rules also exclude certain types of securities (inflation-linked bonds, bonds with equity type features, tax-exempt municipals, structured notes), as well as private placements, retail bonds, and illiquid securities with no available internal or third-party pricing source.

### Regional Aggregate Indices (US Aggregate, Euro Aggregate, Sterling Aggregate)

The regional US Aggregate, Euro Aggregate, and Sterling Aggregate Indices use the same inclusion criteria as the Global Aggregate, but restrict the universe based on currency denomination of the bond. Additionally, the US Aggregate has a slightly lower minimum liquidity threshold than the Global Aggregate (\$250mn outstanding), includes an additional MBS sector (Hybrid ARMS), which is not Global Aggregate eligible, and is restricted to SEC registered bonds or 144A bonds with registration rights.

### Index Weighting

The standard convention for fixed income indices is to weight each security by its market value as a percentage of the overall universe. Other available weighting schemes include capped/constrained indices that limit exposure to market segments to predefined thresholds, GDP weighting by country, and Fiscal Strength Weights by country.

### **Index Mechanics**

The same core index rules and mechanics applied to Barclays' flagship aggregate indices will be used within the Barclays MSCI ESG index family.

### Rebalancing

Indices are rebalanced on a monthly basis on the last business day of each month. For each index, two populations of securities are maintained daily: a fixed returns universe, which is held constant throughout the month and used to compute returns, and a dynamic statistics universe, which projects the next month's index composition based on current eligibility. On the last business day of the month (the rebalancing date), the composition of the latest statistics universe becomes the returns universe for the following month.

During the month, indicative changes to securities (credit rating change, sector reclassification, amount outstanding changes, corporate actions, ticker changes) are reflected daily in the statistics and returns universe of the index. These changes may cause bonds to

enter or fall out of the statistics universe of the index on a daily basis, but will affect the composition of the returns universe at month-end only, when the index is rebalanced.

Intra-month cash flows from interest and principal payments contribute to monthly index returns, but are not reinvested at any short-term reinvestment rate in between rebalance dates to earn an incremental return.

### Pricing and Related Issues

Multiple price sources are used and may vary from market to market. Sources include Barclays market makers and other third-party sources. Prices for securities within the Barclays MSCI ESG index family will be the same as within the flagship Barclays aggregate indices.

Other index pricing conventions, such as quote type and settlement assumptions, will also be the same as the flagship Barclays aggregate indices.

### Sectors within the Eligible Bond Universe

All securities in the aggregate bond indices that serve as the basis for the Barclays MSCI ESG index family are assigned a sector classification under Barclays index classification scheme. The sector classification is designed to segment bonds by industry, government affiliation, or some other grouping of ultimate issuer risk. All issuers within the Barclays fixed income indices are first classified into four broad sectors which represent the first level of the classification scheme:

- Treasury: Includes native currency sovereign debt issued by central governments.
- **Government-Related**: Includes non-Treasury bonds from issuers with direct and indirect government affiliations (government ownership, control, sponsorship, etc.). It also includes government debt obligations from local authority and agency issuers, as well as supranationals. The government-related sector has four sub-sectors to group different types of issuers: agency, sovereign, supranational, and local authority.
- **Corporate**: The largest and most detailed component of the Barclays classification scheme. The corporate sector has been refined over the years to accurately categorize issuers across geographic markets based on their primary lines of business and revenue streams that affect an issuer's ability to repay their debt. Any issuers with more than 50% government ownership are classified as government-related, as opposed to corporate in the Barclays classification scheme.
- Securitized: Captures fixed income instruments whose payments are backed or directly derived from a pool of assets that is protected or ring-fenced from the credit of a particular issuer. The four main sub-sectors of the securitized sector are MBS passthrough (MBS), asset-backed (ABS), commercial mortgage-backed (CMBS), and covered bonds. For Barclays MSCI ESG indices, only covered bond issuers will be assigned ESG ratings.

Within each broad sector, there will be up to three additional layers depending on the depth and heterogeneity of issuers within that market.

Socially Responsible Indices will only cover the credit/corporate sectors, while the Sustainability Indices and ESG Weighted Indices offer coverage of the broader aggregate universe, as well as by sub-sector.

### **MSCI ESG Research**

MSCI ESG Research provides research, ratings, data, and analysis to help investors integrate ESG considerations into their investment process. ESG data and tools are tailored for valuesbased or risk-based ESG approaches, and include the following

- MSCI ESG Intangible Value Assessment (IVA) Ratings
- MSCI ESG Government Ratings
- MSCI ESG Impact Monitor (controversies screening)
- MSCI ESG Business Involvement Screening Research (BISR)

### 1. MSCI ESG Intangible Value Assessment (IVA) Ratings<sup>10</sup>

MSCI's IVA ratings assess the key ESG risks facing companies and other issuers with corporate-like operations, regardless of government ownership. MSCI's global team of research analysts assess ESG data points across key ESG issues focusing on the relationship between an issuer's core business and the key ESG issues that can create financially material ESG risks and opportunities. The MSCI ESG IVA rating is expressed on a seven-letter-grade scale ('AAA–CCC'), and signals an issuer's ESG performance relative to same-industry peers.

Through a three-step process that involves quantitative analysis of an issuer's exposure to ESG-driven risks and in-depth comparison against industry peers on how well issuers are managing their exposures, the MSCI ESG IVA rating signal differentiates issuers' positioning on medium- to long-term factors that may not be captured by conventional financial metrics.

### Step 1: Identify Key ESG Drivers of Risk and Opportunity for Each Industry

MSCI ESG IVA identifies four to seven key ESG trends where issuers in a given industry generate large environmental or social externalities, and where issuers may be forced to internalize unanticipated costs associated with those externalities in future.

An industry's key ESG issues are selected from a defined list of 34 categories falling under the following themes: Climate Change, Natural Resources, Waste Management, Environmental Opportunities, Human Capital, Product Safety, Social Opportunities, Business Ethics, and Corporate Governance

### Step 2: Evaluate Risk Exposure and Risk Management

MSCI ESG analysts calculate each issuer's exposure to key ESG risks based on a granular breakdown of an issuer's core product segments or business activities, the locations of its assets or revenues, and other relevant measures, such as the complexity of its supply chain or the size of its workforce.

The analysis then takes into account the extent to which an issuer has developed robust strategies and demonstrated a strong track record of performance in managing its specific level of risks or opportunities. By weighing a company's strategy and performance against its specific level of risk or opportunities, the MSCI ESG IVA ratings model is designed to measure any gaps in a company's risk management systems.

<sup>&</sup>lt;sup>10</sup> For additional information: www.msci.com/products/esg/iva.

### Step 3: Rank and Rate Each Company against Industry Peers

Using an industry-specific key issue weighting model, companies are rated and ranked in comparison to their industry peers. The companies in each industry are updated on a rolling annual basis unless triggered by a major event.

The MSCI ESG IVA ratings process has built in many steps to assure the quality of the analysis, as well as the consistency of the methodology and the ratings signal. Three groups are responsible for quality assurance: Industry and Team Leads; the IVA Methodology Committee, comprised of senior members of the IVA Research team; and the ESG Ratings Review Committee, comprised of senior leadership of MSCI Index and ESG Research. All changes to the IVA Methodology, major rating movements, event-driven updates, and other company-level exceptions must be reviewed and approved by the appropriate committee.



Source: MSCI ESG Research

### 2. ESG Government Ratings<sup>11</sup>

FIGURE 2

MSCI ESG Government Ratings similarly identify governments' exposure to and management of key ESG risks. Sovereigns, local authorities, selected supranationals, and other government-related issuers are assessed using a transparent model combining over 80 data points from national and international sources covering the following themes: Natural Resource, Environmental Externalities and Vulnerability, Human Capital, Economic Environment, Political Governance, and Financial Governance.

Ratings range from AAA to CCC and are updated on an annual basis.

MSCI ESG Gove	ernment Rating	gs Framework	
ESG Pillar	Risk Factor	Risk Exposure Sub-Factor	Risk Management Sub-Factor
Environment	Natural Resource	Energy Resources (4)* Water Resources (1) Bio-capacity (1) Consumption Levels (2)	Energy Resource Management (5) Water Resource Management (2) Resource Conservation (2)
	Environmental Externalities and Vulnerability	Vulnerability to Environ. Events (3) Environmental Externalities (6)	Environmental Performance (2) Impact of Environ Externalities (1)
Secial	Human Capital	Basic Human Capital (9) Higher Ed and Tech Readiness (5)	Basic Needs (3) Health Levels (5)
Social	Economic Environment	Economic Environment (10)	Wellness (4) Employment (2)
	Financial Governance	Financial Capital (2)	Financial Management (3)
Governance	Political Governance	Institutions (2) Judicial and Penal System (2) Governance Effectiveness (2)	Stability and Peace (2) Corruption Control (2) Political Rights and Civil Liberties (4)

Note: Value in brackets indicates number of data points used to assess that sub-factor. Source: MSCI

### 3. ESG Impact Monitor<sup>12</sup>

MSCI's ESG Impact Monitor is designed to provide timely, consistent, and extensive assessments of ESG controversies involving companies and corporate-like entities. The evaluation framework used in the ESG Impact Monitor is consistent with international norms represented in numerous widely accepted global conventions, including the Universal Declaration of Human Rights, the ILO Declaration on Fundamental Principles and Rights at Work, and the UN Global Compact.

MSCI ESG Research analysts conduct research on alleged company violations of laws and regulations, as well as alleged company actions that violate commonly accepted norms.

The ESG Impact Monitor covers the following five categories of ESG controversies: Environment, Customers, Human Rights & Community, Labor Rights & Supply Chain, and Governance.

The ESG Impact Monitor signals overall company performance via a flagging system (a red flag indicates a very serious controversy for one or more ESG issues, a yellow flag indicates noteworthy controversies on an ESG issue, and a green flag signals either minor controversies or none at all).

<sup>&</sup>lt;sup>11</sup> For additional information: www.msci.com/products/esg/government\_ratings.

<sup>&</sup>lt;sup>12</sup> For additional information: www.msci.com/products/esg/impact\_monitor.



MSCI Impact Monitor Pillar Structure





### 4. Business Involvement Screening Research<sup>13</sup>

MSCI ESG Business Involvement Screening Research (BISR) assesses company involvement in 17 different business areas, encompassing positive and negative screening factors. (Figure 4)

<sup>&</sup>lt;sup>13</sup> For additional information: www.msci.com/products/esg/bisr\_and\_global\_sanctions.

MSCI draws on a variety of sources, including proprietary web-crawling technology, media search services, industry publications/directories, financial data providers, and government agencies, to identify companies with potential involvement, which in-depth research is then conducted upon. The in-depth company research process draws on company websites, annual reports and regulatory filings, NGO reports and websites, media publications, and direct communication with companies.

MSCI seeks input from all companies in the BISR and Sanctions involvement universe once annually in order to increase transparency, improve data accuracy and quality, and maintain an open dialogue with companies. MSCI also conducts annual surveys for many restriction categories that include targeted questions that help to inform research, and contact companies on an ongoing basis at the analyst's discretion throughout the year when this is necessary to confirm involvement, the nature of the involvement, or the revenue derived from the business activity in question.

MSCI's research process combines annual reviews and monthly maintenance processes.

wise Eso business involvement screening research issues											
Business Activit	ies Screening	<b>Global Sanctions Screening</b>	Faith-Based Screening								
<ul> <li>Abortion &amp; Contraceptives</li> </ul>	• Firearms	Arab Boycott of Israel	Catholic								
Adult Entertainment	Gambling	• Burma	Protestant/Religious								
Alcohol	<ul> <li>Genetic Engineering (GMO)</li> </ul>	• Cuba	• Sharia/Islamic								
Animal Welfare	Labor Relations	<ul> <li>Foreign Corrupt Practices Act</li> </ul>									
Child Labor	Landmines	• Iran									
Defense & Weapons	Cluster Munitions	North Korea									
Diversity	Nuclear Power	Northern Ireland									
Environment	<ul> <li>Stem Cell Research</li> </ul>	OFAC Penalties &     Settlements									
		• Sudan									

#### FIGURE 4 MSCI ESG Business Involvement Screening Research Issues

Source: MSCI ESG Research

### BARCLAYS MSCI ESG FIXED INCOME INDEX RULES & MECHANICS

### Socially Responsible (SRI) Indices

SRI benchmark indices provide an option for investors who wish to exclude issuers involved in business activities that are restricted because they are inconsistent with certain valuesbased criteria. The flagship SRI indices exclude issuers with substantial revenue derived from sources such as alcohol, tobacco, controversial military weapons, nuclear power, and genetically modified organisms (GMOs), but additional SRI screening, such as the exclusion of bonds from sanctioned countries (eg, Burma, Iran) or issuers involved in predatory lending, are also available. Standard thematic screenings, such as issuer exclusion based on Catholic-values criteria, will also be available in this category. Bespoke indices that negatively screen business activities based on an investor's specific list of restricted or policy-driven exclusions are also available upon request.

### **Bond Index Criteria**

- Bonds must meet the same eligibility criteria for Barclays indices based on credit quality, minimum, issue size, etc.
- Business Involvement screening is generally only available for corporate bond issuers within Barclays indices<sup>14</sup>, so the vast majority of benchmarks offered will be corporate only. Aggregate indices, where SRI screening is conducted only within the corporate sector, are also available, but with baseline index weights preserved and matching the non-SRI Aggregate benchmark.
- Other index conventions on rebalancing, security weighting, return calculations, etc. follow existing Barclays index conventions.

### ESG Eligibility Criteria

### 1. Business Involvement Screening

For standard Barclays MSCI SRI indices, issuers involved in the following business activities are negatively screened using MSCI Business Involvement Screening Research (BISR): alcohol, civilian firearms, gambling, military weapons, nuclear power, tobacco, adult entertainment, and genetically modified organisms (GMO). Figure 5 details the level of involvement that disqualifies an issuer for inclusion in the standard SRI Indices. These thresholds can be adjusted in bespoke indices to be more restrictive (up to zero tolerance for any tie) or less restrictive.

### 2. MSCI Impact Monitor Screening

Any issuer with a "Red" MSCI ESG Impact Monitor score (score less than 2) is excluded from SRI indices. The Impact Monitor Score measures an issuer's involvement in major ESG controversies and how well they adhere to international norms and principles.

### Additional Screening

MSCI BISR also monitors a variety of other business activities that may be restricted by some investors, but are not part of the SRI index definition, including predatory lending, child labor, board diversity, stem cells, abortion/contraception. Bespoke indices can be constructed for screening these additional activities. (Figure 4)

<sup>&</sup>lt;sup>14</sup> Screening is also available on covered bond issuers and government-related issuers that are rated by the MSCI IVA model (instead of Government model)

Screening is also available on an issuer's exposure/involvement in markets that may be under sanctioned within a particular local market (Iran, Burma, Cuba, etc.). Bespoke indices can be constructed on these additional exposures.

### Other Notable Indices within the SRI Family

- Catholic Values Screened Indices: A family of indices that excludes the following business involvement: abortion/contraception, adult entertainment, stem cells, military weapons
- Corporate SRI ex CCC Indices: Indices that add an additional ESG rating exclusion for issuers with an ESG rating of CCC
- Sub-indices by ESG rating, sector, maturity (intermediate and long), etc.

#### FIGURE 5

Barclays MSCI Socially Responsible Index – Involvement Thresholds for Index Exclusion

Screened Business Involvement	Barclays MSCI SRI Index Threshold
Alcohol	"Producer" companies that earn either 5% or more revenue or more than \$500mr in revenue from alcohol-related activities
Gambling	"Operations" and "Support" companies that earn 5% or more revenue or more than \$500 million in revenue from gambling-related activities
Tobacco	All companies classified as "Producer"
	<ul> <li>"Distributor", "Retailer", and "Supplier" companies that earn 15% or more from tobacco products</li> </ul>
Military Weapons	<ul> <li>All companies involved in manufacturing of "Nuclear Weapons", "Nuclear Weapons Components" and "Chemical and Biological Weapons Components" or "Depleted Uranium Weapons"</li> </ul>
	All companies classified as a "Cluster Bomb Manufacturer"
	All companies classified as a "Landmine Manufacturer"
	<ul> <li>All companies that earn 5% or more revenues or more than \$500 million in revenue from manufacturing of Conventional Weapons and Conventional Weapons Components</li> </ul>
Civilian Firearms	All companies classified as "Producer"
	• "Retailer" companies that earn 5% or more revenue or more than \$20 million in revenue from civilian firearms
Nuclear Power	All companies classified as nuclear "Utility"
	All companies involved in Uranium Mining
	All companies involved in designing nuclear reactors
	All companies involved in enrichment of fuel for nuclear reactors
	<ul> <li>All companies that supply key nuclear-specific products or services to the nuclear power industry</li> </ul>
Adult entertainmen	t • All companies classified as "Producer" that earn more than 5% of revenues or more than \$500mn in revenue from this activity
Genetically Modified Organisms (GMO)	<ul> <li>Companies that derive any revenue from activities like genetically modifying plants, such as seeds and crops, and other organisms intended for agricultural use or human consumption</li> </ul>
	• Companies that are only involved in GMO Research & Development activities are not excluded

Source: MSCI ESG Research, Barclays Research

### Sustainability Indices

Sustainability indices offer an option to investors who are committed to investing in companies that are ranked best in class among their peers based on MSCI ESG rating (IVA and Sovereign). Issuers included in flagship ESG Sustainability indices must have ESG ratings of BBB or higher. The indices also incorporate the MSCI ESG Impact Monitor evaluation, screening out on a timely basis any issuers in significant breach of ESG norms. Additional Sustainability indices are available with broader inclusion criteria (eg, an ESG rating threshold of BB and above).

### Bond Index Criteria

- Bonds must meet same eligibility criteria for Barclays indices based on credit quality, minimum, issue size, etc.
- Sustainability indices are available for corporate, as well as Aggregate benchmark indices, using MSCI IVA Ratings and MSCI Government ratings for a broader ESG assessment of the fixed income universe
- Other index conventions on rebalancing, security weighting, return calculations, etc. will follow existing Barclays bond index conventions

### ESG Eligibility Criteria

- 1. ESG Ratings
- Sustainability indices includes issuers with an MSCI ESG rating of BBB or higher using MSCI's IVA Rating or Sovereign Rating model
- ESG ratings are available for Treasury, government-related, corporate, and covered bond issuers. They are not applied to MBS, ABS, and CMBS issues
- Unrated issuers from sectors with ratings are excluded
- Ratings are applied at the Barclays ticker level, and every bond within the same ticker will have the same ESG rating<sup>15</sup>
- ESG ratings for each issuer are generally updated on an annual basis, but may be reviewed more frequently as needed
- 2. MSCI Impact Monitor Screening
- Any issuer with a "Red" MSCI ESG Impact Monitor score (score less than 2) is excluded from SRI indices. The Impact Monitor Score measures an issuer's involvement in major ESG controversies and how well the issuer adheres to international norms and principles.

### Security and Sector Weights

- Index eligible securities are market value weighted after screening based on rating and Impact Monitor scores have been conducted. Therefore, sector weights may differ from the base index that does not apply any ESG screening
- Sector Neutral versions of Barclays MSCI Sustainability Indices preserve the same sector exposure (Barclays Sector Class 1 or Barclays Sector Class 2) of the non-ESG versions of the same benchmark, while maintaining market value security weights within each sector.

<sup>&</sup>lt;sup>15</sup> If a bond's ticker changes to an existing index eligible ticker (due to acquisition), the bond's ESG rating will adopt the rating of the successor ticker

 For example, the US Aggregate Sustainability Index will have the same Treasury, government-related, corporate, and securitized sector weights as the flagship US Aggregate Index. However, the composition of the government-related and corporate sectors will consist solely of issuers rated BBB or better with an Impact Monitor score of green or yellow.

### Other Notable Indices within the Sustainability Family

- BB or Better indices: sustainability indices with broader inclusion criteria using a lower ratings threshold for positive screening
- Sector neutral variants of flagship sustainability indices
- Sustainability indices with additional BISR negative screening
- Sub-indices by ESG rating, sector, maturity (intermediate and long), etc.

### **ESG** Weighted Indices

ESG Weighted indices depart from market capitalization-based issuer weights in existing Barclays indices by using ESG ratings to tilt issuer allocations above or below their baseline market value weights. These tilts are determined by an issuer's current ESG rating, as well as its rating "momentum", which is determined by any upgrades or downgrades of the issuer's ESG rating in the prior 12 months. This allocation rule is meant to reward issuers that exhibit stronger ESG fundamentals, as well as those that are demonstrating improving fundamentals.

### **Bond Index Criteria**

- Bonds must meet same eligibility criteria for Barclays indices based on credit quality, minimum, issue size, etc.
- The underlying universes for ESG Weighted indices are identical to their non-ESG weighted equivalents. There is no additional positive or negative screening of issuers, making this family more of a "universal owner" benchmark
- ESG Weighted indices are available for corporate as well as Aggregate benchmark indices
- Other index conventions on rebalancing, security weighting, return calculations, etc. will follow existing Barclays bond index conventions.

### ESG Eligibility Criteria

ESG Ratings

• The weight of each index eligible issuer (and security) is adjusted by a fixed multiplier (Figure 6), which is determined by its ESG Rating (AAA, AA, A, BBB, BB, B, CCC, NR) and its ESG Ratings momentum (Positive, Neutral, Negative since its last evaluation). Security weights are then normalized using these adjusted market values

### FIGURE 6

Market Value Weight Adjustments Based on ESG Rating and ESG Rating Momentum

Rating	Tilt	Momentum	Tilt
AAA, AA, A	1.5x	Positive	2.0x
BBB	1.0x	Neutral	1.0x
BB	0.8x	Negative	0.5x
В	0.75x		
CCC	0.67x		
NR	0.75x		
MBS/ABS/CMBS	1.0x		

Source: MSCI ESG Research, Barclays Research

- Factor tilts are based on beginning of the month ratings, so rating changes during the month would not affect index weights and returns until the next index rebalancing date
- ESG ratings are available for Treasury, government-related, corporate, and covered bond issuers. They are not applied to MBS, ABS, and CMBS issues. However, all unrated issuers remain eligible for ESG Weighted indices<sup>16</sup>
- Ratings are applied at the Barclays ticker level, and every bond within the same ticker will have the same ESG rating
- ESG ratings are generally updated annually throughout the year, but may be reviewed more frequently as needed

### Security and Sector Weights

- Index eligible securities are market value weighted using the adjusted market values
- Sector neutral versions of Barclays MSCI ESG Weighted Indices preserve the same sector exposure (Barclays sector class 1 or Barclays sector class 2) of the non-ESG versions of the same benchmark, while maintaining adjusted market value security weights within each sector
  - For example, the US Aggregate Sustainability Index will have the same Treasury, government-related, corporate, and securitized sector weights as the flagship US Aggregate Index. However, the weights within the government-related and corporate sectors will reflect the relative tilts of each issuer based on ratings and ratings momentum

### Index Governance

Barclays MSCI ESG Fixed Income Indices are jointly governed by an index steering committee with equal representation from Barclays and MSCI.

### Index Customization and Reporting Options

Standard Barclays MSCI ESG Fixed Income Indices are available for a broad range of sector, maturity, and quality breakdowns. Some investors may prefer an even more customized index solution that offers even better matching of their ESG considerations. Investors should contact their Barclays or MSCI representative for further details on bespoke index solutions.

These customizations may require a bespoke fixed income index design or a bespoke application of ESG criteria. These may include:

- Additional BISR screening or screening at different thresholds
- Different ESG ratings thresholds for index exclusion/exclusion
- More/less aggressive tilting for ESG weighted indices
- Mixed ESG methodologies within the same benchmark (eg, ESG weighting for sovereign issuers, but Best in Class screening for corporate issuers)

<sup>&</sup>lt;sup>16</sup> MBS/ABS/CMBS issue weights are not adjusted up or down, but unrated issuers from other sectors will receive a slight underweight (factor of 0.75x)

### INDEX PERFORMANCE, RISK, AND ESG CHARACTERISTICS

### Barclays MSCI Global ESG Index Returns

### FIGURE 7

### Global ESG Fixed Income Returns, 2007-2012 (USD, unhedged)

			Corporate			Aggregate						
Year	Global Corp	SRI	Sust	ESG Wgtd	Catholic	Global Agg	SRI	Sust	ESG Wgtd			
2007	6.73	6.59	6.93	6.97	6.64	9.48	9.46	7.15	9.39			
2008	-8.65	-9.81	-8.73	-8.33	-9.00	4.79	4.69	5.75	5.23			
2009	19.18	19.80	19.82	19.76	19.53	6.93	7.00	6.37	6.64			
2010	5.83	5.63	5.12	5.44	5.80	5.54	5.50	6.06	5.96			
2011	4.32	4.24	4.50	4.78	4.17	5.64	5.62	5.97	6.14			
2012	11.21	11.37	10.47	10.73	11.33	4.32	4.30	3.48	3.65			
2007-12	6.10	5.92	6.00	6.23	6.06	6.10	6.08	5.79	6.15			
TEV		0.11	0.18	0.17	0.04		0.01	0.24	0.10			
Min Diff		-0.42	-0.86	-0.66	-0.17		-0.04	-1.09	-0.26			
Max Diff		0.21	0.47	0.59	0.09		0.04	0.64	0.29			

Note: Data as of May 31, 2013. Source: MSCI ESG Research, Barclays Research

### Barclays MSCI US ESG Index Returns

### FIGURE 8

### US ESG Fixed Income Index Returns, 2007-2012 (USD, unhedged)

				Corporate				Aggregate						
Year	US Corp	SRI	Sust	Sust – Neu	ESG Wgtd	ESG Wgtd - Neut	Cath	US Agg	SRI	Sust	Sust – Neu	ESG Wgtd	ESG Wgtd - Neut	
2007	4.56	4.38	5.00	5.07	4.76	4.70	4.43	6.97	6.93	6.50	6.26	6.89	7.01	
2008	-4.94	-5.64	-5.22	-4.93	-4.68	-4.94	-5.62	5.24	5.05	7.43	4.99	5.39	5.24	
2009	18.68	19.19	18.42	18.36	18.74	18.68	19.51	5.93	6.06	4.53	6.12	5.63	5.99	
2010	9.00	8.97	8.60	8.70	9.01	9.00	8.98	6.54	6.52	5.96	6.53	6.55	6.57	
2011	8.15	7.72	9.11	8.66	8.81	8.15	8.09	7.84	7.76	8.04	8.19	8.25	7.86	
2012	9.82	10.12	8.01	8.39	8.93	9.82	9.99	4.21	4.26	3.15	3.15	3.84	4.21	
2007-12	7.31	7.20	7.09	7.15	7.37	7.33	7.30	6.12	6.09	5.92	5.86	6.08	6.14	
TEV		0.08	0.21	0.18	0.22	0.01	0.07		0.02	0.23	0.11	0.10	0.03	
Min Diff		-0.23	-1.00	-0.68	-0.84	-0.04	-0.26		-0.05	-0.59	-0.34	-0.46	0.13	
Max Diff		0.18	0.53	0.49	0.73	0.08	0.28		0.04	1.10	0.31	0.33	-0.18	

### Barclays MSCI Euro ESG Index Returns

### FIGURE 9

EUR ESG Fixed Income Index Returns, 2007-2012 (EUR, unhedged)

				Corporate						Agg	regate		
Year	Euro Corp	SRI	Sust	Sust – Neu	ESG Wgtd	ESG Wgtd - Neut	Cath	Euro Agg	SRI	Sust	Sust – Neutral	ESG Wgtd	ESG Wgtd - Neut
2007	0.02	-0.03	0.01	0.01	0.08	0.04	-0.02	1.45	1.44	0.46	0.98	1.37	1.45
2008	-3.76	-4.26	-3.18	-3.59	-3.51	-3.63	-4.00	6.22	6.14	7.28	6.68	6.56	6.57
2009	15.71	15.80	15.92	15.93	16.15	16.19	15.77	6.95	6.95	6.60	7.09	6.84	6.81
2010	4.75	4.70	4.56	4.54	4.73	4.75	4.68	2.18	2.15	2.81	2.87	2.82	2.80
2011	1.49	1.30	1.67	1.32	1.60	1.36	1.34	3.24	3.17	3.22	3.18	3.74	3.62
2012	13.59	13.82	12.79	13.39	13.03	13.23	13.78	11.19	11.24	11.03	11.09	10.65	10.71
2007-12	5.06	4.97	5.08	5.03	5.11	5.09	5.02	5.15	5.13	5.18	5.26	5.29	5.28
TEV		0.06	0.16	0.17	0.17	0.14	0.05		0.01	0.17	0.11	0.12	0.11
Min Diff		-0.18	-0.70	-1.00	-0.70	-0.78	-0.18		-0.04	-0.63	-0.40	-0.26	-0.25
Max Diff		0.15	0.59	0.71	0.72	0.59	0.18		0.03	0.42	0.41	0.39	0.34

Note: Data as of May 31, 2013. Source: MSCI ESG Research, Barclays Research

### Barclays MSCI Sterling ESG Index Returns

### FIGURE 10

GBP ESG Fixed Income Index Returns, 2007-2012 (GBP, unhedged)

				Corporate						Aggr	egate		
Year	GBP Corp	SRI	Sust	Sust – Neut	ESG Wgtd	ESG Wgtd - Neut	Cath	GBP Agg	SRI	Sust	Sust – Neut	ESG Wgtd	ESG Wgtd - Neut
2007	0.42	0.26	1.00	1.02	0.77	0.67	0.27	3.37	3.55	1.02	1.21	3.17	3.49
2008	-9.99	-10.81	-9.26	-9.18	-9.42	-9.40	-10.53	4.43	4.67	5.71	4.61	5.04	4.63
2009	14.70	14.21	16.66	16.79	15.45	16.36	14.49	3.29	3.12	2.90	3.65	2.99	3.46
2010	8.85	8.70	9.01	9.02	9.04	9.05	8.78	7.86	7.69	7.88	7.88	7.86	7.93
2011	6.52	6.01	5.85	5.67	6.62	6.25	6.20	13.47	13.35	14.22	13.23	14.01	13.48
2012	15.54	15.99	14.15	14.80	14.92	15.07	15.92	6.00	6.23	4.81	5.70	5.41	5.86
2007-12	5.63	5.32	5.87	5.98	5.87	5.96	5.46	6.35	6.38	6.01	5.98	6.35	6.42
TEV		0.14	0.21	0.21	0.19	0.13	0.10		0.06	0.23	0.15	0.09	0.05
Min Diff		-0.55	-0.66	-0.61	-0.33	-0.28	-0.31		-0.17	-1.16	-0.76	-0.19	-0.10
Max Diff		0.28	0.85	0.80	0.97	0.67	0.32		0.17	0.36	0.18	0.27	0.22

### Barclays MSCI Global ESG Fixed Income Characteristics

### FIGURE 11

### **Bond Index Characteristics**

					Ind	ex Characteri	stics		
Region	Universe	Index	# Bonds	# Issuers	OAD	OAS	OASD	Yield	Avg. Quality
Global	Corporate	Barclays Global Agg Corporate	7,979	1,333	6.10	133.5	6.10	2.64	A2/A3
		Global Corporate SRI	6,464	1,191	5.91	136.2	5.94	2.63	A3/BAA1
		Global Corporate Sustainability	4,257	590	5.90	125.7	5.95	2.50	A2/A3
		Global Corp Sustainability – Sector Neutral	4,257	590	5.82	126.5	5.90	2.50	A2/A3
		Global Corp ESG Weighted	7,979	1,333	6.03	128.9	6.04	2.56	A2/A3
		Global Corp ESG Weighted – Sector Neutral	7,979	1,333	5.97	129.3	6.01	2.56	A2/A3
		Global Corporate Catholic Values	7,374	1,275	5.96	136.2	5.97	2.64	A3/BAA1
	Aggregate	Barclays Global Aggregate	15,243	2,039	6.17	58.6	6.07	1.89	AA2/AA3
		Global Agg SRI	13,565	1,884	6.12	58.7	6.03	1.850	AA2/AA3
		Global Agg Sustainability	9,393	985	6.23	49.2	6.13	1.74	AA2/AA3
		Global Agg Sustainability – Sector Neutral	9,393	985	6.17	55.7	6.08	1.82	AA2/AA3
		Global Agg ESG Weighted	15,243	2,039	6.30	41.4	6.18	1.65	AA1/AA2
		Global Agg ESG Weighted – Sector Neutral	15,243	2,039	6.21	48.0	6.12	1.74	AA2/AA3
Note: Data	a as of May 31	, 2013. Source: MSCI ESG Research, Barclays Re	esearch						

#### FIGURE 12

### ESG Rating and Impact Monitor Distribution, % of index

					ESG R	ating Di	istributi	ion			Impac	t Monitor	Distribu	ution
Region	Universe	Index	AAA	AA	Α	BBB	BB	В	ссс	NR	Green	Yellow	Red	NR
Global	Corporate	Barclays Global Agg Corporate	6.4	15.7	18.7	16.4	19.6	6.7	10.0	6.5	18.5	69.0	6.5	5.9
		Global Corporate SRI	7.5	14.5	19.3	14.8	20.7	4.7	10.5	8.0	22.7	70.1	-	7.2
		Global Corporate Sustainability	11.7	28.7	34.2	25.4	-	-	-	-	21.3	78.5	-	0.3
		Global Corp Sustainability – Sector Neutral	12.0	29.2	33.4	25.4	-	-	-	-	21.7	78.1	-	0.3
		Global Corp ESG Weighted	9.7	26.7	30.7	8.6	13.0	4.2	3.4	3.7	21.1	72.3	3.1	3.5
		Global Corp ESG Wght – Sector Neutral	9.8	26.9	30.0	8.6	13.4	4.2	3.5	3.7	21.3	72.2	3.0	3.5
		Global Corporate Catholic Values	6.8	12.8	19.9	17.0	19.6	6.0	10.7	7.2	20.2	67.6	5.7	6.5
	Aggregate	Barclays Global Aggregate	3.6	12.1	47.2	11.3	5.5	2.1	2.5	15.8	5.4	18.0	1.3	75.4
		Global Aggregate SRI	3.8	12.0	47.4	10.8	5.6	1.6	2.6	16.1	6.1	18.0	-	75.9
		Global Agg Sustainability	4.2	14.0	55.0	12.6	-	-	-	14.2	3.8	13.1	-	83.0
		Global Agg Sustainability – Sector Neutral	5.1	15.7	52.1	13.6	-	-	-	13.5	5.4	18.7	-	75.9
		Global Agg ESG Weighted	3.4	15.2	59.3	4.3	2.7	1.0	0.6	13.4	4.6	13.8	0.4	81.2
		3.9	16.1	55.4	4.5	3.3	1.3	0.8	14.6	5.7	17.6	0.6	76.1	
Note: Data	as of May 31,	2013. Source: MSCI ESG Research, Barclays R	esearch											

#### FIGURE 13

### ESG Pillar and IVA Theme Scores: Corporate Indices

	ESG Themes										
Index	Business Ethics	Climate	Corp. Governance	Env. Opport	Human Capital	Natural Resources	Product Safety	Public Policy	Social Oppt	Waste Mgmt.	
Barclays Global Agg Corporate	4.83	8.00	6.73	6.19	5.51	4.66	4.42	2.84	4.78	5.91	
Global Corporate SRI	4.76	8.06	6.68	6.04	5.71	4.82	4.43	2.97	4.81	6.36	
Global Corporate Sustainability	5.84	8.15	7.26	6.85	5.86	5.02	5.22	4.46	5.16	5.92	
Global Corporate ESG Weighted	5.57	8.17	7.17	6.72	5.68	4.92	4.87	3.75	5.02	5.87	
Global Corporate Catholic Values	4.74	7.83	6.53	5.91	5.69	4.70	4.58	2.83	4.83	5.98	

### Barclays MSCI Regional ESG Fixed Income Characteristics

### FIGURE 14

### Bond Index Characteristics

					Inde	ex Characteri	stics		
Region	Universe	Index	# Bonds	# Issuers	OAD	OAS	OASD	Yield	Avg. Quality
USD	Corporate	Barclays US Corporate	4,632	1073	7.07	132.3	6.87	2.91	A3/BAA1
		US Corporate SRI	3,559	616	6.83	135.0	6.64	2.89	A3/BAA1
		US Corporate Sustainability	2,233	428	7.00	121.7	6.81	2.78	A2/A3
		US Corporate Sustainability – Sector Neutral	2,233	428	6.94	121.1	6.77	2.76	A2/A3
		US Corporate ESG Weighted	4,632	705	7.05	126.7	6.86	2.84	A2/A3
		US Corporate ESG Weighted – Sector Neutral	4,632	705	7.07	127.6	6.89	2.86	A2/A3
		US Corporate Catholic Values	4,175	660	6.94	135.2	6.74	2.91	A3/BAA1
	Aggregate	Barclays US Aggregate	8,413	950	5.45	56.2	5.37	2.08	AA1/AA2
		US Aggregate SRI	7,302	858	5.38	56.4	5.31	2.07	AA1/AA2
		US Aggregate Sustainability	4,825	428	5.22	44.2	5.17	1.97	AAA/AA1
		US Aggregate Sustainability – Sector Neutral	4,825	428	5.41	54.4	5.35	2.04	AA1/AA2
		US Aggregate ESG Weighted	8,413	950	5.33	45.1	5.26	1.92	AA1/AA2
		US Agg ESG Weighted – Sector Neutral	8,413	950	5.45	55.4	5.37	2.07	AA1/AA2
EUR	Corporate	Barclays Euro Aggregate Corporate	1,319	334	4.52	127.5	4.76	1.88	A2/A3
		SRI	1,086	295	4.49	131.9	4.77	1.92	A2/A3
		Sustainability	906	199	4.64	126.3	4.88	1.89	A2/A3
		Sustainability – Sector Neutral	906	199	4.62	127.5	4.90	1.90	A2/A3
		ESG Weighted	1,319	329	4.55	125.1	4.78	1.85	A2/A3
		ESG Weighted – Sector Neutral	1,319	329	4.52	126.0	4.79	1.86	A2/A3
		Catholic Values	1,250	312	4.53	130.3	4.77	1.91	A3/BAA1
	Aggregate	Barclays Euro Aggregate	3,037	585	5.83	101.0	5.75	1.79	AA3/A1
		Euro Aggregate SRI	2,739	538	5.82	101.4	5.75	1.79	AA3/A1
		Euro Aggregate Sustainability	2,091	199	6.05	97.2	5.95	1.79	AA3/A1
		Euro Aggregate Sustainability – Sector Neutral	2,091	199	5.90	96.5	5.82	1.76	AA3/A1
		Euro Aggregate ESG Weighted	3,037	585	6.01	77.1	5.93	1.57	AA2/AA3
		Euro Agg ESG Weighted – Sector Neutral	3,037	585	5.95	78.2	5.87	1.57	AA2/AA3
GBP	Corporate	Barclays Sterling Aggregate Corporate	670	231	8.30	153.7	8.52	3.53	A3/BAA1
		SRI	555	201	8.09	156.9	8.44	3.54	A3/BAA1
		Sustainability	380	127	7.92	150.6	8.18	3.42	A3/BAA1
		Sustainability – Sector Neutral	380	127	7.71	153.0	8.12	3.43	A2/A3
		ESG Weighted	670	231	8.22	152.5	8.47	3.50	A3/BAA1
		ESG Weighted – Sector Neutral	670	231	8.09	153.8	8.43	3.50	A2/A3
		Catholic Values	624	218	8.02	159.0	8.29	3.54	A3/BAA1
	Aggregate	Barclays Sterling Aggregate	950	329	9.31	41.2	8.96	2.34	AA2/AA3
		SRI	819	295	9.23	41.1	8.92	2.32	AA2/AA3
		Sustainability	613	210	9.39	28.3	8.99	2.19	AA1/AA2
		Sustainability – Sector Neutral	613	210	9.23	41	8.90	2.32	AA2/AA3
		ESG Weighted	950	329	9.40	29.0	9.01	2.20	AA1/AA2
		ESG Weighted – Sector Neutral	950	329	9.27	40.5	8.93	2.32	AA2/AA3
Nete Det	614 21	2012 Source MSCI ESC Recearch Parelaus Per							

### FIGURE 15

### ESG Rating and Impact Monitor Distribution, % of index

					ESG F		Distrib %)	ution			Impac	t Monito (%		bution
Region	Universe	Index	AAA	AA	Α	BBB	BB	В	ссс	NR	Green	Yellow	Red	NR
US	Corporate	Barclays US Aggregate Corporate	4.5	12.9	15.4	17.8	22.9	8.5	14.3	3.7	16.1	72.6	7.8	3.5
		SRI	5.5	10.4	17.0	15.6	25.6	6.0	15.2	4.6	20.3	75.4	-	4.3
		Sustainability	9.5	27.1	32.4	31.1	-	-	-	-	18.5	81.5	-	-
		Sustainability – Sector Neutral	9.7	28.1	31.3	30.9	-	-	-	-	19.3	80.7	-	-
		ESG Weighted	7.4	23.7	27.0	15.3	15.7	3.7	5.1	2.2	17.6	77.0	3.4	2.0
		ESG Weighted – Sector Neutral	7.2	23.7	25.9	15.3	16.3	3.7	5.3	2.6	17.7	76.5	3.3	2.5
		Catholic Values	4.8	9.4	16.7	18.4	23.0	7.7	15.9	4.3	17.9	71.1	7.0	4.0
	Aggregate	Barclays US Aggregate	1.9	4.0	40.6	4.8	6.0	3.9	4.7	34.1	4.5	21.6	1.9	72.0
		SRI	2.2	3.5	41.0	4.2	6.6	3.2	4.9	34.4	5.5	22.2	-	72.3
		Sustainability	2.4	4.9	49.7	4.9	-	-	-	38.3	2.6	12.6	-	84.8
		Sustainability – Sector Neutral	4.6	9.1	46.1	8.9	-	-	-	31.3	4.5	22.9	-	72.6
		ESG Weighted	2.0	5.2	52.0	3.0	2.9	1.3	1.2	32.4	3.3	15.5	0.7	80.5
		ESG Weighted – Sector Neutral	2.9	7.5	44.2	4.2	4.1	2.0	1.8	33.2	4.7	22.0	0.9	72.3
Euro	Corporate	Barclays Euro Aggregate Corporate	8.5	18.3	28.5	16.8	14.3	2.6	5.1	6.0	20.6	69.2	5.5	4.6
		SRI	9.5	18.3	28.1	16.1	13.9	1.2	5.8	7.2	25.3	69.1	-	5.6
		Sustainability	12.2	26.2	40.8	20.8	-	-	-	-	22.9	76.9	-	0.2
		Sustainability – Sector Neutral	12.2	26.7	39.5	21.6	-	-	-	-	22.8	76.9	-	0.3
		ESG Weighted	11.6	26.1	38.9	9.7	8.6	0.8	1.4	2.9	23.1	71.8	2.7	2.4
		ESG Weighted – Sector Neutral	11.7	26.6	37.2	9.9	9.3	0.9	1.5	2.9	23.1	71.8	2.6	2.5
		Catholic Values	8.8	15.8	29.7	17.7	14.3	2.0	5.4	6.3	22.0	68.2	5.0	4.9
	Aggregate	Barclays Euro Aggregate	4.5	28.6	27.0	28.3	5.5	0.8	1.5	3.7	6.5	20.7	1.1	71.8
		SRI	4.8	28.9	27.2	27.7	5.4	0.5	1.6	3.9	7.2	20.4	-	72.4
		Sustainability	5.1	32.4	30.7	31.6	-	-	-	0.1	5.3	17.8	-	76.9
		Sustainability – Sector Neutral	5.8	32.9	30.6	30.5	-	-	-	0.2	6.9	22.7	-	70.4
		ESG Weighted	4.7	37.9	35.5	16.4	3.1	0.3	0.3	1.7	6.6	19.0	0.4	74.0
		ESG Weighted – Sector Neutral	4.9	37.7	35.2	16.2	3.4	0.3	0.4	1.8	7.2	20.6	0.5	71.7
Sterling	Corporate	Barclays Sterling Agg Corporate	9.5	19.3	18.0	10.6	15.2	6.1	9.2	12.2	21.0	60.7	6.1	12.2
		SRI	11.2	18.1	17.1	9.2	15.2	3.3	10.4	15.5	25.1	59.3	-	15.5
		Sustainability	16.9	34.6	32.3	16.2	-	-	-	-	29.4	70.3	-	0.3
		Sustainability – Sector Neutral	18.6	35.2	30.2	15.9	-	-	-	-	30.0	69.7	-	0.3
		ESG Weighted	12.6	31.8	28.7	7.3	8.1	2.1	2.9	6.5	26.1	64.9	2.3	6.7
		ESG Weighted – Sector Neutral	13.5	32.0	27.0	7.1	8.8	2.1	3.1	6.5	26.1	64.8	2.4	6.7
	Annes	Catholic Values	10.5	15.4	19.9	11.3	14.7	4.6	10.1	13.5	23.3	58.8	4.4	13.5
	Aggregate	Barclays Sterling Aggregate	3.9	7.4	72.3	3.2	3.6	1.5	2.5	5.6	5.1	19.3	1.5	74.1
		SRI	4.5	7.6 8.4	72.2 81.6	2.2	3.6	0.7	2.7	6.5 2.5	6.0	19.0	-	75.0 70.0
		Sustainability	4.4 5 °	8.4	81.6 75 5	3.2	-	-	-	2.5	4.6	15.5 21.2	-	79.9 71.0
		Sustainability – Sector Neutral	5.8	11.2 • 4	75.5 01 2	4.5	- 1 4	-	-	3.0	6.9	21.3	-	71.9
		ESG Weighted ESG Weighted – Sector Neutral	3.3 4.4	8.4	81.3 74.8	1.5 2.0	1.4 1.9	0.4 0.5	0.5 0.8	3.2 4.5	4.5 6.3	14.8 20.0	0.4 0.6	80.3 73.2
	a an af May 2	2013 Source: MSCI FSG Research Barcla			74.0	2.0	1.7	0.5	0.0	ч.Ј	0.5	20.0	0.0	13.2

### FIGURE 16

### ESG Pillar & IVA Theme Scores: Corporate Indices

	ESG Themes									
Index	Business Ethics	Climate	Corp. Governance	Env. Opport	Human Capital	Natural Resources	Product Safety	Public Policy	Social Oppt	Waste Mgmt.
US										
Barclays US Agg Corporate	4.64	7.77	6.98	5.75	4.93	4.27	3.88	2.73	4.48	5.63
SRI	4.56	7.86	6.97	5.64	5.05	4.48	3.74	2.87	4.53	6.19
Sustainability	5.77	7.99	7.95	6.71	5.07	4.58	4.93	5.80	4.84	5.64
ESG Weighted	5.47	8.06	7.59	6.53	5.05	4.61	4.54	3.61	4.63	5.65
Catholic Values	4.59	7.51	6.73	5.36	5.09	4.27	4.01	2.71	4.54	5.63
Euro										
Barclays Euro Agg Corporate	5.26	8.41	6.41	6.85	6.12	5.25	4.85	2.40	5.37	6.17
SRI	5.14	8.41	6.36	6.67	6.32	5.37	4.95	2.52	5.40	6.51
Sustainability	5.78	8.29	6.68	6.97	6.29	5.41	5.51	3.36	5.63	6.07
ESG Weighted	5.69	8.35	6.65	7.00	6.12	5.29	5.19	3.39	5.58	6.00
Catholic Values	5.11	8.30	6.29	6.71	6.24	5.33	4.98	2.40	5.41	6.28
Sterling										
Barclays Sterling Agg Corporate	5.14	8.22	6.84	6.38	6.04	5.01	4.08	2.65	5.44	6.13
SRI	4.92	8.20	6.80	6.33	6.33	5.13	4.17	2.87	5.49	6.63
Sustainability	6.08	8.15	7.29	6.73	6.37	5.29	5.39	5.00	5.94	5.94
ESG Weighted	5.95	8.15	7.16	6.71	6.28	5.11	4.78	4.19	5.61	5.90
Catholic Values	4.71	8.06	6.66	6.04	6.20	5.07	4.16	2.66	5.44	6.28

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Barclays MSCI ESG Fixed Income Indices

## INDEX PROFILES

### BARCLAYS MSCI US CORPORATE SOCIALLY RESPONSIBLE (SRI) INDEX

Inception Date	Currency	Ticker
1/1/2007	USD	RUCM

The Barclays MSCI US Corporate Socially Responsible (SRI) Index is a fixed-rate, investment grade corporate bond benchmark that negatively screens issuers that are involved in alcohol, tobacco, gambling, military weapons, nuclear power, adult entertainment, civilian firearms, and genetically modified organisms. Security eligibility follows the same underlying rules as the Barclays US Corporate Index, with additional ESG negative screening using MSCI ESG Business Involvement Screening Research (BISR) and MSCI Impact Monitor Scores. Screening based on other business activities or ratings that are tracked by MSCI ESG Research are also available. The index was launched in June 2013 with history available back to January 2007.

### **Eligible Bond Universe**

### Eligible Sectors: Corporate (Industrial, Utility, and Financials) Minimum Issue Size: USD250mn

#### Credit Quality

- Rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&P and Fitch; when a rating from only two agencies is available, the lower is used
- Expected ratings at issuance may be used when other indexeligible bonds from the same issuer hold the same actual rating as the expected rating

Maturity: At least one year to final maturity, regardless of optionality. Fixed-rate perpetuals are not included

Seniority of Debt: Senior and subordinated issues are included Taxability: Only fully taxable issues are eligible

**Currency:** Principal and coupon must be denominated in USD

**Coupon**: Issues must pay fixed-rate coupon, callable fixed-to-float bonds are eligible during their fixed-rate only

Market of Issue: Securities must be SEC registered, exempt from registration at issuance, or SEC Rule 144A with registration rights

**Rebalancing**: The index is rebalanced at each month-end, setting a fixed universe (Returns) from which index returns are calculated for the next month. A forward-looking projection (Statistics) changes daily to reflect current eligibility, but is not used to compute returns

### Environment, Social, and Governance Rules

#### **Business Involvement Screens**

Excludes issuers involved in the following business lines/activities:

- Alcohol
- Tobacco
- Gambling
- Adult Entertainment
- Genetically Modified Organisms (GMO)
- Nuclear Power
- Civilian Firearms
- Military Weapons (including mines, cluster bombs, chemical weapons)

Involvement is defined for each restricted activity and may be based on % of revenue, total revenue, or any tie regardless of revenue

#### **Related Index and Sub-Index Info**

Index	Bloomberg Ticker	IndexID
US Corporate Socially Responsible	RUCM	29530
US Intermediate Corporate SRI	-	29558
US Long Corporate SRI	-	29530
US Corporate ex Pred Lending	-	29567
US Corporate ex Weapons	-	29568
US Corporate Catholic Values	RCAT	29569
US Credit Socially Responsible	RCRD	29531
US Aggregate Socially Responsible	-	29532

#### Eligible Securities/Included

- Bullet, callable, putable, sinkable/amortizing
- Fixed-rate and fixed-to-floating capital securities

#### Eligible Securities / Excluded

- Industrial and Utility issuers that > 50% or government-owned
- Bonds with equity type features (eg, warrants, convertibles, contingent capital securities, preferreds, DRDs)
- Private placements, retail bonds, USD 25/USD 50 par bonds
- Structured notes, pass-through certificates
- Inflation-linked bonds, floating-rate issues
- Illiquid securities with no available internal or 3rd-party pricing

**Pricing**: Index prices are sourced primarily from Barclays market makers, though third-party pricing may be used. Prices are quoted on the bid side, with the exception of new issues, which are priced on the offer side upon entering the index. T+1 settlement is used for all dates except month-end, when bonds are assumed to settle on first calendar day of the following month

**Weighting:** Index eligible securities are market value weighted. For Sector Neutral versions of different ESG indices, security weights are market value weighted within each sector (Class 1 or Class 2), but sector weights are designed to match the same sector exposure of the non-ESG versions of the same benchmark

#### Impact Monitor Screens

 Excludes any issuer with a "Red" MSCI ESG Impact Monitor score (less than 2), which measures an issuer's involvement in major ESG controversies and how well they adhere to international norms and principles

#### Other Available Screens

- Screening is available for other business activities that may be restricted for certain investors including predatory lending, child labor, stem cell, abortion/contraception, etc. These are not however screened from the standard SRI Index
- Involvement in countries that are subject to sanctions in certain markets (Iran, Burma, Cuba, etc.) can also be negatively screened in custom indices

### **SRI Index Exclusions**

SRI Exclusion Criteria	# Issuers	# Bonds	MV (\$bn)	MV% US Corp	MV% US Agg			
Business Involvement Screen								
Nuclear Power	34	614	394.0	10.7%	2.33%			
Military Weapons	15	155	172.9	4.7%	1.02%			
GMO	9	108	103.1	2.8%	0.61%			
Alcohol	5	60	49.8	1.4%	0.30%			
Tobacco	4	39	39.1	1.1%	0.23%			
Gambling	3	13	7.3	0.2%	0.04%			
Adult Entertainment	-	-	0.0	-	-			
Civilian Firearms	-	-	0.0	-	-			
Impact Monitor Screen								
MSCI "Red" Impact	21	214	285.8	7.8%	1.7%			
Total								
Excl from US Corp/Agg	89	1,073	869.0	23.7%	5.1%			
US Corp Index	705	4,632	3,671.0	100%	21.8%			
Note: Exclusions are not	mutuall	y exclusi	ve					

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

### Index Characteristics – Financial

	US Corp SRI	US Corp
# Bonds	3,559	4,632
# Issuers	616	1,073
Market Value	2802.0	3671.0
OAD	6.8	7.1
OAS	135.0	132.3
OASD	6.6	6.9
Yield to Mat	2.90	2.92
DTS	9.69	9.84
Liquidity Cost Score	0.97	0.95
Credit Quality	A3/BAA1	A3/BAA1
Credit QualNum	8.26	8.06

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

### Annual Index Returns 2007-12 (Total Return %, USD)



Source: MSCI ESG Research, Barclays Research

### Composition by ESG Rating

ESG				US Corporate				
Rating	Total	IND	UTL	FIN	Total	IND	UTL	FIN
AAA	5.5	3.1	-	2.4	4.5	2.6	0.0	1.9
AA	10.4	7.7	0.2	2.6	12.9	7.8	0.8	4.3
А	17.0	13.5	0.7	2.8	15.4	11.9	1.4	2.1
BBB	15.6	11.5	0.1	4.0	17.8	11.0	1.0	5.8
BB	25.6	11.5	1.5	12.6	22.9	10.5	2.8	9.6
В	6.0	4.4	0.3	1.3	8.5	6.3	1.0	1.3
CCC	15.2	5.3	0.1	9.9	14.3	5.4	1.3	7.5
NR	4.6	1.0	3.3	0.3	3.7	0.8	2.7	0.2
Total	100	58.0	6.3	35.7	100	56.3	11.0	32.8

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

### Index Characteristics – Non-Financial

ESG Theme Score	US Corp SRI	US Corp
"E" Pillar	5.9	5.7
Climate	7.9	7.8
Env Opport	5.6	5.8
Natural Resource	4.5	4.3
Waste Management	6.2	5.6
"S" Pillar	4.3	4.4
Social Opport	4.5	4.5
Human Capital	5.1	4.9
Product Safety	3.7	3.9
"G" Pillar	5.6	5.7
Business Ethics	4.6	4.6
Corp Governance	7.0	7.0
Public Policy	2.9	2.7

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

### Realized Monthly Tracking Error vs. US Corporate Index



Source: MSCI ESG Research, Barclays Research

### BARCLAYS MSCI US CORPORATE SUSTAINABILITY INDEX

Inception Date	Currency	Ticker
1/1/2007	USD	SUCM

The Barclays MSCI US Corporate Sustainability Index is a fixed-rate, investment grade corporate bond benchmark that includes issuers with MSCI ESG ratings of BBB or higher. This benchmark is designed to positively screen "best in class" issuers that are more effective at managing the ESG risks most relevant to their industry peer group. Security eligibility follows the same underlying rules as the Barclays US Corporate Index, with additional ESG negative screening using MSCI Impact Monitor Scores. This index is a market value weighted benchmark, but a variant is available that preserved the Class 2 sector weights for the full Barclays US Corporate Index. The index was launched in June 2013 with history available back to January 2007.

Related Index and Sub-Index Info		
Index	Bloomberg Ticker	IndexID
US Corporate Sustainability	SUCM	29534
US Corp Sustainability Sector Neutral	SUCN	29689
US Intermediate Corp Sustainability	-	29611
US Long Corp Sustainability	-	29612
US Corp Industrial Sustainability	-	29630
US Corp Utility Sustainability	-	29639
US Corp Financial Sustainability	-	29623
US Credit Sustainability	-	29613

### **Eligible Bond Universe**

### Eligible Sectors: Corporate (Industrial, Utility, and Financials) Minimum Issue Size: USD250mn

#### **Credit Quality**

- Rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&P and Fitch; when a rating from only two agencies is available, the lower is used
- Expected ratings at issuance may be used when other indexeligible bonds from the same issuer hold the same actual rating as the expected rating

Maturity: At least one year to final maturity, regardless of optionality. Fixed-rate perpetuals are not included

Seniority of Debt: Senior and subordinated issues are included

Taxability: Only fully taxable issues are eligible

Currency: Principal and coupon must be denominated in USD

**Coupon**: Issues must pay fixed-rate coupon, callable fixed-to-float bonds are eligible during their fixed-rate only

Market of Issue: Securities must be SEC registered, exempt from registration at issuance, or SEC Rule 144A with registration rights

**Rebalancing**: The index is rebalanced at each month-end, setting a fixed universe (Returns) from which index returns are calculated for the next month. A forward-looking projection (Statistics) changes daily to reflect current eligibility, but is not used to compute returns

### Environment, Social, and Governance Rules

#### ESG Rating

- Includes issuers with an ESG rating of BBB or higher using MSCI's IVA Rating or Sovereign Rating model
- ESC ratings are available for Treasury, government-related, corporate, and covered bond issuers. They are not applied to MBS, ABS, and CMBS issues
- Unrated issuers from sectors with ratings are excluded
- Ratings are applied at the Barclays ticker level. Every bond within the same ticker will have the same ESG rating
- ESG ratings are generally updated annually, but may be reviewed more frequently as needed

#### Eligible Securities/Included

- Bullet, callable, putable, sinkable/amortizing
- Fixed-rate and fixed-to-floating capital securities

#### Eligible Securities / Excluded

- Industrial and Utility issuers that > 50% or government-owned
- Bonds with equity type features (eg, warrants, convertibles, contingent capital securities, preferreds, DRDs)
- Private placements, retail bonds, USD 25/USD 50 par bonds
- Structured notes, pass-through certificates
- Inflation-linked bonds, floating-rate issues
- Illiquid securities with no available internal or 3rd-party pricing

**Pricing**: Index prices are sourced primarily from Barclays market makers, though third-party pricing may be used. Prices are quoted on the bid side, with the exception of new issues, which are priced on the offer side upon entering the index. T+1 settlement is used for all dates except month-end, when bonds are assumed to settle on first calendar day of the following month

**Weighting:** Index eligible securities are market value weighted. For Sector Neutral versions of different ESG indices, security weights are market value weighted within each sector (Class 1 or Class 2), but sector weights are designed to match the same sector exposure of the non-ESG versions of the same benchmark

#### Impact Monitor Screens

 Excludes any issuer with a "Red" MSCI ESG Impact Monitor score (less than 2), which measures an issuer's involvement in major ESG controversies and how well they adhere to international norms and principles

#### Other Available Screens

- Lower or higher ESG rating thresholds may be applied for custom indices
- Negative screening is available for business activities covered by MSCI Business Issuer Screening Research (BISR) that may also be used in Barclays MSCI Socially Responsible Indices

### **SRI Exposure**

	#	#	MV	MV% US	MV% US
SRI Exposure	Issuers	Bonds	(\$bn)	Corp	Agg
SRI Business Involveme	ent				
Nuclear Power	14	275	234.3	13.4%	1.70%
Military Weapons	10	136	162.4	9.3%	1.18%
GMO	5	69	65.9	3.8%	0.48%
Alcohol	2	48	45.1	2.6%	0.33%
Tobacco	-	-	-	-	-
Gambling	2	12	6.8	0.4%	0.05%
Adult Entertainment	-	-	-	-	-
Civilian Firearms	-	-	-	-	-
Total					
BBB+ SRI Exposure	31	486	387.8	22.2%	2.8%
US Corp ESG BBB+	314	2,233	1,748.7	100%	12.7%

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

### Index Characteristics - Financial

	US Corp Sustainability	Sector Neutral	US Corp
# Bonds	2,233	2,233	4,632
# Issuers	428	428	1,073
Market Value	1,748.7	1,748.7	3,671.0
OAD	7.0	6.9	7.1
OAS	121.7	121.1	132.3
OASD	6.8	6.8	6.9
Yield to Mat	2.79	2.76	2.92
DTS	9.07	8.99	9.84
Liquidity Cost Score	0.96	0.94	0.95
Credit Quality	A2/A3	A2/A3	A3/BAA1
Credit QualNum	7.78	7.70	8.06

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

### Annual Index Returns 2007-12 (Total Return %, USD)



Source: MSCI ESG Research, Barclays Research

### Composition by ESG Rating

ESG	US Corp Sustainability			US Corporate				
Rating	Total	IND	UTL	FIN	Total	IND	UTL	FIN
AAA	9.5	5.5	0.1	3.9	4.5	2.6	0.0	1.9
AA	27.1	16.3	1.7	9.0	12.9	7.8	0.8	4.3
А	32.4	24.9	3.0	4.5	15.4	11.9	1.4	2.1
BBB	31.1	21.4	2.0	7.7	17.8	11.0	1.0	5.8
BB	-	-	-	-	22.9	10.5	2.8	9.6
В	-	-	-	-	8.5	6.3	1.0	1.3
CCC	-	-	-	-	14.3	5.4	1.3	7.5
NR	-	-	-	-	3.7	0.8	2.7	0.2
Total	100	68.09	6.81	25.1	100	56.3	11.0	32.8

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics - Non-Financial

ESG Theme Score	US Corp Sustainability	Sector Neutral	US Corp
"E" Pillar	6.5	6.5	5.7
Climate	8.0	8.1	7.8
Env Opport	6.7	6.7	5.8
Natural Resource	4.6	4.6	4.3
Waste Management	5.6	5.7	5.6
"S" Pillar	4.9	5.0	4.4
Social Opport	4.8	4.7	4.5
Human Capital	5.1	5.2	4.9
Product Safety	4.9	5.0	3.9
"G" Pillar	7.0	7.0	5.7
Business Ethics	5.8	5.9	4.6
Corp Governance	8.0	7.9	7.0
Public Policy	5.8	5.8	2.7

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

### Realized Monthly Tracking Error vs. US Corporate Index



Source: MSCI ESG Research, Barclays Research
### BARCLAYS MSCI US CORPORATE ESG WEIGHTED INDEX

Inception Date	Currency	Ticker
1/1/2007	USD	UCEW

The Barclays MSCI US Corporate ESG Weighted Index is a fixed-rate, investment grade corporate bond benchmark that adjusts the market value weight of index eligible issuers based on ESG Ratings and ESG Ratings Momentum. This benchmark is designed to overweight issuers that have higher ESG ratings and/or positive ratings momentum while underweighting issuers that have lower ratings and/or negative momentum. Security eligibility follows the same underlying rules as the Barclays US Corporate Index, with different weighting tilts applied for each rating/ratings momentum combination. A variant of this benchmark is available that preserved the Class 2 sector weights of the full Barclays US Corporate Index. The index was launched in June 2013 with history available back to January 2007.

#### **Eligible Bond Universe**

#### Eligible Sectors: Corporate (Industrial, Utility, and Financials) Minimum Issue Size: USD250mn

#### **Credit Quality**

- Rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&P and Fitch; when a rating from only two agencies is available, the lower is used
- Expected ratings at issuance may be used when other indexeligible bonds from the same issuer hold the same actual rating as the expected rating

Maturity: At least one year to final maturity, regardless of optionality. Fixed-rate perpetuals are not included

Seniority of Debt: Senior and subordinated issues are included

Taxability: Only fully taxable issues are eligible

Currency: Principal and coupon must be denominated in USD

**Coupon:** Issues must pay fixed-rate coupon, callable fixed-to-float bonds are eligible during their fixed-rate only

Market of Issue: Securities must be SEC registered, exempt from registration at issuance, or SEC Rule 144A with registration rights

**Rebalancing**: The index is rebalanced at each month-end, setting a fixed universe (Returns) from which index returns are calculated for the next month. A forward-looking projection (Statistics) changes daily to reflect current eligibility, but is not used to compute returns

#### Environment, Social, and Governance Rules

#### ESG Weighting

- The weight of each index eligible issuer (and security) is adjusted by a fixed multiplier based on both its ESG Rating (AAA, AA, A, BBB, BB, B, CCC, NR) and its ESG Ratings momentum (Positive, Neutral, Negative since last evaluation)
- Security weights are normalized using adjusted market values
- ESG ratings are available for Treasury, government-related, corporate, and covered bond issuers. They are not applied to MBS, ABS, and CMBS issues, which are left unadjusted
- Ratings are applied at the Barclays ticker level, and every bond within the same ticker will have the same ESG rating.
- ESG ratings are generally updated annually, but may be reviewed more frequently as needed

#### Related Index and Sub-Index Info

Index	Bloomberg Ticker	IndexID
US Corporate ESG Weighted	UCEW	29693
US Corp ESG Weighted Sector Neutral	UCW1	29539
US Intermediate Corp ESG Weighted	-	29694
US Long Corp ESG Weighted	-	29695
US Credit ESG Weighted	UDEW	29696
US Credit ESG Weighted Sector Neutral	UDW1	29540
US Agg ESG Weighted	UAEW	29698
US Agg ESG Wtg Sector Neutral Class 1	UAW1	29542

#### Eligible Securities/Included

- Bullet, callable, putable, sinkable/amortizing
- Fixed-rate and fixed-to-floating capital securities

#### Eligible Securities/Excluded

- Industrial and Utility issuers that > 50% or government-owned
- Bonds with equity type features (eg, warrants, convertibles, contingent capital securities, preferreds, DRDs)
- Private placements, retail bonds, USD 25/USD 50 par bonds
- Structured notes, pass-through certificates
- Inflation-linked bonds, floating-rate issues
- Illiquid securities with no available internal or 3rd-party pricing
- Pricing: Index prices are sourced primarily from Barclays market

makers, though third-party pricing may be used. Prices are quoted on the bid side, with the exception of new issues, which are priced on the offer side upon entering the index. T+1 settlement is used for all dates except month-end, when bonds are assumed to settle on first calendar day of the following month

**Weighting:** Index eligible securities are market value weighted. For Sector Neutral versions of different ESG indices, security weights are market value weighted within each sector (Class 1 or Class 2), but sector weights are designed to match the same sector exposure of the non-ESG versions of the same benchmark

#### Factors Used to Adjust Weights Based on Ratings/Momentum

•	5	0	
Rating	Tilt	Momentum	Tilt
AAA, AA, A	1.5x	Positive	2.0x
BBB	1.0x	Neutral	1.0x
BB	0.8x	Negative	0.5x
В	0.75x		
CCC	0.67x		
NR	0.75x		
MBS/ABS/CMBS	1.0x		

#### Socially Responsible Index Exclusions

	#	#	MV	MV% US	MV% US		
SRI Exposure	Issuers	Bonds	(\$bn)	Corp	Agg		
SRI Business Involvement							
Nuclear Power	14	275	234.3	13.4%	1.70%		
Military Weapons	10	136	162.4	9.3%	1.18%		
GMO	5	69	65.9	3.8%	0.48%		
Alcohol	2	48	45.1	2.6%	0.33%		
Tobacco	-	-	-	-	-		
Gambling	2	12	6.8	0.4%	0.05%		
Adult Entertainment	-	-	-	-	-		
Civilian Firearms	-	-	-	-	-		
Total							
BBB+ SRI Exposure	31	486	387.8	22.2%	2.8%		
US Corp ESG BBB+	314	2,233	1,748.7	100%	12.7%		

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics - Financial

	US Corp ESG Weighted	Sector Neutral	US Corp	
# Bonds	4,632	4,632	4,632	
# Issuers	705	705	1,073	
OAD	7.1	7.1	7.1	
OAS	126.7	127.1	132.3	
OASD	6.9	6.9	6.9	
Yield to Mat	2.85	2.86	2.92	
DTS	9.48	9.52	9.84	
Liquidity Cost Score	0.95	0.95	0.95	
Credit Quality	A2/A3	A2/A3	A3/BAA1	
Credit QualNum	7.87	7.87	8.06	

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Annual Index Returns 2007-12 (Total Return %, USD)



Source: MSCI ESG Research, Barclays Research

#### Composition by ESG Rating

ESG	US Cor	porate E	SG We	eighted		US Cor		
Rating	Total	IND	UTL	FIN	Total	IND	UTL	FIN
AAA	7.4	5.0	0.1	2.4	4.5	2.6	0.0	1.9
AA	23.7	14.0	1.4	8.4	12.9	7.8	0.8	4.3
A	27.0	21.8	1.5	3.7	15.4	11.9	1.4	2.1
BBB	15.3	9.4	1.4	4.5	17.8	11.0	1.0	5.8
BB	15.7	6.4	1.5	7.9	22.9	10.5	2.8	9.6
В	3.7	2.6	0.5	0.5	8.5	6.3	1.0	1.3
CCC	5.1	1.8	0.5	2.8	14.3	5.4	1.3	7.5
NR	2.2	0.5	1.6	0.1	3.7	0.8	2.7	0.2
Total	100	61.35	8.42	30.23	100	56.3	11.0	32.8

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics – Non-Financial

ESG Theme Score	US Corp ESG Weighted	Sector Neutral	US Corp
"E" Pillar	6.4	6.3	5.7
Climate	8.1	8.1	7.8
Env Opport	6.5	6.5	5.8
Natural Resource	4.6	4.6	4.3
Waste Management	5.7	5.6	5.6
"S" Pillar	4.7	4.7	4.4
Social Opport	4.6	4.6	4.5
Human Capital	5.1	5.1	4.9
Product Safety	4.5	4.5	3.9
"G" Pillar	6.4	6.4	5.7
Business Ethics	5.5	5.5	4.6
Corp Governance	7.6	7.5	7.0
Public Policy	3.6	3.6	2.7

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Realized Monthly Tracking Error vs. US Corporate Index



### BARCLAYS MSCI US CREDIT SOCIALLY RESPONSIBLE (SRI) INDEX

Inception Date	Currency	Ticker
1/1/2007	USD	RCRD

The Barclays MSCI US Credit Socially Responsible Index is a fixedrate, investment-grade corporate bond benchmark that negatively screens issuers that are involved in alcohol, tobacco, gambling, military weapons, nuclear power, adult entertainment, civilian firearms, and genetically modified organisms. Security eligibility follows the same underlying rules as the Barclays US Credit Index, with additional ESG negative screening using MSCI ESG Business Involvement Screening Research (BISR) and MSCI Impact Monitor Scores. Screening based on other business activities or ratings that are tracked by MSCI ESG Research are also available. The index was launched in June 2013 with history available back to January 2007.

# Related Index and Sub-Index Info Index Bloomberg Ticker

	Ticker	
US Credit Socially Responsible	RCRD	29531
US Intermediate Credit SRI	-	29560
US Long Credit SRI	-	29561
US Credit SRI + ESG	-	29565
US Corporate Socially Responsible	RUCM	29530
US Gov/Credit Socially Responsible	RUGM	29562
US Corporate Socially Responsible	RUCM	29530
US Aggregate Socially Responsible	-	29532

IndexID

#### **Eligible Bond Universe**

Eligible Sectors: Corporate, Non-Native Currency Agencies, Sovereigns, Supranational and Local Authorities Minimum Issue Size: USD250mn

#### Credit Quality

- Rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&P and Fitch; when a rating from only two agencies is available, the lower is used
- Expected ratings at issuance may be used when other indexeligible bonds from the same issuer hold the same actual rating as the expected rating

Maturity: At least one year to final maturity, regardless of optionality. Fixed-rate perpetuals are not included

Seniority of Debt: Senior and subordinated issues are included Taxability: Only fully taxable issues are eligible

Currency: Principal and coupon must be denominated in USD

**Coupon:** Issues must pay fixed-rate coupon, callable fixed-to-float bonds are eligible during their fixed-rate only

Market of Issue: Securities must be SEC registered, exempt from registration at issuance, or SEC Rule 144A with registration rights **Rebalancing**: The index is rebalanced at each month-end, setting a fixed universe (Returns) from which index returns are calculated for the next month. A forward-looking projection (Statistics) changes daily to reflect current eligibility, but is not used to compute returns

#### Environment, Social, and Governance Rules

#### **Business Involvement Screens**

Excludes issuers involved in the following business lines/activities:

- Alcohol
- Tobacco
- Gambling
- Adult Entertainment
- Genetically Modified Organisms (GMO)
- Nuclear Power
- Civilian Firearms
- Military Weapons (including mines, cluster bombs, chemical weapons)

Involvement is defined for each restricted activity and may be based on % of revenue, total revenue, or any tie regardless of revenue

#### Eligible Securities/Included

- Bullet, callable, putable, sinkable/amortizing
- Fixed-rate and fixed-to-floating capital securities

#### Eligible Securities / Excluded

- Industrial and Utility issuers that > 50% or government-owned
- Bonds with equity type features (eg, warrants, convertibles, contingent capital securities, preferreds, DRDs)
- Private placements, retail bonds, USD 25/USD 50 par bonds
- Structured notes, pass-through certificates
- Inflation-linked bonds, floating-rate issues
- Illiquid securities with no available internal or 3rd-party pricing

**Pricing:** Index prices are sourced primarily from Barclays market makers, though third-party pricing may be used. Prices are quoted on the bid side, with the exception of new issues, which are priced on the offer side upon entering the index. T+1 settlement is used for all dates except month-end, when bonds are assumed to settle on first calendar day of the following month

**Weighting:** Index eligible securities are market value weighted. For Sector Neutral versions of different ESG indices, security weights are market value weighted within each sector (Class 1 or Class 2), but sector weights are designed to match the same sector exposure of the non-ESG versions of the same benchmark

#### Impact Monitor Screens

 Excludes any issuer with a "Red" MSCI ESG Impact Monitor score (less than 2), which measures an issuer's involvement in major ESG controversies and how well they adhere to international norms and principles

- Screening is available for other business activities that may be restricted for certain investors including predatory lending, child labor, stem cell, abortion/contraception, etc. These are not however screened from the standard SRI Index
- Involvement in countries that are subject to sanctions in certain markets (Iran, Burma, Cuba, etc.) can also be negatively screened in custom indices

#### **SRI Index Exclusions**

SRI Exclusion Criteria	# Issuers	# Bonds	MV (\$bn)	MV% US Corp	MV% US Agg		
Business Involvement Screen							
Nuclear Power	614	34	394.0	10.7%	2.33%		
Military Weapons	155	15	172.9	4.7%	1.02%		
GMO	108	9	103.1	2.8%	0.61%		
Alcohol	60	5	49.8	1.4%	0.30%		
Tobacco	39	4	39.1	1.1%	0.23%		
Gambling	13	3	7.3	0.2%	0.04%		
Adult Entertainment	-	-	-	-	-		
Civilian Firearms	-	-	-	-	-		
Impact Monitor Screen							
MSCI "Red" Impact	214	21	285.8	7.8%	1.7%		
Total							
Excl from US Corp/Agg	89	1,073	869.0	23.7%	5.1%		
US Corp Index	705	4,632	3,671.0	100%	21.8%		
Note: Exclusions are not	t mutuall	v exclusi	ve				

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics – Financial

	US Credit SRI	US Credit
# Bonds	4,305	5,396
# Issuers	786	878
Market Value	3,774.9	4,680.2
OAD	6.8	7.0
OAS	123.7	124.6
OASD	6.6	6.8
Yield to Mat	2.77	2.82
DTS	9.09	9.36
Liquidity Cost Score	0.87	0.87
Credit Quality	A2/A3	A2/A3
Credit QualNum	7.49	7.50

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)



#### Annual Index Returns 2007-12 (Total Return %, USD)

Source: MSCI ESG Research, Barclays Research

#### Composition by ESG Rating

ESG Rating	US Credit SRI					ι	JS Crea	lit		
Kating	Total	IND	UTL	FIN	N-Corp	Total	IND	UTL	FIN	N-Corp
AAA	8.2	2.3	-	1.8	4.1	6.9	2.1	0.0	1.5	3.3
AA	12.9	5.7	0.2	1.9	5.2	14.3	6.1	0.6	3.4	4.2
A	17.1	10.0	0.5	2.1	4.5	15.7	9.3	1.1	1.7	3.6
BBB	14.7	8.5	0.1	3.0	3.2	17.3	8.6	0.7	4.6	3.3
BB	23.5	8.5	1.1	9.3	4.5	21.6	8.3	2.2	7.5	3.6
В	4.6	3.3	0.2	0.9	0.1	6.8	4.9	0.8	1.0	0.1
CCC	11.3	3.9	0.1	7.3	-	11.2	4.3	1.0	5.9	-
NR	7.6	0.8	2.4	0.2	4.2	6.3	0.6	2.1	0.2	3.4
Total	100	43.1	4.6	26.5	25.8	100	44.1	8.6	25.7	21.6

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics – Non-Financial

ESG Theme Score	US Credit ESG SRI	US Credit
"E" Pillar	6.1	5.9
Climate	7.5	7.5
Env Opport	5.7	5.8
Natural Resource	4.9	4.6
Waste Management	6.0	5.5
"S" Pillar	4.5	4.5
Social Opport	4.6	4.6
Human Capital	5.4	5.2
Product Safety	3.8	3.9
"G" Pillar	5.7	5.8
Business Ethics	5.1	5.0
Corp Governance	7.0	7.0
Public Policy	4.2	3.9

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Realized Monthly Tracking Error vs. US Corporate Index



### BARCLAYS MSCI US CREDIT SUSTAINABILITY INDEX

Inception Date	Currency	Ticker
1/1/2007	USD	-

The Barclays MSCI US Credit Sustainability Index is a fixed-rate, investment-grade corporate bond benchmark that includes issuers with MSCI ESG ratings of BBB or higher. This benchmark is designed to positively screen "best in class" issuers that are more effective at managing the ESG risks most relevant to their industry peer group. Security eligibility follows the same underlying rules as the Barclays US Credit Index, with additional ESG negative screening using MSCI Impact Monitor Scores. This index is a market value weighted benchmark, but a variant is available that preserved the Class 2 sector weights for the full Barclays US Credit Index. The index was launched in June 2013 with history available back to January 2007.

#### Related Index and Sub-Index Info

Index	Bloomberg Ticker	IndexID
US Credit Sustainability	-	29613
US Credit Sustainability Sector Neutral	SUDN	29690
US Gov-Related Sustainability	-	29618
US Corp Industrial Sustainability	-	29630
US Corp Utility Sustainability	-	29639
US Corp Financial Sustainability	-	29623
US Corporate Sustainability	SUCM	29534
US Corp Sustainability Sector Neutral	SUCN	29689

#### **Eligible Bond Universe**

Eligible Sectors: Corporate, Non-Native Currency Agencies, Sovereigns, Supranational and Local Authorities Minimum Issue Size: USD250mn

#### Credit Quality

- Rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&P and Fitch; when a rating from only two agencies is available, the lower is used
- Expected ratings at issuance may be used when other indexeligible bonds from the same issuer hold the same actual rating as the expected rating

Maturity: At least one year to final maturity, regardless of optionality. Fixed-rate perpetuals are not included

Seniority of Debt: Senior and subordinated issues are included Taxability: Only fully taxable issues are eligible

Currency: Principal and coupon must be denominated in USD

**Coupon:** Issues must pay fixed-rate coupon, callable fixed-to-float bonds are eligible during their fixed-rate only

Market of Issue: Securities must be SEC registered, exempt from registration at issuance, or SEC Rule 144A with registration rights **Rebalancing**: The index is rebalanced at each month-end, setting a fixed universe (Returns) from which index returns are calculated for the next month. A forward-looking projection (Statistics) changes daily to reflect current eligibility, but is not used to compute returns

#### Environment, Social, and Governance Rules

#### ESG Rating

- Includes issuers with an ESG rating of BBB or higher using MSCI's IVA Rating or Sovereign Rating model
- ESG ratings are available for Treasury, government-related, corporate, and covered bond issuers. They are not applied to MBS, ABS, and CMBS issues
- Unrated issuers from sectors with ratings are excluded
- Ratings are applied at the Barclays ticker level. Every bond within the same ticker will have the same ESG rating
- ESG ratings are generally updated annually, but may be reviewed more frequently as needed

#### Eligible Securities/Included

- Bullet, callable, putable, sinkable/amortizing
- Fixed-rate and fixed-to-floating capital securities

#### Eligible Securities / Excluded

- Industrial and Utility issuers that > 50% or government-owned
- Bonds with equity type features (eg, warrants, convertibles, contingent capital securities, preferreds, DRDs)
- Private placements, retail bonds, USD 25/USD 50 par bonds
- Structured notes, pass-through certificates
- Inflation-linked bonds, floating-rate issues
- Illiquid securities with no available internal or 3rd-party pricing

**Pricing:** Index prices are sourced primarily from Barclays market makers, though third-party pricing may be used. Prices are quoted on the bid side, with the exception of new issues, which are priced on the offer side upon entering the index. T+1 settlement is used for all dates except month-end, when bonds are assumed to settle on first calendar day of the following month

**Weighting:** Index eligible securities are market value weighted. For Sector Neutral versions of different ESG indices, security weights are market value weighted within each sector (Class 1 or Class 2), but sector weights are designed to match the same sector exposure of the non-ESG versions of the same benchmark

#### Impact Monitor Screens

 Excludes any issuer with a "Red" MSCI ESG Impact Monitor score (less than 2), which measures an issuer's involvement in major ESG controversies and how well they adhere to international norms and principles

- Lower or higher ESG rating thresholds may be applied for custom indices
- Negative screening is available for business activities covered by MSCI Business Issuer Screening Research (BISR) that may also be used in Barclays MSCI Socially Responsible Indices

#### **SRI Exposure**

SRI Exposure	# Issuers	# Bonds	MV (\$bn)	MV% US Corp	MV% US Agg
SRI Business Involveme	ent				
Nuclear Power	14	275	234.3	13.4%	1.70%
Military Weapons	10	136	162.4	9.3%	1.18%
GMO	5	69	65.9	3.8%	0.48%
Alcohol	2	48	45.1	2.6%	0.33%
Tobacco	-	-	-	-	-
Gambling	2	12	6.8	0.4%	0.05%
Adult Entertainment	-	-	-	-	-
Civilian Firearms	-	-	-	-	-
Total					
BBB+ SRI Exposure	31	486	387.8	22.2%	2.8%
US Corp ESG BBB+	314	2,233	1,748.7	100%	12.7%

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics - Financial

	US Credit Sustainability	US Credit
# Bonds	2624.0	5396.0
# Issuers	361	878
Market Value	2390.2	4680.2
OAD	6.5	7.0
OAS	106.4	124.6
OASD	6.3	6.8
Yield to Mat	2.52	2.82
DTS	7.75	9.36
Liquidity Cost Score	0.83	0.87
Credit Quality	A1/A2	A2/A3
Credit QualNum	6.83	7.50

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Annual Index Returns 2007-12 (Total Return %, USD)



Source: MSCI ESG Research, Barclays Research

#### Composition by ESG Rating

ESG	US Credit Sustainability					ι	JS Crea	lit		
Rating	Total	IND	UTL	FIN	N-Corp	Total	IND	UTL	FIN	N-Corp
AAA	13.4	4.0	0.1	2.8	6.5	6.9	2.1	0.0	1.5	3.3
AA	28.0	11.9	1.3	6.6	8.2	14.3	6.1	0.6	3.4	4.2
A	30.8	18.2	2.2	3.3	7.1	15.7	9.3	1.1	1.7	3.6
BBB	27.8	15.6	1.5	5.7	5.0	17.3	8.6	0.7	4.6	3.3
BB	-	-	-	-	-	21.6	8.3	2.2	7.5	3.6
В	-	-	-	-	-	6.8	4.9	0.8	1.0	0.1
CCC	-	-	-	-	-	11.2	4.3	1.0	5.9	-
NR	-	-	-	-	-	6.3	0.6	2.1	0.2	3.4
Total	100	49.8	5.0	18.4	26.8	100	44.1	8.6	25.7	21.6

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics – Non-Financial

ESG Theme Score	US Credit Sustainability	US Credit
"E" Pillar	6.8	5.9
Climate	7.5	7.5
Env Opport	6.7	5.8
Natural Resource	5.1	4.6
Waste Management	5.5	5.5
"S" Pillar	5.1	4.5
Social Opport	4.9	4.6
Human Capital	5.6	5.2
Product Safety	5.0	3.9
"G" Pillar	7.0	5.8
Business Ethics	6.1	5.0
Corp Governance	7.8	7.0
Public Policy	6.9	3.9

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Realized Monthly Tracking Error vs. US Credit Index



### BARCLAYS MSCI US CREDIT ESG WEIGHTED INDEX

Inception Date	Currency	Ticker
1/1/2007	USD	UDEW

The Barclays MSCI US Credit ESG Weighted Index is a fixed-rate, investment-grade corporate bond benchmark that adjusts the market value weight of index eligible issuers based on ESG Ratings and ESG Ratings Momentum. This benchmark is designed to overweight issuers that have higher ESG ratings and/or positive ratings momentum while underweighting issuers that have lower ratings and/or negative momentum. Security eligibility follows the same underlying rules as the Barclays US Credit Index, with different weighting tilts applied for each rating/ratings momentum combination. A variant of this benchmark is available that preserved the Class 2 sector weights of the full Barclays US Credit Index. The index was launched in June 2013 with history available back to January 2007.

#### **Eligible Bond Universe**

Eligible Sectors: Corporate, Non-Native Currency Agencies, Sovereigns, Supranational and Local Authorities Minimum Issue Size: USD250mn

Credit Quality

- Rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&P and Fitch; when a rating from only two agencies is available, the lower is used
- Expected ratings at issuance may be used when other indexeligible bonds from the same issuer hold the same actual rating as the expected rating

Maturity: At least one year to final maturity, regardless of optionality. Fixed-rate perpetuals are not included

Seniority of Debt: Senior and subordinated issues are included

Taxability: Only fully taxable issues are eligible

Currency: Principal and coupon must be denominated in USD

**Coupon**: Issues must pay fixed-rate coupon, callable fixed-to-float bonds are eligible during their fixed-rate only

Market of Issue: Securities must be SEC registered, exempt from registration at issuance, or SEC Rule 144A with registration rights

**Rebalancing**: The index is rebalanced at each month-end, setting a fixed universe (Returns) from which index returns are calculated for the next month. A forward-looking projection (Statistics) changes daily to reflect current eligibility, but is not used to compute returns

#### Environment, Social, and Governance Rules

#### ESG Weighting

- The weight of each index eligible issuer (and security) is adjusted by a fixed multiplier based on both its ESG Rating (AAA, AA, A, BBB, BB, B, CCC, NR) and its ESG Ratings momentum (Positive, Neutral, Negative since last evaluation)
- Security weights are normalized using adjusted market values
- ESG ratings are available for Treasury, government-related, corporate, and covered bond issuers. They are not applied to MBS, ABS, and CMBS issues, which are left unadjusted
- Ratings are applied at the Barclays ticker level, and every bond within the same ticker will have the same ESG rating.
- ESG ratings are generally updated annually, but may be reviewed more frequently as needed

#### **Related Index and Sub-Index Info**

Index	Bloomberg Ticker	IndexID
US Credit ESG Weighted	UDEW	29696
US Credit ESG Weighted Sector Neutral	UDW1	29540
US Corporate ESG Weighted	UCEW	29693
US Corp ESG Weighted Sector Neutral	UCW1	29539
US Gov/Credit ESG Weighted	UGEW	29696
US Gov/Credit ESG Wtg Sector Neutral	UGW1	29541
US Agg ESG Weighted	UAEW	29698
US Agg ESG Wtg Sector Neutral Class 1	UAW1	29542
US Gov/Credit ESG Wtg Sector Neutral US Agg ESG Weighted	UGW1 UAEW	29541 29698

#### Eligible Securities/Included

- Bullet, callable, putable, sinkable/amortizing
- Fixed-rate and fixed-to-floating capital securities

#### Eligible Securities/Excluded

- Industrial and Utility issuers that > 50% or government-owned
- Bonds with equity type features (eg, warrants, convertibles, contingent capital securities, preferreds, DRDs)
- Private placements, retail bonds, USD 25/USD 50 par bonds
- Structured notes, pass-through certificates
- Inflation-linked bonds, floating-rate issues
- Illiquid securities with no available internal or 3rd-party pricing

Pricing: Index prices are sourced primarily from Barclays market

makers, though third-party pricing may be used. Prices are quoted on the bid side, with the exception of new issues, which are priced on the offer side upon entering the index. T+1 settlement is used for all dates except month-end, when bonds are assumed to settle on first calendar day of the following month

**Weighting:** Index eligible securities are market value weighted. For Sector Neutral versions of different ESG indices, security weights are market value weighted within each sector (Class 1 or Class 2), but sector weights are designed to match the same sector exposure of the non-ESG versions of the same benchmark

#### Factors Used to Adjust Weights Based on Ratings/Momentum

•	-	-	
Rating	Tilt	Momentum	Tilt
AAA, AA, A	1.5x	Positive	2.0x
BBB	1.0x	Neutral	1.0x
BB	0.8x	Negative	0.5x
В	0.75x		
CCC	0.67x		
NR	0.75x		
MBS/ABS/CMBS	1.0x		

#### Under lying Index ESG Exposure

SRI Exposure	# Issuers	# Bonds	MV (\$bn)	MV% US Corp	MV% US Agg	
SRI Business Involveme		Donas	(401)	corp	/ \gg	
Nuclear Power	14	275	234.3	13.4%	1.70%	
Military Weapons	10	136	162.4	9.3%	1.18%	
GMO	5	69	65.9	3.8%	0.48%	
Alcohol	2	48	45.1	2.6%	0.33%	
Tobacco	-	-	-	-	-	
Gambling	2	12	6.8	0.4%	0.05%	
Adult Entertainment	-	-	-	-	-	
Civilian Firearms	-	-	-	-	-	
Total						
BBB+ SRI Exposure	31	486	387.8	22.2%	2.8%	
US Corp ESG BBB+	314	2,233	1,748.7	100%	12.7%	

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics - Financial

	US Credit ESG Weighted	US Credit
# Bonds	5,396	5,396
# Issuers	878	878
OAD	6.7	7.0
OAS	115.0	124.6
OASD	6.6	6.8
Yield to Mat	2.66	2.82
DTS	8.57	9.36
Liquidity Cost Score	0.85	0.87
Credit Quality	A2/A3	A2/A3
Credit QualNum	7.08	7.50

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Annual Index Returns 2007-12 (Total Return %, USD)



Source: MSCI ESG Research, Barclays Research

#### Composition by ESG Rating

ESG	US Credit ESG Weighted					US Credit				
Rating	Total	IND	UTL	FIN	N-Corp	Total	IND	UTL	FIN	N-Corp
AAA	9.4	3.8	0.0	1.8	3.8	6.9	2.1	0.0	1.5	3.3
AA	25.2	10.6	1.0	6.4	7.2	14.3	6.1	0.6	3.4	4.2
A	26.8	16.6	1.2	2.8	6.3	15.7	9.3	1.1	1.7	3.6
BBB	14.1	7.2	1.1	3.4	2.5	17.3	8.6	0.7	4.6	3.3
BB	14.1	4.8	1.1	6.0	2.2	21.6	8.3	2.2	7.5	3.6
В	2.9	2.0	0.4	0.4	0.1	6.8	4.9	0.8	1.0	0.1
CCC	3.9	1.4	0.4	2.1	-	11.2	4.3	1.0	5.9	-
NR	3.6	0.4	1.2	0.1	1.9	6.3	0.6	2.1	0.2	3.4
Total	100	46.7	6.4	23.0	24.0	100	44.1	8.6	25.7	21.6

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics - Non-Financial

ESG Theme Score	US Credit ESG Weighted	US Credit
"E" Pillar	6.6	5.9
Climate	7.6	7.5
Env Opport	6.5	5.8
Natural Resource	5.0	4.6
Waste Management	5.5	5.5
"S" Pillar	4.8	4.5
Social Opport	4.8	4.6
Human Capital	5.5	5.2
Product Safety	4.5	3.9
"G" Pillar	6.4	5.8
Business Ethics	5.8	5.0
Corp Governance	7.6	7.0
Public Policy	5.2	3.9

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Realized Monthly Tracking Error vs. US Credit Index



### BARCLAYS MSCI US AGGREGATE SOCIALLY RESPONSIBLE (SRI) INDEX

Inception Date	Currency	Ticker
1/1/2007	USD	RUAN

The Barclays MSCI US Aggregate Socially Responsible Index is a fixed-rate, investment-grade corporate bond benchmark that negatively screens issuers that are involved in alcohol, tobacco, gambling, military weapons, nuclear power, adult entertainment, civilian firearms, and genetically modified organisms. Security eligibility follows the same underlying rules as the Barclays US Aggregate Index, with additional ESG negative screening using MSCI ESG Business Involvement Screening Research (BISR) and MSCI Impact Monitor Scores. Screening based on other business activities or ratings that are tracked by MSCI ESG Research are also available. The index was launched in June 2013 with history available back to January 2007.

#### **Related Index and Sub-Index Info** Index Bloomberg IndexID Ticker 29532 US Aggregate Socially Responsible US Aggregate SRI Sector Neutral RUAN 29533 US Corporate Socially Responsible RUCM 29530 29567 US Corporate ex Pred Lending -

US Corporate ex Weapons-29568US Corporate Catholic ValuesRCAT29569US Credit Socially ResponsibleRCRD29531US Cov/Credit Socially ResponsibleRUGM29562

#### **Eligible Bond Universe**

# Eligible Sectors: Treasury, Gov-Related, Securitized, Corporate Minimum Issue Size: USD250mn

#### **Credit Quality**

- Rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&P and Fitch; when a rating from only two agencies is available, the lower is used
- Expected ratings at issuance may be used when other indexeligible bonds from the same issuer hold the same actual rating as the expected rating

Maturity: At least one year to final maturity, regardless of optionality. Fixed-rate perpetuals are not included

Seniority of Debt: Senior and subordinated issues are included

Taxability: Only fully taxable issues are eligible

Currency: Principal and coupon must be denominated in USD

**Coupon**: Issues must pay fixed-rate coupon, callable fixed-to-float bonds are eligible during their fixed-rate only

Market of Issue: Securities must be SEC registered, exempt from registration at issuance, or SEC Rule 144A with registration rights

**Rebalancing**: The index is rebalanced at each month-end, setting a fixed universe (Returns) from which index returns are calculated for the next month. A forward-looking projection (Statistics) changes daily to reflect current eligibility, but is not used to compute returns

#### Environment, Social, and Governance Rules

#### **Business Involvement Screens**

Excludes issuers involved in the following business lines/activities:

- Alcohol
- Tobacco
- Gambling
- Adult Entertainment
- Genetically Modified Organisms (GMO)
- Nuclear Power
- Civilian Firearms
- Military Weapons (including mines, cluster bombs, chemical weapons)

Involvement is defined for each restricted activity and may be based on % of revenue, total revenue, or any tie regardless of revenue

#### Eligible Securities/Included

- Bullet, callable, putable, sinkable/amortizing
- Fixed-rate and fixed-to-floating capital securities

#### Eligible Securities / Excluded

- Industrial and Utility issuers that > 50% or government-owned
- Bonds with equity type features (eg, warrants, convertibles, contingent capital securities, preferreds, DRDs)
- Private placements, retail bonds, USD 25/USD 50 par bonds
- Structured notes, pass-through certificates
- Inflation-linked bonds, floating-rate issues
- Illiquid securities with no available internal or 3rd-party pricing

**Pricing:** Index prices are sourced primarily from Barclays market makers, though third-party pricing may be used. Prices are quoted on the bid side, with the exception of new issues, which are priced for the affer side upon entering the index. To active price for the second second

on the offer side upon entering the index. T+1 settlement is used for all dates except month-end, when bonds are assumed to settle on first calendar day of the following month **Weighting:** Index eligible securities are market value weighted. For

Weighting: index eligible securities are market value weighted. For Sector Neutral versions of different ESG indices, security weights are market value weighted within each sector (Class 1 or Class 2), but sector weights are designed to match the same sector exposure of the non-ESG versions of the same benchmark

#### Impact Monitor Screens

 Excludes any issuer with a "Red" MSCI ESG Impact Monitor score (less than 2), which measures an issuer's involvement in major ESG controversies and how well they adhere to international norms and principles

- Screening is available for other business activities that may be restricted for certain investors including predatory lending, child labor, stem cell, abortion/contraception, etc. These are not however screened from the standard SRI Index
- Involvement in countries that are subject to sanctions in certain markets (Iran, Burma, Cuba, etc.) can also be negatively screened in custom indices

#### **SRI Index Exclusions**

SRI Exclusion Criteria	# Issuers	# Bonds	MV (\$bn)	MV% US Corp	MV% US Agg
Business Involvement S	creen				
Nuclear Power	614	34	394.0	10.7%	2.33%
Military Weapons	155	15	172.9	4.7%	1.02%
GMO	108	9	103.1	2.8%	0.61%
Alcohol	60	5	49.8	1.4%	0.30%
Tobacco	39	4	39.1	1.1%	0.23%
Gambling	13	3	7.3	0.2%	0.04%
Adult Entertainment	-	-	-	-	-
Civilian Firearms	-	-	-	-	-
Impact Monitor Screen					
MSCI "Red" Impact	214	21	285.8	7.8%	1.7%
Total					
Excl from US Corp/Agg	89	1,073	869.0	23.7%	5.1%
US Corp Index	705	4,632	3,671.0	100%	21.8%
Note: Exclusions are not	t mutuall;	y exclusi	ve		

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics – Financial

	US Agg SRI	US Agg
# Bonds	7,302	8,413
# Issuers	858	950
Market Value	15,947.5	16,875.9
OAD	5.3	5.5
OAS	52.1	56.2
OASD	5.2	5.4
Yield to Mat	2.03	2.08
DTS	2.96	3.37
Liquidity Cost Score	0.28	0.32
Credit Quality	AA1/AA2	AA1/AA2
Credit QualNum	3.35	3.57

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Annual Index Returns 2007-12 (Total Return %, USD)



Source: MSCI ESG Research, Barclays Research

#### Composition by ESG Rating

	-		-							
	US Agg SRI					US Aggregate				
Total	Tsy	Gov	Corp	Sec	Total	Tsy	Gov	Corp	Sec	
2.0	-	1.0	1.0	0.0	1.9	-	0.9	1.0	0.0	
3.1	-	1.2	1.8	-	4.0	-	1.2	2.8	-	
42.4	38.4	1.1	3.0	-	40.6	36.3	1.0	3.4	-	
3.5	-	0.8	2.7	-	4.8	-	1.0	3.9	-	
12.9	-	4.7	8.2	-	14.5	-	4.6	9.9	-	
36.1	-	2.2	0.8	33.1	34.1	-	2.1	0.8	31.3	
100	38.4	10.9	17.6	33.1	100	36.3	10.7	21.8	31.3	
	2.0 3.1 42.4 3.5 12.9 36.1	Total         Tsy           2.0         -           3.1         -           42.4         38.4           3.5         -           12.9         -           36.1         -	Total         Tsy         Gov           2.0         -         1.0           3.1         -         1.2           42.4         38.4         1.1           3.5         -         0.8           12.9         -         4.7           36.1         -         2.2	Total         Tsy         Gov         Corp           2.0         -         1.0         1.0           3.1         -         1.2         1.8           42.4         38.4         1.1         3.0           3.5         -         0.8         2.7           12.9         -         4.7         8.2           36.1         -         2.2         0.8	Total         Tsy         Gov         Corp         Sec           2.0         -         1.0         1.0         0.0           3.1         -         1.2         1.8         -           42.4         38.4         1.1         3.0         -           3.5         -         0.8         2.7         -           12.9         -         4.7         8.2         -           36.1         -         2.2         0.8         33.1	Total         Tsy         Gov         Corp         Sec         Total           2.0         -         1.0         1.0         0.0         1.9           3.1         -         1.2         1.8         -         4.0           42.4         38.4         1.1         3.0         -         40.6           3.5         -         0.8         2.7         -         4.8           12.9         -         4.7         8.2         -         14.5           36.1         -         2.2         0.8         33.1         34.1	Total         Tsy         Gov         Corp         Sec         Total         Tsy           2.0         -         1.0         1.0         0.0         1.9         -           3.1         -         1.2         1.8         -         4.0         -           42.4         38.4         1.1         3.0         -         40.6         36.3           3.5         -         0.8         2.7         -         4.8         -           12.9         -         4.7         8.2         -         14.5         -           36.1         -         2.2         0.8         33.1         34.1         -	Total         Tsy         Gov         Corp         Sec         Total         Tsy         Gov           2.0         -         1.0         1.0         0.0         1.9         -         0.9           3.1         -         1.2         1.8         -         4.0         -         1.2           42.4         38.4         1.1         3.0         -         40.6         36.3         1.0           3.5         -         0.8         2.7         -         4.8         -         1.0           12.9         -         4.7         8.2         -         14.5         -         4.6           36.1         -         2.2         0.8         33.1         34.1         -         2.1	Total         Tsy         Gov         Corp         Sec         Total         Tsy         Gov         Corp           2.0         -         1.0         1.0         0.0         1.9         -         0.9         1.0           3.1         -         1.2         1.8         -         4.0         -         1.2         2.8           42.4         38.4         1.1         3.0         -         40.6         36.3         1.0         3.4           3.5         -         0.8         2.7         -         4.8         -         1.0         3.9           12.9         -         4.7         8.2         -         14.5         -         4.6         9.9           36.1         -         2.2         0.8         33.1         34.1         -         2.1         0.8	

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics – Non-Financial

Sector	U	S Agg Sl	RI	US Agg			
	ENV	SOC	GOV	ENV	SOC	GOV	
Tsy	6.2	8.0	6.6	6.2	8.0	6.6	
Corp	5.9	4.3	5.6	5.7	4.4	5.7	
Gov Related	6.1	5.2	4.5	6.1	5.1	4.6	
Other	6.0	7.0	6.7	6.0	7.0	6.7	
Combined	6.1	6.6	6.0	6.0	6.5	6.0	

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Realized Monthly Tracking Error vs. US Credit Index



### BARCLAYS MSCI US AGGREGATE SUSTAINABILITY INDEX

Inception Date	Currency	Ticker
1/1/2007	USD	SUAM

The Barclays MSCI US Aggregate Sustainability Index is a fixed-rate, investment-grade corporate bond benchmark that includes issuers with MSCI ESG ratings of BBB or higher. This benchmark is designed to positively screen "best in class" issuers that are more effective at managing the ESG risks most relevant to their industry peer group. Security eligibility follows the same underlying rules as the Barclays US Aggregate Index, with additional ESG negative screening using MSCI Impact Monitor Scores. This index is a market value weighted benchmark, but a variant is available that preserved the Class 2 sector weights for the full Barclays US Aggregate Index. The index was launched in June 2013 with history available back to January 2007.

Related Index and Sub-Index Info		
Index	Bloomberg Ticker	IndexID
US Aggregate Sustainability	SUAM	29537
US Agg Sustainability Sector Neut. Cl1	-	29538
US Agg Sustainability Sector Neut. Cl2	-	29692
US Intermediate Agg Sustainability	-	29614
US Long Agg Sustainability	-	29615
US Corporate Sustainability	SUCM	29534
US Corp Sustainability Sector Neutral	SUCN	29689
US Credit Sustainability	-	29613

#### **Eligible Bond Universe**

# Eligible Sectors: Treasury, Gov-Related, Securitized, Corporate Minimum Issue Size: USD250mn

#### **Credit Quality**

- Rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&P and Fitch; when a rating from only two agencies is available, the lower is used
- Expected ratings at issuance may be used when other indexeligible bonds from the same issuer hold the same actual rating as the expected rating

Maturity: At least one year to final maturity, regardless of optionality. Fixed-rate perpetuals are not included

Seniority of Debt: Senior and subordinated issues are included

Taxability: Only fully taxable issues are eligible

Currency: Principal and coupon must be denominated in USD

**Coupon**: Issues must pay fixed-rate coupon, callable fixed-to-float bonds are eligible during their fixed-rate only

Market of Issue: Securities must be SEC registered, exempt from registration at issuance, or SEC Rule 144A with registration rights

**Rebalancing**: The index is rebalanced at each month-end, setting a fixed universe (Returns) from which index returns are calculated for the next month. A forward-looking projection (Statistics) changes daily to reflect current eligibility, but is not used to compute returns

#### Environment, Social, and Governance Rules

#### ESG Rating

- Includes issuers with an ESG rating of BBB or higher using MSCI's IVA Rating or Sovereign Rating model
- ESG ratings are available for Treasury, government-related, corporate, and covered bond issuers. They are not applied to MBS, ABS, and CMBS issues
- Unrated issuers from sectors with ratings are excluded
- Ratings are applied at the Barclays ticker level. Every bond within the same ticker will have the same ESG rating
- ESG ratings are generally updated annually, but may be reviewed more frequently as needed

#### Eligible Securities/Included

- Bullet, callable, putable, sinkable/amortizing
- Fixed-rate and fixed-to-floating capital securities

#### Eligible Securities / Excluded

- Industrial and Utility issuers that > 50% or government-owned
- Bonds with equity type features (eg, warrants, convertibles, contingent capital securities, preferreds, DRDs)
- Private placements, retail bonds, USD 25/USD 50 par bonds
- Structured notes, pass-through certificates
- Inflation-linked bonds, floating-rate issues
- Illiquid securities with no available internal or 3rd-party pricing

**Pricing**: Index prices are sourced primarily from Barclays market makers, though third-party pricing may be used. Prices are quoted on the bid side, with the exception of new issues, which are priced on the offer side upon entering the index. T+1 settlement is used for all dates except month-end, when bonds are assumed to settle on first calendar day of the following month

**Weighting:** Index eligible securities are market value weighted. For Sector Neutral versions of different ESG indices, security weights are market value weighted within each sector (Class 1 or Class 2), but sector weights are designed to match the same sector exposure of the non-ESG versions of the same benchmark

#### Impact Monitor Screens

 Excludes any issuer with a "Red" MSCI ESG Impact Monitor score (less than 2), which measures an issuer's involvement in major ESG controversies and how well they adhere to international norms and principles

- Lower or higher ESG rating thresholds may be applied for custom indices
- Negative screening is available for business activities covered by MSCI Business Issuer Screening Research (BISR) that may also be used in Barclays MSCI Socially Responsible Indices

#### Underlying Index SRI Exposure

SRI Exposure	# Issuers	# Bonds	MV (\$bn)	MV% US Corp	MV% US Agg
SRI Business Involveme	ent				
Nuclear Power	14	275	234.3	13.4%	1.70%
Military Weapons	10	136	162.4	9.3%	1.18%
GMO	5	69	65.9	3.8%	0.48%
Alcohol	2	48	45.1	2.6%	0.33%
Tobacco	-	-	-	-	-
Gambling	2	12	6.8	0.4%	0.05%
Adult Entertainment	-	-	-	-	-
Civilian Firearms	-	-	-	-	-
Total					
BBB+ SRI Exposure	31	486	387.8	22.2%	2.8%
US Corp ESG BBB+	314	2,233	1,748.7	100%	12.7%

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics - Financial

	US Agg Sustainability	Sector Neutral	US Agg
# Bonds	4,825	4,825	8,413
# Issuers	428	428	950
Market Value	13,800.7	13,800.7	16,875.9
OAD	5.2	5.4	5.5
OAS	44.2	54.4	56.2
OASD	5.2	5.4	5.4
Yield to Mat	1.97	2.05	2.08
DTS	2.25	3.16	3.37
Liquidity Cost Score	0.21	0.32	0.32
Credit Quality	AAA/AA1	AA1/AA2	AA1/AA2
Credit QualNum	2.88	3.53	3.57

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Annual Index Returns 2007-12 (Total Return %, USD)



Source: MSCI ESG Research, Barclays Research

#### Composition by ESG Rating

ESG	US Agg Sustainability					US Aggregate				
Rating	Total	Tsy	Gov	Corp	Sec	Total	Tsy	Gov	Corp	Sec
AAA	2.4	-	1.1	1.2	0.0	1.9	-	0.9	1.0	0.0
AA	4.9	-	1.4	3.4	-	4.0	-	1.2	2.8	-
A	49.7	44.3	1.2	4.1	-	40.6	36.3	1.0	3.4	-
BBB	4.9	-	0.9	3.9	-	4.8	-	1.0	3.9	-
<bbb< td=""><td></td><td>-</td><td>-</td><td>-</td><td>-</td><td>14.5</td><td>-</td><td>4.6</td><td>9.9</td><td>-</td></bbb<>		-	-	-	-	14.5	-	4.6	9.9	-
NR	38.3	-	-	-	38.3	34.1	-	2.1	0.8	31.3
Total	100	44.3	4.7	12.7	38.3	100	36.3	10.7	21.8	31.3

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics - Non-Financial

Sector	US Agg Sustainability				US Agg	
	ENV	SOC	GOV	ENV	SOC	GOV
Tsy	6.2	8.0	6.6	6.2	8.0	6.6
Corp	6.5	4.9	7.0	5.7	4.4	5.7
Gov Related	6.7	6.8	6.8	6.1	5.1	4.6
Other	6.0	7.0	6.7	6.0	7.0	6.7
Combined	6.3	7.3	6.7	6.0	6.5	6.0

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Realized Monthly Tracking Error vs. US Aggregate Index



### BARCLAYS MSCI US AGGREGATE ESG WEIGHTED INDEX

Inception Date	Currency	Ticker
1/1/2007	USD	UAEW

The Barclays MSCI US Aggregate ESG Weighted Index is a fixedrate, investment-grade corporate bond benchmark that adjusts the market value weight of index eligible issuers based on ESG Ratings and ESG Ratings Momentum. This benchmark is designed to overweight issuers that have higher ESG ratings and/or positive ratings momentum while underweighting issuers that have lower ratings and/or negative momentum. Security eligibility follows the same underlying rules as the Barclays US Aggregate Index, with different weighting tilts applied for each rating/ratings momentum combination. A variant of this benchmark is available that preserved the Class 2 sector weights of the full Barclays US Aggregate Index. The index was launched in June 2013 with history available back to January 2007.

#### **Eligible Bond Universe**

Eligible Sectors: Treasury, Gov-Related, Securitized, Corporate Minimum Issue Size: USD250mn

#### Credit Quality

- Rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&P and Fitch; when a rating from only two agencies is available, the lower is used
- Expected ratings at issuance may be used when other indexeligible bonds from the same issuer hold the same actual rating as the expected rating

Maturity: At least one year to final maturity, regardless of optionality. Fixed-rate perpetuals are not included

Seniority of Debt: Senior and subordinated issues are included

Taxability: Only fully taxable issues are eligible

Currency: Principal and coupon must be denominated in USD

**Coupon**: Issues must pay fixed-rate coupon, callable fixed-to-float bonds are eligible during their fixed-rate only

Market of Issue: Securities must be SEC registered, exempt from registration at issuance, or SEC Rule 144A with registration rights

**Rebalancing**: The index is rebalanced at each month-end, setting a fixed universe (Returns) from which index returns are calculated for the next month. A forward-looking projection (Statistics) changes daily to reflect current eligibility, but is not used to compute returns

#### Environment, Social, and Governance Rules

#### ESG Weighting

- The weight of each index eligible issuer (and security) is adjusted by a fixed multiplier based on both its ESG Rating (AAA, AA, A, BBB, BB, B, CCC, NR) and its ESG Ratings momentum (Positive, Neutral, Negative since last evaluation)
- Security weights are normalized using adjusted market values
- ESG ratings are available for Treasury, government-related, corporate, and covered bond issuers. They are not applied to MBS, ABS, and CMBS issues, which are left unadjusted
- Ratings are applied at the Barclays ticker level, and every bond within the same ticker will have the same ESG rating.
- ESG ratings are generally updated annually, but may be reviewed more frequently as needed

#### **Related Index and Sub-Index Info**

Index	Bloomberg Ticker	IndexID
US Aggregate ESG Weighted	UAEW	29698
US Agg ESG Wtg Sector Neutral Class 1	UAW1	29542
US Intermediate Agg ESG Weighted	-	29699
US Long Agg ESG Weighted	-	29700
US Corporate ESG Weighted	UCEW	29693
US Corp ESG Weighted Sector Neutral	UCW1	29539
US Credit ESG Weighted	UDEW	29696
US Credit ESG Weighted Sector Neutral	UDW1	29540

#### Eligible Securities/Included

- Bullet, callable, putable, sinkable/amortizing
- Fixed-rate and fixed-to-floating capital securities

#### Eligible Securities/Excluded

- Industrial and Utility issuers that > 50% or government-owned
- Bonds with equity type features (eg, warrants, convertibles, contingent capital securities, preferreds, DRDs)
- Private placements, retail bonds, USD 25/USD 50 par bonds
- Structured notes, pass-through certificates
- Inflation-linked bonds, floating-rate issues
- Illiquid securities with no available internal or 3rd-party pricing

**Pricing**: Index prices are sourced primarily from Barclays market makers, though third-party pricing may be used. Prices are quoted on the bid side, with the exception of new issues, which are priced on the offer side upon entering the index. T+1 settlement is used for all dates except month-end, when bonds are assumed to settle on first calendar day of the following month

**Weighting:** Index eligible securities are market value weighted. For Sector Neutral versions of different ESG indices, security weights are market value weighted within each sector (Class 1 or Class 2), but sector weights are designed to match the same sector exposure of the non-ESG versions of the same benchmark

#### Factors Used to Adjust Weights Based on Ratings/Momentum

•	5	0	
Rating	Tilt	Momentum	Tilt
AAA, AA, A	1.5x	Positive	2.0x
BBB	1.0x	Neutral	1.0x
BB	0.8x	Negative	0.5x
В	0.75x		
CCC	0.67x		
NR	0.75x		
MBS/ABS/CMBS	1.0x		

#### Underlying Index SRI Exposure

SRI Exclusion Criteria	# Issuers	# Bonds	MV (\$bn)	MV% US Corp	MV% US Agg		
Business Involvement S	Business Involvement Screen						
Nuclear Power	614	34	394.0	10.7%	2.33%		
Military Weapons	155	15	172.9	4.7%	1.02%		
GMO	108	9	103.1	2.8%	0.61%		
Alcohol	60	5	49.8	1.4%	0.30%		
Tobacco	39	4	39.1	1.1%	0.23%		
Gambling	13	3	7.3	0.2%	0.04%		
Adult Entertainment	-	-	-	-	-		
Civilian Firearms	-	-	-	-	-		
Impact Monitor Screen							
MSCI "Red" Impact	214	21	285.8	7.8%	1.7%		
Total							
Excl from US Corp/Agg	89	1,073	869.0	23.7%	5.1%		
US Corp Index	705	4,632	3,671.0	100%	21.8%		
Note: Exclusions are not	mutuall	v exclusi	/e				

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics - Financial

	US Agg ESG Weighted	Sector Neutral	US Agg
# Bonds	8,413	8,413	8,413
# Issuers	950	950	950
Market Value	29,670.5	29,670.5	16,875.9
OAD	5.3	5.4	5.5
OAS	45.1	55.1	56.2
OASD	5.3	5.4	5.4
Yield to Mat	1.92	2.06	2.08
DTS	2.53	3.27	3.37
Liquidity Cost Score	0.24	0.32	0.32
Credit Quality	AA1/AA2	AA1/AA2	AA1/AA2
Credit QualNum	3.09	3.53	3.57

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Annual Index Returns 2007-12 (Total Return %, USD)



Source: MSCI ESG Research, Barclays Research

#### Composition by ESG Rating

ESG	US Agg ESG Weighted				US Aggregate					
Rating	Total	Tsy	Gov	Corp	Sec	Total	Tsy	Gov	Corp	Sec
AAA	2.0	-	0.8	1.2	0.0	1.9	-	0.9	1.0	0.0
AA	5.2	-	1.5	3.7	-	4.0	-	1.2	2.8	-
A	52.0	46.4	1.3	4.3	-	40.6	36.3	1.0	3.4	-
BBB	3.0	-	0.6	2.4	-	4.8	-	1.0	3.9	-
<bbb< td=""><td>5.5</td><td>-</td><td>1.7</td><td>3.9</td><td>-</td><td>14.5</td><td>-</td><td>4.6</td><td>9.9</td><td>-</td></bbb<>	5.5	-	1.7	3.9	-	14.5	-	4.6	9.9	-
NR	32.4	-	0.9	0.3	31.1	34.1	-	2.1	0.8	31.3
Total	100	46.4	6.7	15.8	31.2	100	36.3	10.7	21.8	31.3

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics - Non-Financial

Sector	US Agg ESG Weighted				US Agg	
	ENV	SOC	GOV	ENV	SOC	GOV
Tsy	6.2	8.0	6.6	6.2	8.0	6.6
Corp	6.4	4.7	6.4	5.7	4.4	5.7
Gov Related	6.3	5.9	5.7	6.1	5.1	4.6
Other	6.0	7.0	6.7	6.0	7.0	6.7
Combined	6.3	7.1	6.5	6.0	6.5	6.0

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Realized Monthly Tracking Error vs. US Aggregate Index



### BARCLAYS MSCI EURO CORPORATE SOCIALLY RESPONSIBLE (SRI) INDEX

Inception Date	Currency	Ticker
1/1/2007	USD	RECM

The Barclays MSCI Euro Corporate Socially Responsible Index is a fixed-rate, investment-grade corporate bond benchmark that negatively screens issuers that are involved in alcohol, tobacco, gambling, military weapons, nuclear power, adult entertainment, civilian firearms, and genetically modified organisms. Security eligibility follows the same underlying rules as the Barclays Euro Corporate Index, with additional ESG negative screening using MSCI ESG Business Involvement Screening Research (BISR) and MSCI Impact Monitor Scores. Screening based on other business activities or ratings that are tracked by MSCI ESG Research are also available. The index was launched in June 2013 with history available back to January 2007.

Related Index and Sub-Index Info		
Index	Bloomberg Ticker	IndexID
Euro Corporate Socially Responsible	RECM	29543
Euro Intermediate Corporate SRI	-	29721
Euro Long Corporate SRI	-	29722
Euro Corporate ex Pred Lending	-	29724
Euro Corporate ex Weapons	-	29725
Euro Corporate Catholic Values	-	29726
Euro Corporate SRI + ESG	-	29723
Euro Aggregate SRI Sector Neutral	-	29702

#### **Eligible Bond Universe**

#### Eligible Sectors: Corporate (Industrial, Utility, and Financials) Minimum Issue Size: EUR300mn

#### **Credit Quality**

- Rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&P and Fitch; when a rating from only two agencies is available, the lower is used
- Expected ratings at issuance may be used when other indexeligible bonds from the same issuer hold the same actual rating as the expected rating

Maturity: At least one year to final maturity, regardless of optionality. Fixed-rate perpetuals are not included

Seniority of Debt: Senior and subordinated issues are included

Taxability: Only fully taxable issues are eligible

Currency: Principal and coupon must be denominated in EUR

**Coupon**: Issues must pay fixed-rate coupon, callable fixed-to-float bonds are eligible during their fixed-rate only

**Rebalancing**: The index is rebalanced at each month-end, setting a fixed universe (Returns) from which index returns are calculated for the next month. A forward-looking projection (Statistics) changes daily to reflect current eligibility, but is not used to compute returns

#### Environment, Social, and Governance Rules

#### **Business Involvement Screens**

Excludes issuers involved in the following business lines/activities:

- Alcohol
- Tobacco
- Gambling
- Adult Entertainment
- Genetically Modified Organisms (GMO)
- Nuclear Power
- Civilian Firearms
- Military Weapons (including mines, cluster bombs, chemical weapons)

Involvement is defined for each restricted activity and may be based on % of revenue, total revenue, or any tie regardless of revenue

#### Eligible Securities/Included

- Bullet, callable, putable, sinkable/amortizing
- Fixed-rate and fixed-to-floating capital securities

#### Eligible Securities / Excluded

- Industrial and Utility issuers that > 50% or government-owned
- Bonds with equity type features (eg, warrants, convertibles, contingent capital securities, preferreds, DRDs)
- Private placements, retail bonds
- Structured notes, pass-through certificates
- Inflation-linked bonds, floating-rate issues
- Illiquid securities with no available internal or 3rd-party pricing

**Pricing**: Index prices are sourced primarily from Barclays market makers, though third-party pricing may be used. Prices are quoted on the bid side, with the exception of new issues, which are priced on the offer side upon entering the index. T+1 settlement is used for all dates except month-end, when bonds are assumed to settle on first calendar day of the following month

**Weighting:** Index eligible securities are market value weighted. For Sector Neutral versions of different ESG indices, security weights are market value weighted within each sector (Class 1 or Class 2), but sector weights are designed to match the same sector exposure of the non-ESG versions of the same benchmark

#### Impact Monitor Screens

 Excludes any issuer with a "Red" MSCI ESG Impact Monitor score (less than 2), which measures an issuer's involvement in major ESG controversies and how well they adhere to international norms and principles

- Screening is available for other business activities that may be restricted for certain investors including predatory lending, child labor, stem cell, abortion/contraception, etc. These are not however screened from the standard SRI Index
- Involvement in countries that are subject to sanctions in certain markets (Iran, Burma, Cuba, etc.) can also be negatively screened in custom indices

#### **SRI Index Exclusions**

SRI Exclusion Criteria	# Issuers	# Bonds	MV (€bn)	MV% EUR Corp	MV% EUR Agg	
Business Involvement Screen						
Nuclear Power	9	104	114.9	9.0%	1.37%	
Military Weapons	5	36	37.2	2.9%	0.44%	
GMO	8	31	27.0	2.1%	0.32%	
Alcohol	7	24	20.0	1.6%	0.24%	
Tobacco	4	21	18.3	1.4%	0.22%	
Gambling	1	3	2.0	0.2%	0.02%	
Adult Entertainment	-	-	-	-	-	
Civilian Firearms	-	-	-	-	-	
Impact Monitor Screen						
MSCI "Red" Impact	11	59	71.0	5.5%	0.8%	
Total						
Excl from EUR Corp/Agg	39	233	242.7	18.9%	2.9%	
Euro Corp Index	334	1,319	1,282.5	100%	15.3%	
Note: Exclusions are not n	nutually e	exclusive				

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics – Financial

	Euro Corp SRI	Euro Corp
# Bonds	1,086	1,319
# Issuers	295	334
Market Value	1,347.5	1,662.1
OAD	4.5	4.5
OAS	131.9	127.5
OASD	4.8	4.8
Yield to Mat	1.93	1.88
DTS	5.42	5.21
Liquidity Cost Score	0.46	0.43
Credit Quality	A2/A3	A2/A3
Credit QualNum	7.97	7.92

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)



#### Annual Index Returns 2007-12 (Total Return %, EUR)

Source: MSCI ESG Research, Barclays Research

#### Composition by ESG Rating

ESG	Euro Corporate SRI			Euro Corporate				
Rating	Total	IND	UTL	FIN	Total	IND	UTL	FIN
AAA	9.5	4.2	0.8	4.5	8.5	3.4	1.5	3.6
AA	18.3	8.9	1.9	7.5	18.3	8.3	1.5	8.5
А	28.1	16.3	0.9	10.9	28.5	14.7	5.0	8.8
BBB	16.1	6.4	0.1	9.7	16.8	7.1	0.8	8.9
BB	13.9	2.4	0.1	11.5	14.3	4.9	0.1	9.3
В	1.2	0.3	-	0.9	2.6	0.9	-	1.6
ССС	5.8	0.7	-	5.1	5.1	1.0	-	4.1
NR	7.2	3.0	1.0	3.2	6.0	2.6	0.8	2.6
Total	100	42.2	4.7	53.2	100	42.8	9.7	47.5

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics – Non-Financial

ESG Theme Score	Euro Corp ESG SRI	Euro Corp
"E" Pillar	6.7	6.6
Climate	8.4	8.4
Env Opport	6.7	6.9
Natural Resource	5.4	5.3
Waste Management	6.5	6.2
"S" Pillar	5.6	5.5
Social Opport	5.4	5.4
Human Capital	6.3	6.1
Product Safety	5.0	4.9
"G" Pillar	4.4	4.7
Business Ethics	5.1	5.3
Corp Governance	6.4	6.4
Public Policy	2.5	2.4

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Realized Monthly Tracking Error vs. US Aggregate Index



### BARCLAYS MSCI EURO CORPORATE SUSTAINABILITY INDEX

Inception Date	Currency	Ticker
1/1/2007	EUR	SECM

The Barclays MSCI Euro Corporate Sustainability Index is a fixedrate, investment-grade corporate bond benchmark that includes issuers with MSCI ESG ratings of BBB or higher. This benchmark is designed to positively screen "best in class" issuers that are more effective at managing the ESG risks most relevant to their industry peer group. Security eligibility follows the same underlying rules as the Barclays US Corporate Index, with additional ESG negative screening using MSCI Impact Monitor Scores. This index is a market value weighted benchmark, but a variant is available that preserved the Class 2 sector weights for the full Barclays Euro Corporate Index. The index was launched in June 2013 with history available back to January 2007.

Related Index and Sub-Index Info		
Index	Bloomberg Ticker	IndexID
Euro Corporate Sustainability	SECM	29547
Euro Corp Sustainability Sector Neutral	SECN	29704
Euro Intermediate Corp Sustainability	-	29733
Euro Long Corp Sustainability	-	29734
Euro Aggregate Sustainability	SEAG	29549
Euro Agg Sustainability Sector Neutral	SUAN	29550
Euro Intermediate Agg Sustainability	-	29735
Euro Long Agg Sustainability	-	29736

#### **Eligible Bond Universe**

#### Eligible Sectors: Corporate (Industrial, Utility, and Financials) Minimum Issue Size: EUR300mn

#### **Credit Quality**

- Rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&P and Fitch; when a rating from only two agencies is available, the lower is used
- Expected ratings at issuance may be used when other indexeligible bonds from the same issuer hold the same actual rating as the expected rating

Maturity: At least one year to final maturity, regardless of optionality. Fixed-rate perpetuals are not included

Seniority of Debt: Senior and subordinated issues are included

Taxability: Only fully taxable issues are eligible

Currency: Principal and coupon must be denominated in EUR

**Coupon**: Issues must pay fixed-rate coupon, callable fixed-to-float bonds are eligible during their fixed-rate only

**Rebalancing**: The index is rebalanced at each month-end, setting a fixed universe (Returns) from which index returns are calculated for the next month. A forward-looking projection (Statistics) changes daily to reflect current eligibility, but is not used to compute returns

#### Environment, Social, and Governance Rules

#### ESG Rating

- Includes issuers with an ESG rating of BBB or higher using MSCI's IVA Rating or Sovereign Rating model
- ESG ratings are available for Treasury, government-related, corporate, and covered bond issuers. They are not applied to MBS, ABS, and CMBS issues
- Unrated issuers from sectors with ratings are excluded
- Ratings are applied at the Barclays ticker level. Every bond within the same ticker will have the same ESG rating
- ESG ratings are generally updated annually, but may be reviewed more frequently as needed

#### Eligible Securities/Included

- Bullet, callable, putable, sinkable/amortizing
- Fixed-rate and fixed-to-floating capital securities

#### Eligible Securities / Excluded

- Industrial and Utility issuers that > 50% or government-owned
- Bonds with equity type features (eg, warrants, convertibles, contingent capital securities, preferreds, DRDs)
- Private placements, retail bonds
- Structured notes, pass-through certificates
- Inflation-linked bonds, floating-rate issues
- Illiquid securities with no available internal or 3rd-party pricing

**Pricing:** Index prices are sourced primarily from Barclays market makers, though third-party pricing may be used. Prices are quoted on the bid side, with the exception of new issues, which are priced on the offer side upon entering the index. T+1 settlement is used for all dates except month-end, when bonds are assumed to settle on first calendar day of the following month

**Weighting:** Index eligible securities are market value weighted. For Sector Neutral versions of different ESG indices, security weights are market value weighted within each sector (Class 1 or Class 2), but sector weights are designed to match the same sector exposure of the non-ESG versions of the same benchmark

#### Impact Monitor Screens

• Excludes any issuer with a "Red" MSCI ESG Impact Monitor score (less than 2), which measures an issuer's involvement in major ESG controversies and how well they adhere to international norms and principles

- Lower or higher ESG rating thresholds may be applied for custom indices
- Negative screening is available for business activities covered by MSCI Business Issuer Screening Research (BISR) that may also be used in Barclays MSCI Socially Responsible Indices

#### **SRI Exposure**

SRI Exposure	#	# Bonds	MV (€bn)	MV% EUR Corp	MV% EUR		
		# DOMUS	(edit)	Corp	Agg		
SRI Business Involvemen	nt						
Nuclear Power	8	102	113.7	12.7%	1.54%		
Military Weapons	4	35	36.7	4.1%	0.50%		
GMO	6	22	18.5	2.1%	0.25%		
Alcohol	6	18	15.7	1.8%	0.21%		
Tobacco	1	1	0.4	0.0%	0.01%		
Gambling	-	-	-	-	-		
Adult Entertainment	-	-	-	-	-		
Civilian Firearms	-	-	-	-	-		
Total							
BBB+ SRI Exposure	22	144	147.0	16.4%	2.0%		
EUR Corp ESG BBB+	199	906	894.9	100%	12.1%		

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics – Financial

	Euro Corp Sustainability	Sector Neutral	Euro Corp
# Bonds	906	906	1,319
# Issuers	199	199	334
Market Value	1,159.8	1,159.8	1,662.1
OAD	4.6	4.6	4.5
OAS	126.3	127.5	127.5
OASD	4.9	4.9	4.8
Yield to Mat	1.89	1.90	1.88
DTS	5.38	5.51	5.21
Liquidity Cost Score	0.428	0.439	0.43
Credit Quality	A2/A3	A2/A3	A2/A3
Credit QualNum	7.94	7.83	7.92

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Annual Index Returns 2007-12 (Total Return %, EUR)



Source: MSCI ESG Research, Barclays Research

#### Composition by ESG Rating

			•					
ESG	Euro Corp Sustainability			E	uro Cor	porate		
Rating	Total	IND	UTL	FIN	Total	IND	UTL	FIN
AAA	12.2	4.9	2.2	5.2	8.5	3.4	1.5	3.6
AA	26.2	11.9	2.2	12.2	18.3	8.3	1.5	8.5
А	40.8	21.0	7.2	12.6	28.5	14.7	5.0	8.8
BBB	20.8	8.3	1.2	11.3	16.8	7.1	0.8	8.9
BB	-	-	-	-	14.3	4.9	0.1	9.3
В	-	-	-	-	2.6	0.9	-	1.6
CCC	-	-	-	-	5.1	1.0	-	4.1
NR	-	-	-	-	6.0	2.6	0.8	2.6
Total	100	46.02	12.75	41.23	100	42.8	9.7	47.5

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics – Non-Financial

ESG Theme Score	Euro Corp Sustainability	Sector Neutral	Euro Corp
"E" Pillar	7.1	7.1	6.6
Climate	8.3	8.3	8.4
Env Opport	7.0	7.1	6.9
Natural Resource	5.4	5.5	5.3
Waste Management	6.1	6.1	6.2
"S" Pillar	5.9	5.2	5.5
Social Opport	5.6	5.6	5.4
Human Capital	6.3	6.3	6.1
Product Safety	5.5	5.6	4.9
"G" Pillar	5.3	5.9	4.7
Business Ethics	5.8	5.8	5.3
Corp Governance	6.7	6.7	6.4
Public Policy	3.4	3.4	2.4

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Realized Monthly Tracking Error vs. Euro Corporate Index



### BARCLAYS MSCI EURO CORPORATE ESG WEIGHTED INDEX

Inception Date	Currency	Ticker
1/1/2007	EUR	EECM

The Barclays MSCI Euro Corporate ESG Weighted Index is a fixedrate, investment-grade corporate bond benchmark that adjusts the market value weight of index eligible issuers based on ESG Ratings and ESG Ratings Momentum. This benchmark is designed to overweight issuers that have higher ESG ratings and/or positive ratings momentum while underweighting issuers that have lower ratings and/or negative momentum. Security eligibility follows the same underlying rules as the Barclays Euro Corporate Index, with different weighting tilts applied for each rating/ratings momentum combination. A variant of this benchmark is available that preserved the Class 2 sector weights of the full Barclays Euro Corporate Index. The index was launched in June 2013 with history available back to January 2007.

#### Eligible Bond Universe

#### Eligible Sectors: Corporate (Industrial, Utility, and Financials) Minimum Issue Size: EUR300mn

#### **Credit Quality**

- Rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&P and Fitch; when a rating from only two agencies is available, the lower is used
- Expected ratings at issuance may be used when other indexeligible bonds from the same issuer hold the same actual rating as the expected rating

Maturity: At least one year to final maturity, regardless of optionality. Fixed-rate perpetuals are not included

Seniority of Debt: Senior and subordinated issues are included Taxability: Only fully taxable issues are eligible

Currency: Principal and coupon must be denominated in EUR

**Coupon:** Issues must pay fixed-rate coupon, callable fixed-to-float bonds are eligible during their fixed-rate only

**Rebalancing**: The index is rebalanced at each month-end, setting a fixed universe (Returns) from which index returns are calculated for the next month. A forward-looking projection (Statistics) changes daily to reflect current eligibility, but is not used to compute returns

#### Environment, Social, and Governance Rules

#### ESG Weighting

- The weight of each index eligible issuer (and security) is adjusted by a fixed multiplier based on both its ESG Rating (AAA, AA, A, BBB, BB, B, CCC, NR) and its ESG Ratings momentum (Positive, Neutral, Negative since last evaluation)
- Security weights are normalized using adjusted market values
- ESC ratings are available for Treasury, government-related, corporate, and covered bond issuers. They are not applied to MBS, ABS, and CMBS issues, which are left unadjusted
- Ratings are applied at the Barclays ticker level, and every bond within the same ticker will have the same ESG rating.
- ESG ratings are generally updated annually, but may be reviewed more frequently as needed

Related Index and Sub-Index Info	rmation	

Index	Bloomberg Ticker	IndexID
Euro Corporate ESG Weighted	EECM	29708
Euro Corp ESG Weighted Sector Neutral	EECN	29554
Euro Intermediate Corp ESG Weighted	-	29709
Euro Long Corp ESG Weighted	-	29710
Euro Agg ESG Weighted	EAAM	29712
Euro Agg ESG Wtg Sector Neutral CL1	EEAN	29555
Euro Intermediate Agg ESG Weighted	-	29713
Euro Long Agg ESG Weighted	-	29714

#### Eligible Securities/Included

- Bullet, callable, putable, sinkable/amortizing
- Fixed-rate and fixed-to-floating capital securities

#### Eligible Securities/Excluded

- Industrial and Utility issuers that > 50% or government-owned
- Bonds with equity type features (eg, warrants, convertibles, contingent capital securities, preferreds, DRDs)
- Private placements, retail bonds
- Structured notes, pass-through certificates
- Inflation-linked bonds, floating-rate issues
- Illiquid securities with no available internal or 3rd-party pricing

**Pricing:** Index prices are sourced primarily from Barclays market makers, though third-party pricing may be used. Prices are quoted on the bid side, with the exception of new issues, which are priced on the offer side upon entering the index. T+1 settlement is used for all dates except month-end, when bonds are assumed to settle on first calendar day of the following month

**Weighting:** Index eligible securities are market value weighted. For Sector Neutral versions of different ESG indices, security weights are market value weighted within each sector (Class 1 or Class 2), but sector weights are designed to match the same sector exposure of the non-ESG versions of the same benchmark

#### Factors Used to Adjust Weights Based on Ratings/Momentum

Rating	Tilt	Momentum	Tilt
AAA, AA, A	1.5x	Positive	2.0x
BBB	1.0x	Neutral	1.0x
BB	0.8x	Negative	0.5x
В	0.75x		
CCC	0.67x		
NR	0.75x		
MBS/ABS/CMBS	1.0x		

#### Underlying Index SRI Exposure

SRI Exclusion Criteria	# Issuers	# Bonds	MV (€bn)	MV% EUR Corp	MV% EUR Agg		
Business Involvement Screen							
Nuclear Power	9	104	114.9	9.0%	1.37%		
Military Weapons	5	36	37.2	2.9%	0.44%		
GMO	8	31	27.0	2.1%	0.32%		
Alcohol	7	24	20.0	1.6%	0.24%		
Tobacco	4	21	18.3	1.4%	0.22%		
Gambling	1	3	2.0	0.2%	0.02%		
Adult Entertainment	-	-	-	-	-		
Civilian Firearms	-	-	-	-	-		
Impact Monitor Screen							
MSCI "Red" Impact	11	59	71.0	5.5%	0.8%		
Total							
Excl from EUR Corp/Agg	39	233	242.7	18.9%	2.9%		
Euro Corp Index	334	1,319	1,282.5	100%	15.3%		
Note: Exclusions are not i	nutually	exclusive	2				

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics - Financial

	Euro Corp ESG Weighted	Sector Neutral	Euro Corp
# Bonds	1,319	1,319	1,319
# Issuers	329	329	334
OAD	4.6	4.5	4.5
OAS	125.1	126	127.5
OASD	4.78	4.79	4.76
Yield to Mat	1.85	1.87	1.88
DTS	5.24	5.33	5.21
Liquidity Cost Score	0.42	0.43	0.43
Credit Quality	A2/A3	A2/A3	A2/A3
Credit QualNum	7.95	7.85	7.92

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Annual Index Returns 2007-12 (Total Return %, EUR)



Composition by ESG Rating

ESG	Eu	ro Corp	orate S	RI	Euro Corporate			
Rating	Total	IND	UTL	FIN	Total	IND	UTL	FIN
AAA	11.6	4.7	1.5	5.4	8.5	3.4	1.5	3.6
AA	26.1	11.8	2.1	12.2	18.3	8.3	1.5	8.5
A	38.9	20.2	8.2	10.6	28.5	14.7	5.0	8.8
BBB	9.7	4.5	0.5	4.6	16.8	7.1	0.8	8.9
BB	8.6	2.8	0.0	5.8	14.3	4.9	0.1	9.3
В	0.8	0.3	-	0.5	2.6	0.9	-	1.6
CCC	1.4	0.2	-	1.1	5.1	1.0	-	4.1
NR	2.9	1.3	0.4	1.3	6.0	2.6	0.8	2.6
Total	100	45.9	12.7	41.5	100.0	42.8	9.7	47.5

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics - Non-Financial

ESG Theme Score	Euro Corp ESG Weighted	Sector Neutral	Euro Corp
"E" Pillar	7.0	7.0	6.6
Climate	8.4	8.3	8.4
Env Opport	7.0	7.1	6.9
Natural Resource	5.3	5.3	5.3
Waste Management	6.0	6.0	6.2
"S" Pillar	5.7	5.2	5.5
Social Opport	5.6	5.5	5.4
Human Capital	6.1	6.2	6.1
Product Safety	5.2	5.3	4.9
"G" Pillar	5.3	5.7	4.7
Business Ethics	5.7	5.8	5.3
Corp Governance	6.7	6.7	6.4
Public Policy	3.4	3.4	2.4

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Realized Monthly Tracking Error vs. Euro Corporate Index



Source: MSCI ESG Research, Barclays Research

### BARCLAYS MSCI EURO AGGREGATE SOCIALLY RESPONSIBLE (SRI) INDEX

Inception Date	Currency	Ticker
1/1/2007	EUR	-

The Barclays MSCI Euro Aggregate Socially Responsible Index is a fixed-rate, investment-grade corporate bond benchmark that negatively screens issuers that are involved in alcohol, tobacco, gambling, military weapons, nuclear power, adult entertainment, civilian firearms, and genetically modified organisms. Security eligibility follows the same underlying rules as the Barclays Euro Aggregate Index, with additional ESG negative screening using MSCI ESG Business Involvement Screening Research (BISR) and MSCI Impact Monitor Scores. Screening based on other business activities or ratings that are tracked by MSCI ESG Research are also available. The index was launched in June 2013 with history available back to January 2007.

Related Index and Sub-Index Info		
Index	Bloomberg Ticker	IndexID
Euro Aggregate SRI Sector Neutral	-	29702
Euro Corporate Socially Responsible	RECM	29543
Euro Corporate ex Pred Lending	-	29724
Euro Corporate ex Weapons	-	29725
Euro Corporate Catholic Values	-	29726
Euro Intermediate Corporate SRI	-	29721
Euro Long Corporate SRI	-	29722
Euro Corporate SRI + ESG	-	29723

#### **Eligible Bond Universe**

#### Eligible Sectors: Treasury, Gov-Related, Securitized, Corporate Minimum Issue Size: EUR300mn

#### **Credit Quality**

- Rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&P and Fitch; when a rating from only two agencies is available, the lower is used
- Expected ratings at issuance may be used when other indexeligible bonds from the same issuer hold the same actual rating as the expected rating

Maturity: At least one year to final maturity, regardless of optionality. Fixed-rate perpetuals are not included

Seniority of Debt: Senior and subordinated issues are included Taxability: Only fully taxable issues are eligible

Currency: Principal and coupon must be denominated in EUR

**Coupon:** Issues must pay fixed-rate coupon, callable fixed-to-float bonds are eligible during their fixed-rate only

**Rebalancing**: The index is rebalanced at each month-end, setting a fixed universe (Returns) from which index returns are calculated for the next month. A forward-looking projection (Statistics) changes daily to reflect current eligibility, but is not used to compute returns

#### Environment, Social, and Governance Rules

#### **Business Involvement Screens**

Excludes issuers involved in the following business lines/activities:

- Alcohol
- Tobacco
- Gambling
- Adult Entertainment
- Genetically Modified Organisms (GMO)
- Nuclear Power
- Civilian Firearms
- Military Weapons (including mines, cluster bombs, chemical weapons)

Involvement is defined for each restricted activity and may be based on % of revenue, total revenue, or any tie regardless of revenue

#### Eligible Securities/Included

- Bullet, callable, putable, sinkable/amortizing
- Fixed-rate and fixed-to-floating capital securities

#### Eligible Securities / Excluded

- Industrial and Utility issuers that > 50% or government-owned
- Bonds with equity type features (eg, warrants, convertibles, contingent capital securities, preferreds, DRDs)
- Private placements, retail bonds
- Structured notes, pass-through certificates
- Inflation-linked bonds, floating-rate issues
- Illiquid securities with no available internal or 3rd-party pricing

**Pricing:** Index prices are sourced primarily from Barclays market makers, though third-party pricing may be used. Prices are quoted on the bid side, with the exception of new issues, which are priced on the offer side upon entering the index. T+1 settlement is used for all dates except month-end, when bonds are assumed to settle on first calendar day of the following month

**Weighting:** Index eligible securities are market value weighted. For Sector Neutral versions of different ESG indices, security weights are market value weighted within each sector (Class 1 or Class 2), but sector weights are designed to match the same sector exposure of the non-ESG versions of the same benchmark

#### Impact Monitor Screens

 Excludes any issuer with a "Red" MSCI ESG Impact Monitor score (less than 2), which measures an issuer's involvement in major ESG controversies and how well they adhere to international norms and principles

- Screening is available for other business activities that may be restricted for certain investors including predatory lending, child labor, stem cell, abortion/contraception, etc. These are not however screened from the standard SRI Index
- Involvement in countries that are subject to sanctions in certain markets (Iran, Burma, Cuba, etc.) can also be negatively screened in custom indices

#### **SRI Index Exclusions**

SRI Exclusion Criteria	# Issuers	# Bonds	MV (€bn)	MV% EUR Corp	MV% EUR Agg		
Business Involvement Sc	reen						
Nuclear Power	104	9	114.9	9.0%	1.37%		
Military Weapons	36	5	37.2	2.9%	0.44%		
GMO	31	8	27.0	2.1%	0.32%		
Alcohol	24	7	20.0	1.6%	0.24%		
Tobacco	21	4	18.3	1.4%	0.22%		
Gambling	3	1	2.0	0.2%	0.02%		
Adult Entertainment	-	-	-	-	-		
Civilian Firearms	-	-	-	-	-		
Impact Monitor Screen							
MSCI "Red" Impact	59	11	71.0	5.5%	0.8%		
Total							
Excl from EUR Corp/Agg	39	233	242.7	18.9%	2.9%		
Euro Corp Index	334	1,319	1,282.5	100%	15.3%		
Note: Exclusions are not	mutually	exclusive	2				

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics – Financial

	Euro Agg SRI	Euro Agg
# Bonds	2,739	3,037
# Issuers	538	585
Market Value	10,440.6	10,859.7
OAD	5.9	5.8
OAS	100.8	101.0
OASD	5.78	5.75
Yield to Mat	1.79	1.79
DTS	4.93	4.91
Liquidity Cost Score	0.28	0.29
Credit Quality	AA3/A1	AA3/A1
Credit QualNum	5.25	5.34

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Annual Index Returns 2007-12 (Total Return %, EUR)



Source: MSCI ESG Research, Barclays Research

#### Composition by ESG Rating

ESG	Euro Agg SRI					Euro Aggregate				
Rating	Total	Tsy	Gov	Corp	Sec	Total	Tsy	Gov	Corp	Sec
AAA	4.6	0.9	1.9	1.2	0.5	4.5	0.9	1.8	1.3	0.5
AA	29.2	19.1	4.9	2.4	2.8	28.6	18.3	4.7	2.8	2.7
A	27.2	18.2	4.3	3.6	1.1	27.0	17.5	4.1	4.4	1.1
BBB	28.2	22.7	1.8	2.1	1.6	28.3	21.8	2.3	2.6	1.6
<bbb< td=""><td>7.1</td><td>-</td><td>0.6</td><td>2.7</td><td>3.8</td><td>7.9</td><td>-</td><td>0.7</td><td>3.4</td><td>3.9</td></bbb<>	7.1	-	0.6	2.7	3.8	7.9	-	0.7	3.4	3.9
NR	3.8	-	1.7	0.9	1.1	3.7	-	1.7	0.9	1.1
Total	100	60.8	15.2	12.9	11.0	100	58.5	15.4	15.3	10.8

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics – Non-Financial

Sector	E	uro Agg	SRI	Euro Agg		
	ENV	SOC	GOV	ENV	SOC	GOV
Tsy	4.9	7.7	6.7	4.9	7.7	6.7
Corp	6.7	5.6	4.4	6.6	5.5	4.7
Gov Related	6.0	6.9	7.2	6.0	6.9	7.0
Other	5.6	5.8	3.5	5.6	5.8	3.5
Combined	5.3	7.2	6.2	5.3	7.1	6.1

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Realized Monthly Tracking Error vs. Euro Corporate Index



### BARCLAYS MSCI EURO AGGREGATE SUSTAINABILITY INDEX

Inception Date	Currency	Ticker
1/1/2007	EUR	SEAG

The Barclays MSCI Euro Aggregate Sustainability Index is a fixedrate, investment-grade corporate bond benchmark that includes issuers with MSCI ESG ratings of BBB or higher. This benchmark is designed to positively screen "best in class" issuers that are more effective at managing the ESG risks most relevant to their industry peer group. Security eligibility follows the same underlying rules as the Barclays Euro Aggregate Index, with additional ESG negative screening using MSCI Impact Monitor Scores. This index is a market value weighted benchmark, but a variant is available that preserved the Class 2 sector weights for the full Barclays Euro Aggregate Index. The index was launched in June 2013 with history available back to January 2007.

#### **Eligible Bond Universe**

#### Eligible Sectors: Treasury, Gov-Related, Securitized, Corporate Minimum Issue Size: EUR300mn

#### **Credit Quality**

- Rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&P and Fitch; when a rating from only two agencies is available, the lower is used
- Expected ratings at issuance may be used when other indexeligible bonds from the same issuer hold the same actual rating as the expected rating

Maturity: At least one year to final maturity, regardless of optionality. Fixed-rate perpetuals are not included

Seniority of Debt: Senior and subordinated issues are included Taxability: Only fully taxable issues are eligible

**Currency**: Principal and coupon must be denominated in EUR **Coupon**: Issues must pay fixed-rate coupon, callable fixed-to-float bonds are eligible during their fixed-rate only

**Rebalancing**: The index is rebalanced at each month-end, setting a fixed universe (Returns) from which index returns are calculated for the next month. A forward-looking projection (Statistics) changes daily to reflect current eligibility, but is not used to compute returns

#### Environment, Social, and Governance Rules

#### ESG Rating

- Includes issuers with an ESG rating of BBB or higher using MSCI's IVA Rating or Sovereign Rating model
- ESC ratings are available for Treasury, government-related, corporate, and covered bond issuers. They are not applied to MBS, ABS, and CMBS issues
- Unrated issuers from sectors with ratings are excluded
- Ratings are applied at the Barclays ticker level. Every bond within the same ticker will have the same ESG rating
- ESG ratings are generally updated annually, but may be reviewed more frequently as needed

Related	Index a	nd Sub-li	ndex Inf	formation
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Index	Bloomberg Ticker	IndexID
Euro Aggregate Sustainability	SEAG	29549
Euro Agg Sustainability Sector Neutral	SUAN	29550
Euro Intermediate Agg Sustainability	-	29735
Euro Long Agg Sustainability	-	29736
Euro Corporate Sustainability	SECM	29547
Euro Corp Sustainability Sector Neutral	SECN	29704
Euro Intermediate Corp Sustainability	-	29733
Euro Long Corp Sustainability	-	29734

#### Eligible Securities/Included

- Bullet, callable, putable, sinkable/amortizing
- Fixed-rate and fixed-to-floating capital securities

#### Eligible Securities / Excluded

- Industrial and Utility issuers that > 50% or government-owned
- Bonds with equity type features (eg, warrants, convertibles, contingent capital securities, preferreds, DRDs)
- Private placements, retail bonds
- Structured notes, pass-through certificates
- Inflation-linked bonds, floating-rate issues
- Illiquid securities with no available internal or 3rd-party pricing

**Pricing:** Index prices are sourced primarily from Barclays market makers, though third-party pricing may be used. Prices are quoted on the bid side, with the exception of new issues, which are priced on the offer side upon entering the index. T+1 settlement is used for all dates except month-end, when bonds are assumed to settle on first calendar day of the following month

**Weighting:** Index eligible securities are market value weighted. For Sector Neutral versions of different ESG indices, security weights are market value weighted within each sector (Class 1 or Class 2), but sector weights are designed to match the same sector exposure of the non-ESG versions of the same benchmark

#### Impact Monitor Screens

 Excludes any issuer with a "Red" MSCI ESG Impact Monitor score (less than 2), which measures an issuer's involvement in major ESG controversies and how well they adhere to international norms and principles

- Lower or higher ESG rating thresholds may be applied for custom indices
- Negative screening is available for business activities covered by MSCI Business Issuer Screening Research (BISR) that may also be used in Barclays MSCI Socially Responsible Indices

#### **SRI Exposure**

SRI Exposure	# Issuers	# Bonds	MV (€bn)	MV% EUR Corp	MV% EUR Agg			
SRI Business Involvemen	nt							
Nuclear Power	8	102	113.7	12.7%	1.54%			
Military Weapons	4	35	36.7	4.1%	0.50%			
GMO	6	22	18.5	2.1%	0.25%			
Alcohol	6	18	15.7	1.8%	0.21%			
Tobacco	1	1	0.4	0.0%	0.01%			
Gambling	-	-	-	-	-			
Adult Entertainment	-	-	-	-	-			
Civilian Firearms	-	-	-	-	-			
Total								
BBB+ SRI Exposure	22	144	147.0	16.4%	2.0%			
EUR Corp ESG BBB+	199	906	894.9	100%	12.1%			

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics – Financial

	Euro Agg Sustainability	Sector Neutral	Euro Agg
# Bonds	2,091	2,091	3,037
# Issuers	341	341	585
Market Value	9,572.1	9,572.1	10,859.7
OAD	6.1	5.9	5.8
OAS	97.2	96.5	101.0
OASD	6.0	5.8	5.8
Yield to Mat	1.79	1.76	1.79
DTS	4.93	4.73	4.91
Liquidity Cost Score	0.25	0.27	0.29
Credit Quality	AA3/A1	AA3/A1	AA3/A1
Credit QualNum	5.19	5.19	5.34

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Annual Index Returns 2007-12 (Total Return %, EUR)



Source: MSCI ESG Research, Barclays Research

#### Composition by ESG Rating

ESG	Euro Agg Sustainability					Euro Aggregate				
Rating	Total	Tsy	Gov	Corp	Sec	Total	Tsy	Gov	Corp	Sec
AAA	5.1	1.0	2.1	1.5	0.6	4.5	0.9	1.8	1.3	0.5
AA	32.4	20.8	5.4	3.2	3.1	28.6	18.3	4.7	2.8	2.7
A	30.7	19.8	4.7	5.0	1.2	27.0	17.5	4.1	4.4	1.1
BBB	31.6	24.8	2.5	2.5	1.8	28.3	21.8	2.3	2.6	1.6
<bbb< td=""><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>7.9</td><td>-</td><td>0.7</td><td>3.4</td><td>3.9</td></bbb<>	-	-	-	-	-	7.9	-	0.7	3.4	3.9
NR	0.2	-	-	-	0.2	3.7	-	1.7	0.9	1.1
Total	100	66.4	14.7	12.1	6.8	100	58.5	15.4	15.3	10.8

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics – Non-Financial

Sector	Euro Agg Sustainability			E	Euro Ag	9
	ENV	SOC	GOV	ENV	SOC	GOV
Tsy	4.9	7.7	6.7	4.9	7.7	6.7
Corp	7.1	5.9	5.3	6.6	5.5	4.7
Gov Related	6.0	7.0	7.1	6.0	6.9	7.0
Other	6.4	6.6	4.2	5.6	5.8	3.5
Combined	5.4	7.3	6.4	5.3	7.1	6.1

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Realized Monthly Tracking Error vs. Euro Corporate Index



### BARCLAYS MSCI EURO AGGREGATE ESG WEIGHTED INDEX

Inception Date	Currency	Ticker
1/1/2007	EUR	EAAM

The Barclays MSCI Euro Aggregate ESG Weighted Index is a fixedrate, investment-grade corporate bond benchmark that adjusts the market value weight of index eligible issuers based on ESG Ratings and ESG Ratings Momentum. This benchmark is designed to overweight issuers that have higher ESG ratings and/or positive ratings momentum while underweighting issuers that have lower ratings and/or negative momentum. Security eligibility follows the same underlying rules as the Barclays Euro Aggregate Index, with different weighting tilts applied for each rating/ratings momentum combination. A variant of this benchmark is available that preserved the Class 2 sector weights of the full Barclays Euro Aggregate Index. The index was launched in June 2013 with history available back to January 2007.

#### **Eligible Bond Universe**

## Eligible Sectors: Treasury, Gov-Related, Securitized, Corporate Minimum Issue Size: EUR300mn

#### **Credit Quality**

- Rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&P and Fitch; when a rating from only two agencies is available, the lower is used
- Expected ratings at issuance may be used when other indexeligible bonds from the same issuer hold the same actual rating as the expected rating

**Maturity:** At least one year to final maturity, regardless of optionality. Fixed-rate perpetuals are not included

Seniority of Debt: Senior and subordinated issues are included Taxability: Only fully taxable issues are eligible

Currency: Principal and coupon must be denominated in EUR

**Coupon:** Issues must pay fixed-rate coupon, callable fixed-to-float bonds are eligible during their fixed-rate only

**Rebalancing**: The index is rebalanced at each month-end, setting a fixed universe (Returns) from which index returns are calculated for the next month. A forward-looking projection (Statistics) changes daily to reflect current eligibility, but is not used to compute returns

#### Environment, Social, and Governance Rules

#### ESG Weighting

- The weight of each index eligible issuer (and security) is adjusted by a fixed multiplier based on both its ESG Rating (AAA, AA, A, BBB, BB, B, CCC, NR) and its ESG Ratings momentum (Positive, Neutral, Negative since last evaluation)
- Security weights are normalized using adjusted market values
- ESC ratings are available for Treasury, government-related, corporate, and covered bond issuers. They are not applied to MBS, ABS, and CMBS issues, which are left unadjusted
- Ratings are applied at the Barclays ticker level, and every bond within the same ticker will have the same ESG rating.
- ESG ratings are generally updated annually, but may be reviewed more frequently as needed

#### **Related Index and Sub-Index Information**

Index	Bloomberg Ticker	IndexID
Euro Agg ESG Weighted	EAAM	29712
Euro Agg ESG Wtg Sector Neutral CL1	EEAN	29555
Euro Intermediate Agg ESG Weighted	-	29713
Euro Long Agg ESG Weighted	-	29714
Euro Corporate ESG Weighted	EECM	29708
Euro Corp ESG Weighted Sector Neutral	EECN	29554
Euro Intermediate Corp ESG Weighted	-	29709
Euro Long Corp ESG Weighted	-	29710

#### Eligible Securities/Included

- Bullet, callable, putable, sinkable/amortizing
- Fixed-rate and fixed-to-floating capital securities

#### Eligible Securities/Excluded

- Industrial and Utility issuers that > 50% or government-owned
- Bonds with equity type features (eg, warrants, convertibles, contingent capital securities, preferreds, DRDs)
- Private placements, retail bonds
- Structured notes, pass-through certificates
- Inflation-linked bonds, floating-rate issues
- Illiquid securities with no available internal or 3rd-party pricing

**Pricing:** Index prices are sourced primarily from Barclays market makers, though third-party pricing may be used. Prices are quoted on the bid side, with the exception of new issues, which are priced on the offer side upon entering the index. T+1 settlement is used for all dates except month-end, when bonds are assumed to settle on first calendar day of the following month

**Weighting:** Index eligible securities are market value weighted. For Sector Neutral versions of different ESG indices, security weights are market value weighted within each sector (Class 1 or Class 2), but sector weights are designed to match the same sector exposure of the non-ESG versions of the same benchmark

#### Factors Used to Adjust Weights Based on Ratings/Momentum

Rating	Tilt	Momentum	Tilt
AAA, AA, A	1.5x	Positive	2.0x
BBB	1.0x	Neutral	1.0x
BB	0.8x	Negative	0.5x
В	0.75x		
CCC	0.67x		
NR	0.75x		
MBS/ABS/CMBS	1.0x		

#### Underlying Index SRI Exposure

SRI Exclusion Criteria	# Issuers	# Bonds	MV (€bn)	MV% EUR Corp	MV% EUR Agg				
Business Involvement Screen									
Nuclear Power	104	9	114.9	9.0%	1.37%				
Military Weapons	36	5	37.2	2.9%	0.44%				
GMO	31	8	27.0	2.1%	0.32%				
Alcohol	24	7	20.0	1.6%	0.24%				
Tobacco	21	4	18.3	1.4%	0.22%				
Gambling	3	1	2.0	0.2%	0.02%				
Adult Entertainment	-	-	-	-	-				
Civilian Firearms	-	-	-	-	-				
Impact Monitor Screen									
MSCI "Red" Impact	59	11	71.0	5.5%	0.8%				
Total									
Excl from EUR Corp/Agg	39	233	242.7	18.9%	2.9%				
Euro Corp Index	334	1,319	1,282.5	100%	15.3%				
Note: Exclusions are not	mutually	exclusive	2						

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics – Financial

	Euro Corp ESG Weighted	Sector Neutral	Euro Corp
# Bonds	1,319	1,319	1,319
# Issuers	329	329	334
Market Value	2,582.5	2,582.5	1,662.1
OAD	4.6	4.5	4.5
OAS	125.1	126	127.5
OASD	4.78	4.79	4.76
Yield to Mat	1.85	1.87	1.88
DTS	5.24	5.33	5.21
Liquidity Cost Score	0.42	0.43	0.43
Credit Quality	A2/A3	A2/A3	A2/A3
Credit QualNum	7.95	7.85	7.92

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Annual Index Returns 2007-12 (Total Return %, EUR)



Source: MSCI ESG Research, Barclays Research

#### Composition by ESG Rating

ESG	Euro Corporate SRI			Euro Corporate				
Rating	Total	IND	UTL	FIN	Total	IND	UTL	FIN
AAA	11.6	4.7	1.5	5.4	8.5	3.4	1.5	3.6
AA	26.1	11.8	2.1	12.2	18.3	8.3	1.5	8.5
А	38.9	20.2	8.2	10.6	28.5	14.7	5.0	8.8
BBB	9.7	4.5	0.5	4.6	16.8	7.1	0.8	8.9
BB	8.6	2.8	0.0	5.8	14.3	4.9	0.1	9.3
В	0.8	0.3	-	0.5	2.6	0.9	-	1.6
ССС	1.4	0.2	-	1.1	5.1	1.0	-	4.1
NR	2.9	1.3	0.4	1.3	6.0	2.6	0.8	2.6
Total	100	45.9	12.7	41.5	100.0	42.8	9.7	47.5

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics - Non-Financial

Sector	Euro A	gg ESG \	Weighted	E	Euro Ag	9
	ENV	SOC	GOV	ENV	SOC	GOV
Tsy	4.9	7.9	7.1	4.9	7.7	6.7
Corp	7.0	5.7	5.3	6.6	5.5	4.7
Gov Related	6.0	6.9	7.3	6.0	6.9	7.0
Other	6.0	6.3	4.1	5.6	5.8	3.5
Combined	5.5	7.3	6.7	5.3	7.1	6.1

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Realized Monthly Tracking Error vs. Euro Aggregate Index



### BARCLAYS MSCI STERLING CORPORATE SOCIALLY RESPONSIBLE (SRI) INDEX

Inception Date	Currency	Ticker
1/1/2007	EUR	RSCM

The Barclays MSCI Sterling Corporate Socially Responsible Index is a fixed-rate, investment-grade corporate bond benchmark that negatively screens issuers that are involved in alcohol, tobacco, gambling, military weapons, nuclear power, adult entertainment, civilian firearms, and genetically modified organisms. Security eligibility follows the same underlying rules as the Barclays Sterling Corporate Index, with additional ESG negative screening using MSCI ESG Business Involvement Screening Research (BISR) and MSCI Impact Monitor Scores. Screening based on other business activities or ratings that are tracked by MSCI ESG Research are also available. The index was launched in June 2013 with history available back to January 2007.

### Eligible Bond Universe

#### **Eligible Sectors:** Corporate (Industrial, Utility, and Financials) **Minimum Issue Size:** GBP300mn

#### **Credit Quality**

- Rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&P and Fitch; when a rating from only two agencies is available, the lower is used
- Expected ratings at issuance may be used when other indexeligible bonds from the same issuer hold the same actual rating as the expected rating

**Maturity**: At least one year to final maturity, regardless of optionality. Fixed-rate perpetuals are not included

Seniority of Debt: Senior and subordinated issues are included Taxability: Only fully taxable issues are eligible

Currency: Principal and coupon must be denominated in GBP

**Coupon**: Issues must pay fixed-rate coupon, callable fixed-to-float bonds are eligible during their fixed-rate only

**Rebalancing**: The index is rebalanced at each month-end, setting a fixed universe (Returns) from which index returns are calculated for the next month. A forward-looking projection (Statistics) changes daily to reflect current eligibility, but is not used to compute returns

#### Environment, Social, and Governance Rules

#### **Business Involvement Screens**

Excludes issuers involved in the following business lines/activities:

- Alcohol
- Tobacco
- Gambling
- Adult Entertainment
- Genetically Modified Organisms (GMO)
- Nuclear Power
- Civilian Firearms
- Military Weapons (including mines, cluster bombs, chemical weapons)

Involvement is defined for each restricted activity and may be based on % of revenue, total revenue, or any tie regardless of revenue

#### Related Index and Sub-Index Info

Index	Bloomberg Ticker	IndexID
Sterling Corporate Socially Responsible	RSCM	29545
Sterling Intermediate Corporate SRI	-	29727
Sterling Long Corporate SRI	-	29728
Sterling Corporate ex Pred Lending	-	29730
Sterling Corporate ex Weapons	-	29731
Sterling Corporate Catholic Values	RSCA	29732
Sterling Corporate SRI + ESG	-	29729
Sterling Aggregate SRI Sector Neutral	-	29703

#### Eligible Securities/Included

- Bullet, callable, putable, sinkable/amortizing
- Fixed-rate and fixed-to-floating capital securities

#### Eligible Securities / Excluded

- Industrial and Utility issuers that > 50% or government-owned
- Bonds with equity type features (eg, warrants, convertibles, contingent capital securities, preferreds, DRDs)
- Private placements, retail bonds
- Structured notes, pass-through certificates
- Inflation-linked bonds, floating-rate issues
- Illiquid securities with no available internal or 3rd-party pricing

**Pricing:** Index prices are sourced primarily from Barclays market makers, though third-party pricing may be used. Prices are quoted on the bid side, with the exception of new issues, which are priced on the offer side upon entering the index. T+1 settlement is used for all dates except month-end, when bonds are assumed to settle on first calendar day of the following month

**Weighting:** Index eligible securities are market value weighted. For Sector Neutral versions of different ESG indices, security weights are market value weighted within each sector (Class 1 or Class 2), but sector weights are designed to match the same sector exposure of the non-ESG versions of the same benchmark

#### Impact Monitor Screens

 Excludes any issuer with a "Red" MSCI ESG Impact Monitor score (less than 2), which measures an issuer's involvement in major ESG controversies and how well they adhere to international norms and principles

- Screening is available for other business activities that may be restricted for certain investors including predatory lending, child labor, stem cell, abortion/contraception, etc. These are not however screened from the standard SRI Index
- Involvement in countries that are subject to sanctions in certain markets (Iran, Burma, Cuba, etc.) can also be negatively screened in custom indices

#### **SRI Index Exclusions**

SRI Exclusion Criteria	# Issuers	# Bonds	MV (£bn)	MV% GBP Corp	MV% GBP Agg			
Business Involvement Screen								
Nuclear Power	67	11	41.5	12.3%	2.57%			
Military Weapons	25	4	13.4	4.0%	0.83%			
Tobacco	12	2	7.4	2.2%	0.46%			
GMO	5	4	3.1	0.9%	0.19%			
Alcohol	5	4	3.0	0.9%	0.18%			
Gambling	-	-	-	-	-			
Civilian Firearms	-	-	-	-	-			
Adult Entertainment	-	-	-	-	-			
Impact Monitor Screen								
MSCI "Red" Impact	28	11	20.7	6.1%	1.3%			
Total								
Excl from GBP Corp/Agg	30	115	73.9	21.8%	4.6%			
Full GBP Corp Index	231	670	338.4	100%	21.0%			
Note: Exclusions are not	mutually	exclusiv	е					

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics – Financial

	Sterling Corp SRI	Sterling Corp
# Bonds	555	670
# Issuers	201	231
Market Value	401.1	513.1
OAD	8.1	8.3
OAS	156.9	153.7
OASD	8.4	8.5
Yield to Mat	3.55	3.54
DTS	13.75	13.57
Liquidity Cost Score	0.93	0.92
Credit Quality	A3/BAA1	A3/BAA1
Credit QualNum	8.12	8.03

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Annual Index Returns 2007-12 (Total Return %, GBP)



Source: MSCI ESG Research, Barclays Research

#### Composition by ESG Rating

-								
ESG	Ster	Sterling Corporate SRI			St	erling (	Corpora	te
Rating	Total	IND	UTL	FIN	Total	IND	UTL	FIN
AAA	11.2	4.0	-	7.2	9.5	3.2	0.7	5.6
AA	18.1	9.5	3.5	5.1	19.3	7.8	4.1	7.4
А	17.1	9.6	3.5	4.0	18.1	8.6	6.3	3.1
BBB	9.2	4.1	1.5	3.5	10.6	3.9	2.8	3.9
BB	15.2	3.8	0.8	10.6	15.2	6.2	0.7	8.3
В	3.3	0.6	1.8	0.9	6.1	2.4	1.4	2.3
ССС	10.4	1.3	0.4	8.8	9.2	1.1	1.3	6.8
NR	15.5	6.0	3.8	5.8	12.2	4.7	3.0	4.5
Total	100	38.8	15.5	45.8	100	37.9	20.3	41.9

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics – Non-Financial

ESG Theme Score	Sterling Corp ESG SRI	Sterling Corp
"E" Pillar	6.7	6.5
Climate	8.2	8.2
Env Opport	6.3	6.4
Natural Resource	5.1	5.0
Waste Management	6.6	6.1
"S" Pillar	5.7	5.5
Social Opport	5.5	5.4
Human Capital	6.3	6.0
Product Safety	4.2	4.1
"G" Pillar	5.2	5.4
Business Ethics	4.9	5.1
Corp Governance	6.8	6.8
Public Policy	2.9	2.7

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Realized Monthly Tracking Error vs. Euro Aggregate Index



### BARCLAYS MSCI STERLING CORPORATE SUSTAINABILITY INDEX

Inception Date	Currency	Ticker
1/1/2007	GBP	SSCM

The Barclays MSCI Sterling Corporate Sustainability Index is a fixedrate, investment-grade corporate bond benchmark that includes issuers with MSCI ESG ratings of BBB or higher. This benchmark is designed to positively screen "best in class" issuers that are more effective at managing the ESG risks most relevant to their industry peer group. Security eligibility follows the same underlying rules as the Barclays Sterling Corporate Index, with additional ESG negative screening using MSCI Impact Monitor Scores. This index is a market value weighted benchmark, but a variant is available that preserved the Class 2 sector weights for the full Barclays Sterling Corporate Index. The index was launched in June 2013 with history available back to January 2007.

Related Index and Sub-Index Information							
Index	Bloomberg Ticker	IndexID					
Sterling Corporate Sustainability	SSCM	29551					
Sterling Corp Sustainability Sctr Neutral	SCAN	29706					
Sterling Int Corp Sustainability	-	29739					
Sterling Long Corp Sustainability	-	29740					
Sterling Aggregate Sustainability	SSAM	29552					
Sterling Agg Sustainability Sctr Neutral	SSCN	29553					
Sterling Intermediate Agg Sustainability	-	29741					
Sterling Long Agg Sustainability	-						

#### **Eligible Bond Universe**

#### Eligible Sectors: Corporate (Industrial, Utility, and Financials) Minimum Issue Size: GBP300mn

#### Credit Quality

- Rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&P and Fitch; when a rating from only two agencies is available, the lower is used
- Expected ratings at issuance may be used when other indexeligible bonds from the same issuer hold the same actual rating as the expected rating

**Maturity**: At least one year to final maturity, regardless of optionality. Fixed-rate perpetuals are not included

Seniority of Debt: Senior and subordinated issues are included Taxability: Only fully taxable issues are eligible

Currency: Principal and coupon must be denominated in GBP

**Coupon**: Issues must pay fixed-rate coupon, callable fixed-to-float bonds are eligible during their fixed-rate only

**Rebalancing**: The index is rebalanced at each month-end, setting a fixed universe (Returns) from which index returns are calculated for the next month. A forward-looking projection (Statistics) changes daily to reflect current eligibility, but is not used to compute returns

#### Environment, Social, and Governance Rules

#### ESG Rating

- Includes issuers with an ESG rating of BBB or higher using MSCI's IVA Rating or Sovereign Rating model
- ESC ratings are available for Treasury, government-related, corporate, and covered bond issuers. They are not applied to MBS, ABS, and CMBS issues
- Unrated issuers from sectors with ratings are excluded
- Ratings are applied at the Barclays ticker level. Every bond within the same ticker will have the same ESG rating
- ESG ratings are generally updated annually, but may be reviewed more frequently as needed

#### Eligible Securities/Included

- Bullet, callable, putable, sinkable/amortizing
- Fixed-rate and fixed-to-floating capital securities

#### Eligible Securities / Excluded

- Industrial and Utility issuers that > 50% or government-owned
- Bonds with equity type features (eg, warrants, convertibles, contingent capital securities, preferreds, DRDs)
- Private placements, retail bonds
- Structured notes, pass-through certificates
- Inflation-linked bonds, floating-rate issues
- Illiquid securities with no available internal or 3rd-party pricing

**Pricing:** Index prices are sourced primarily from Barclays market makers, though third-party pricing may be used. Prices are quoted on the bid side, with the exception of new issues, which are priced on the offer side upon entering the index. T+1 settlement is used for all dates except month-end, when bonds are assumed to settle on first calendar day of the following month

**Weighting:** Index eligible securities are market value weighted. For Sector Neutral versions of different ESG indices, security weights are market value weighted within each sector (Class 1 or Class 2), but sector weights are designed to match the same sector exposure of the non-ESG versions of the same benchmark

#### Impact Monitor Screens

 Excludes any issuer with a "Red" MSCI ESG Impact Monitor score (less than 2), which measures an issuer's involvement in major ESG controversies and how well they adhere to international norms and principles

- Lower or higher ESG rating thresholds may be applied for custom indices
- Negative screening is available for business activities covered by MSCI Business Issuer Screening Research (BISR) that may also be used in Barclays MSCI Socially Responsible Indices

#### **SRI Exposure**

	#	#	MV	MV% GBP	MV% GBP		
SRI Exposure	Issuers	Bonds	(£bn)	Corp	Agg		
SRI Business Involvemen	ıt						
Nuclear Power	9	59	37.8	20.0%	2.64%		
Military Weapons	3	24	12.9	6.8%	0.90%		
GMO	3	4	2.7	1.4%	0.19%		
Alcohol	3	4	2.5	1.3%	0.18%		
Tobacco	-	-	-	-	-		
Gambling	-	-	-	-	-		
Civilian Firearms	-	-	-	-	-		
Adult Entertainment	-	-	-	-	-		
Total							
BBB+ SRI Exposure	15	67	42.1	22.3%	2.9%		
GBP Corp ESG BBB+	127	380	189.1	100%	13.2%		

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics – Financial

	Sterling Corp Sustainability	Sector Neutral	Sterling Corp
# Bonds	380	380	670
# Issuers	127	127	231
Market Value	286.7	286.7	513.1
OAD	7.9	7.7	8.3
OAS	150.6	153.0	153.7
OASD	8.2	8.1	8.5
Yield to Mat	3.42	3.43	3.54
DTS	13.05	13.28	13.57
Liquidity Cost Score	0.91	0.90	0.92
Credit Quality	A3/BAA1	A2/A3	A3/BAA1
Credit QualNum	8.02	7.91	8.03

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Annual Index Returns 2007-12 (Total Return %, GBP)



Source: MSCI ESG Research, Barclays Research

#### Composition by ESG Rating

1 , 5								
ESG	Sterling Corp Sustainability			St	erling (	Corpora	te	
Rating	Total	IND	UTL	FIN	Total	IND	UTL	FIN
AAA	16.9	5.6	1.2	10.1	9.5	3.2	0.7	5.6
AA	34.6	13.9	7.4	13.3	19.3	7.8	4.1	7.4
A	32.3	15.5	11.3	5.6	18.1	8.6	6.3	3.1
BBB	16.2	6.2	5.1	4.9	10.6	3.9	2.8	3.9
BB	-	-	-	-	15.2	6.2	0.7	8.3
В	-	-	-	-	6.1	2.4	1.4	2.3
ССС	-	-	-	-	9.2	1.1	1.3	6.8
NR	-	-	-	-	12.2	4.7	3.0	4.5
Total	100	41.3	24.9	33.8	100	37.9	20.3	41.9

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics – Non-Financial

ESG Theme Score	Sterling Corp Sustainability	Sector Neutral	Sterling Corp
"E" Pillar	7.2	7.3	6.5
Climate	8.2	8.2	8.2
Env Opport	6.7	6.9	6.4
Natural Resource	5.3	5.4	5.0
Waste Management	5.9	6.0	6.1
"S" Pillar	6.2	6.5	5.5
Social Opport	5.9	5.8	5.4
Human Capital	6.4	6.3	6.0
Product Safety	5.4	5.5	4.1
"G" Pillar	6.5	6.1	5.4
Business Ethics	6.1	6.2	5.1
Corp Governance	7.3	7.2	6.8
Public Policy	5.0	5.0	2.7

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Realized Monthly Tracking Error vs. Sterling Corporate Index



### BARCLAYS MSCI STERLING CORPORATE ESG WEIGHTED INDEX

Inception Date	Currency	Ticker
1/1/2007	GBP	ESCM

The Barclays MSCI Sterling Corporate ESG Weighted Index is a fixed-rate, investment-grade corporate bond benchmark that adjusts the market value weight of index eligible issuers based on ESG Ratings and ESG Ratings Momentum. This benchmark is designed to overweight issuers that have higher ESG ratings and/or positive ratings momentum while underweighting issuers that have lower ratings and/or negative momentum. Security eligibility follows the same underlying rules as the Barclays Sterling Corporate Index, with different weighting tilts applied for each rating/ratings momentum combination. A variant of this benchmark is available that preserved the Class 2 sector weights of the full Barclays Sterling Corporate Index. The index was launched in June 2013 with history available back to January 2007.

#### **Eligible Bond Universe**

#### Eligible Sectors: Corporate (Industrial, Utility, and Financials) Minimum Issue Size: GBP300mn

#### **Credit Quality**

- Rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&P and Fitch; when a rating from only two agencies is available, the lower is used
- Expected ratings at issuance may be used when other indexeligible bonds from the same issuer hold the same actual rating as the expected rating

Maturity: At least one year to final maturity, regardless of optionality. Fixed-rate perpetuals are not included

Seniority of Debt: Senior and subordinated issues are included Taxability: Only fully taxable issues are eligible

Currency: Principal and coupon must be denominated in GBP

**Coupon**: Issues must pay fixed-rate coupon, callable fixed-to-float bonds are eligible during their fixed-rate only

**Rebalancing**: The index is rebalanced at each month-end, setting a fixed universe (Returns) from which index returns are calculated for the next month. A forward-looking projection (Statistics) changes daily to reflect current eligibility, but is not used to compute returns

#### Environment, Social, and Governance Rules

#### ESG Weighting

- The weight of each index eligible issuer (and security) is adjusted by a fixed multiplier based on both its ESG Rating (AAA, AA, A, BBB, BB, B, CCC, NR) and its ESG Ratings momentum (Positive, Neutral, Negative since last evaluation)
- Security weights are normalized using adjusted market values
- ESG ratings are available for Treasury, government-related, corporate, and covered bond issuers. They are not applied to MBS, ABS, and CMBS issues, which are left unadjusted
- Ratings are applied at the Barclays ticker level, and every bond within the same ticker will have the same ESG rating.
- ESG ratings are generally updated annually, but may be reviewed more frequently as needed

#### Related Index and Sub-Index Information

Index	Bloomberg Ticker	IndexID
Sterling Corporate ESG Weighted	ESCM	29716
Sterling Corp ESG Wtg Sector Neutral	ESC1	29556
Sterling Intermediate Corp ESG Wtg	-	29717
Sterling Long Corp ESG Weighted	-	29718
Sterling Agg ESG Weighted	ESAM	29719
Sterling Agg ESG Wtg Sctr Neutral CL1	ESAN	29557
Sterling Agg ESG Wtg Sctr Neutral CL2	-	29720
Sterling Corporate SRI + ESG	-	29729

#### Eligible Securities/Included

- Bullet, callable, putable, sinkable/amortizing
- Fixed-rate and fixed-to-floating capital securities

#### Eligible Securities/Excluded

- Industrial and Utility issuers that > 50% or government-owned
- Bonds with equity type features (eg, warrants, convertibles, contingent capital securities, preferreds, DRDs)
- Private placements, retail bonds
- Structured notes, pass-through certificates
- Inflation-linked bonds, floating-rate issues
- Illiquid securities with no available internal or 3rd-party pricing

**Pricing:** Index prices are sourced primarily from Barclays market makers, though third-party pricing may be used. Prices are quoted on the bid side, with the exception of new issues, which are priced on the offer side upon entering the index. T+1 settlement is used for all dates except month-end, when bonds are assumed to settle on first calendar day of the following month

**Weighting:** Index eligible securities are market value weighted. For Sector Neutral versions of different ESG indices, security weights are market value weighted within each sector (Class 1 or Class 2), but sector weights are designed to match the same sector exposure of the non-ESG versions of the same benchmark

#### Factors Used to Adjust Weights Based on Ratings/Momentum

Rating	Tilt	Momentum	Tilt
AAA, AA, A	1.5x	Positive	2.0x
BBB	1.0x	Neutral	1.0x
BB	0.8x	Negative	0.5x
В	0.75x		
CCC	0.67x		
NR	0.75x		
MBS/ABS/CMBS	1.0x		

#### Underlying Index SRI Exposure

SRI Exclusion Criteria	# Issuers	# Bonds	MV (£bn)	MV% GBP Corp	MV% GBP Agg	
Business Involvement Sc	reen					
Nuclear Power	67	11	41.5	12.3%	2.57%	
Military Weapons	25	4	13.4	4.0%	0.83%	
Tobacco	12	2	7.4	2.2%	0.46%	
GMO	5	4	3.1	0.9%	0.19%	
Alcohol	5	4	3.0	0.9%	0.18%	
Gambling	-	-	-	-	-	
Civilian Firearms	-	-	-	-	-	
Adult Entertainment	-	-	-	-	-	
Impact Monitor Screen						
MSCI "Red" Impact	28	11	20.7	6.1%	1.3%	
Total						
Excl from GBP Corp/Agg	30	115	73.9	21.8%	4.6%	
Full GBP Corp Index	231	670	338.4	100%	21.0%	
Note: Exclusions are not i	mutually	exclusiv	e			

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics – Financial

	Sterling Corp ESG Weighted	Sector Neutral	Sterling Corp
# Bonds	670	670	670
# Issuers	231	231	231
OAD	8.2	8.1	8.3
OAS	152.5	153.8	153.7
OASD	8.5	8.4	8.5
Yield to Mat	3.50	3.51	3.54
DTS	13.61	13.72	13.57
Liquidity Cost Score	0.94	0.93	0.92
Credit Quality	A3/BAA1	A2/A3	A3/BAA1
Credit QualNum	8.03	7.97	8.03

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Annual Index Returns 2007-12 (Total Return %, GBP)



Source: Barclays Research, MSCI ESG Research

#### Composition by ESG Rating

ESG	Ster	ling Co	rporate	SRI	Sterling Corporate			te
Rating	Total	IND	UTL	UTL FIN	Total	IND	UTL	FIN
AAA	12.6	4.3	0.7	7.6	9.5	3.2	0.7	5.6
AA	31.8	11.3	7.9	12.6	19.3	7.8	4.1	7.4
А	28.7	13.5	11.1	4.0	18.1	8.6	6.3	3.1
BBB	7.3	2.8	2.3	2.2	10.6	3.9	2.8	3.9
BB	8.1	2.9	0.2	5.1	15.2	6.2	0.7	8.3
В	2.1	0.7	0.7	0.7	6.1	2.4	1.4	2.3
CCC	2.9	0.3	0.5	2.2	9.2	1.1	1.3	6.8
NR	6.5	2.5	1.6	2.4	12.2	4.7	3.0	4.5
Total	100	38.2	25.0	36.8	100	37.9	20.3	41.9

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics – Non-Financial

ESG Theme Score	Sterling Corp ESG Weighted	Sector Neutral	Sterling Corp
"E" Pillar	7.0	7.1	6.5
Climate	8.2	8.2	8.2
Env Opport	6.7	6.9	6.4
Natural Resource	5.1	5.2	5.0
Waste Management	5.9	6.0	6.1
"S" Pillar	6.0	6.2	5.5
Social Opport	5.6	5.6	5.4
Human Capital	6.3	6.2	6.0
Product Safety	4.8	4.8	4.1
"G" Pillar	6.3	5.9	5.4
Business Ethics	6.0	6.0	5.1
Corp Governance	7.2	7.2	6.8
Public Policy	4.2	4.2	2.7

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Realized Monthly Tracking Error vs. Sterling Corporate Index



Source: Barclays Research, MSCI ESG Research

### BARCLAYS MSCI STERLING AGGREGATE SOCIALLY RESPONSIBLE (SRI) INDEX

Inception Date	Currency	Ticker
1/1/2007	GBP	-

The Barclays MSCI Sterling Aggregate Socially Responsible Index is a fixed-rate, investment-grade corporate bond benchmark that negatively screens issuers that are involved in alcohol, tobacco, gambling, military weapons, nuclear power, adult entertainment, civilian firearms, and genetically modified organisms. Security eligibility follows the same underlying rules as the Barclays Sterling Aggregate Index, with additional ESG negative screening using MSCI ESG Business Involvement Screening Research (BISR) and MSCI Impact Monitor Scores. Screening based on other business activities or ratings that are tracked by MSCI ESG Research are also available. The index was launched in June 2013 with history available back to January 2007.

#### Related Index and Sub-Index Info

Index	Bloomberg Ticker	IndexID
Sterling Aggregate SRI Sector Neutral	-	29703
Sterling Corporate Socially Responsible	RSCM	29545
Sterling Intermediate Corporate SRI	-	29727
Sterling Long Corporate SRI	-	29728
Sterling Corporate ex Pred Lending	-	29730
Sterling Corporate ex Weapons	-	29731
Sterling Corporate Catholic Values	RSCA	29732
Sterling Corporate SRI + ESG	-	29729

#### **Eligible Bond Universe**

#### Eligible Sectors: Treasury, Gov-Related, Securitized, Corporate Minimum Issue Size: GBP300mn

#### **Credit Quality**

- Rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&P and Fitch; when a rating from only two agencies is available, the lower is used
- Expected ratings at issuance may be used when other indexeligible bonds from the same issuer hold the same actual rating as the expected rating

Maturity: At least one year to final maturity, regardless of optionality. Fixed-rate perpetuals are not included

Seniority of Debt: Senior and subordinated issues are included Taxability: Only fully taxable issues are eligible

Currency: Principal and coupon must be denominated in GBP

**Coupon**: Issues must pay fixed-rate coupon, callable fixed-to-float bonds are eligible during their fixed-rate only

**Rebalancing**: The index is rebalanced at each month-end, setting a fixed universe (Returns) from which index returns are calculated for the next month. A forward-looking projection (Statistics) changes daily to reflect current eligibility, but is not used to compute returns

#### Environment, Social, and Governance Rules

#### **Business Involvement Screens**

Excludes issuers involved in the following business lines/activities:

- Alcohol
- Tobacco
- Gambling
- Adult Entertainment
- Genetically Modified Organisms (GMO)
- Nuclear Power
- Civilian Firearms
- Military Weapons (including mines, cluster bombs, chemical weapons)

Involvement is defined for each restricted activity and may be based on % of revenue, total revenue, or any tie regardless of revenue

#### Eligible Securities/Included

- Bullet, callable, putable, sinkable/amortizing
- Fixed-rate and fixed-to-floating capital securities

#### Eligible Securities / Excluded

- Industrial and Utility issuers that > 50% or government-owned
- Bonds with equity type features (eg, warrants, convertibles, contingent capital securities, preferreds, DRDs)
- Private placements, retail bonds
- Structured notes, pass-through certificates
- Inflation-linked bonds, floating-rate issues
- Illiquid securities with no available internal or 3rd-party pricing

**Pricing:** Index prices are sourced primarily from Barclays market makers, though third-party pricing may be used. Prices are quoted on the bid side, with the exception of new issues, which are priced on the offer side upon entering the index. T+1 settlement is used for all dates except month-end, when bonds are assumed to settle on first calendar day of the following month

**Weighting:** Index eligible securities are market value weighted. For Sector Neutral versions of different ESG indices, security weights are market value weighted within each sector (Class 1 or Class 2), but sector weights are designed to match the same sector exposure of the non-ESG versions of the same benchmark

#### Impact Monitor Screens

 Excludes any issuer with a "Red" MSCI ESG Impact Monitor score (less than 2), which measures an issuer's involvement in major ESG controversies and how well they adhere to international norms and principles

- Screening is available for other business activities that may be restricted for certain investors including predatory lending, child labor, stem cell, abortion/contraception, etc. These are not however screened from the standard SRI Index
- Involvement in countries that are subject to sanctions in certain markets (Iran, Burma, Cuba, etc.) can also be negatively screened in custom indices

#### **SRI Index Exclusions**

SRI Exclusion Criteria	# Issuers	# Bonds	MV (£bn)	MV% GBP Corp	MV% GBP Agg
Business Involvement Sc	reen				
Nuclear Power	67	11	41.5	12.3%	2.57%
Military Weapons	25	4	13.4	4.0%	0.83%
Tobacco	12	2	7.4	2.2%	0.46%
GMO	5	4	3.1	0.9%	0.19%
Alcohol	5	4	3.0	0.9%	0.18%
Gambling	-	-	-	-	-
Civilian Firearms	-	-	-	-	-
Adult Entertainment	-	-	-	-	-
Impact Monitor Screen					
MSCI "Red" Impact	28	11	20.7	6.1%	1.3%
Total					
Excl from GBP Corp/Agg	30	115	73.9	21.8%	4.6%
Full GBP Corp Index	231	670	338.4	100%	21.0%
Note: Exclusions are not	mutually	exclusiv	е		

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics – Financial

Sterling Agg SRI	Sterling Agg
819	950
295	329
2313.3	2448.1
9.3	9.3
35.3	41.2
9.0	9.0
2.27	2.34
3.88	4.41
0.31	0.34
AA1/AA2	AA2/AA3
3.93	4.13
	819 295 2313.3 9.3 35.3 9.0 2.27 3.88 0.31 AA1/AA2

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Annual Index Returns 2007-12 (Total Return %, GBP)



Source: MSCI ESG Research, Barclays Research

#### Composition by ESG Rating

ESG	Sterling Agg SRI				9	Sterling	egate			
Rating	Total	Tsy	Gov	Corp	Sec	Total	Tsy	Gov	Corp	Sec
AAA	4.0	-	2.0	2.0	-	3.9	-	1.9	2.0	-
AA	6.7	-	3.5	3.1	0.1	7.4	-	3.3	4.1	0.1
А	75.5	71.8	0.7	3.0	0.1	72.3	67.8	0.6	3.8	0.1
BBB	1.9	-	0.3	1.6	-	3.2	-	1.0	2.2	-
<bbb< td=""><td>6.0</td><td>-</td><td>0.2</td><td>5.0</td><td>0.8</td><td>7.5</td><td>-</td><td>0.4</td><td>6.4</td><td>0.8</td></bbb<>	6.0	-	0.2	5.0	0.8	7.5	-	0.4	6.4	0.8
NR	5.9	-	0.8	2.7	2.5	5.6	-	0.7	2.6	2.3
Total	100	71.8	7.5	17.3	3.4	100	67.8	7.9	21.0	3.3

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics – Non-Financial

Sector	Sterling Agg SRI			St	erling A	99
	ENV	SOC	GOV	ENV	SOC	GOV
Tsy	4.7	7.9	6.8	4.7	7.9	6.8
Corp	6.7	5.7	5.2	6.5	5.5	5.4
Gov Related	7.6	6.2	7.2	7.3	6.1	6.6
Other	6.0	4.4	2.3	6.0	4.5	2.2
Combined	5.2	7.4	6.5	5.3	7.3	6.4

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Realized Monthly Tracking Error vs. Sterling Aggregate Index



### BARCLAYS MSCI STERLING AGGREGATE SUSTAINABILITY INDEX

Inception Date	Currency	Ticker
1/1/2007	GBP	SSAM

The Barclays MSCI Sterling Aggregate Sustainability Index is a fixedrate, investment-grade corporate bond benchmark that includes issuers with MSCI ESG ratings of BBB or higher. This benchmark is designed to positively screen "best in class" issuers that are more effective at managing the ESG risks most relevant to their industry peer group. Security eligibility follows the same underlying rules as the Barclays Sterling Aggregate Index, with additional ESG negative screening using MSCI Impact Monitor Scores. This index is a market value weighted benchmark, but a variant is available that preserved the Class 2 sector weights for the full Barclays Sterling Aggregate Index. The index was launched in June 2013 with history available back to January 2007.

# Related Index and Sub-Index Information Index Bloomberg Ticker IndexID Sterling Aggregate Sustainability SSAM 29552

	licker	
Sterling Aggregate Sustainability	SSAM	29552
Sterling Agg Sustainability Sctr Neutral	SSCN	29553
Sterling Intermediate Agg Sustainability	-	29741
Sterling Long Agg Sustainability	-	
Sterling Corporate Sustainability	SSCM	29551
Sterling Corp Sustainability Sctr Neutral	SCAN	29706
Sterling Int Corp Sustainability	-	29739
Sterling Long Corp Sustainability	-	29740

#### **Eligible Bond Universe**

#### Eligible Sectors: Treasury, Gov-Related, Securitized, Corporate Minimum Issue Size: GBP300mn

#### **Credit Quality**

- Rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&P and Fitch; when a rating from only two agencies is available, the lower is used
- Expected ratings at issuance may be used when other indexeligible bonds from the same issuer hold the same actual rating as the expected rating

Maturity: At least one year to final maturity, regardless of optionality. Fixed-rate perpetuals are not included

Seniority of Debt: Senior and subordinated issues are included Taxability: Only fully taxable issues are eligible

Currency: Principal and coupon must be denominated in GBP

**Coupon**: Issues must pay fixed-rate coupon, callable fixed-to-float bonds are eligible during their fixed-rate only

**Rebalancing**: The index is rebalanced at each month-end, setting a fixed universe (Returns) from which index returns are calculated for the next month. A forward-looking projection (Statistics) changes daily to reflect current eligibility, but is not used to compute returns

#### Environment, Social, and Governance Rules

#### ESG Rating

- Includes issuers with an ESG rating of BBB or higher using MSCI's IVA Rating or Sovereign Rating model
- ESG ratings are available for Treasury, government-related, corporate, and covered bond issuers. They are not applied to MBS, ABS, and CMBS issues
- Unrated issuers from sectors with ratings are excluded
- Ratings are applied at the Barclays ticker level. Every bond within the same ticker will have the same ESG rating
- ESG ratings are generally updated annually, but may be reviewed more frequently as needed

#### Eligible Securities/Included

- Bullet, callable, putable, sinkable/amortizing
- Fixed-rate and fixed-to-floating capital securities

#### Eligible Securities / Excluded

- Industrial and Utility issuers that > 50% or government-owned
- Bonds with equity type features (eg, warrants, convertibles, contingent capital securities, preferreds, DRDs)
- Private placements, retail bonds
- Structured notes, pass-through certificates
- Inflation-linked bonds, floating-rate issues
- Illiquid securities with no available internal or 3rd-party pricing

**Pricing:** Index prices are sourced primarily from Barclays market makers, though third-party pricing may be used. Prices are quoted on the bid side, with the exception of new issues, which are priced on the offer side upon entering the index. T+1 settlement is used for all dates except month-end, when bonds are assumed to settle on first calendar day of the following month

**Weighting:** Index eligible securities are market value weighted. For Sector Neutral versions of different ESG indices, security weights are market value weighted within each sector (Class 1 or Class 2), but sector weights are designed to match the same sector exposure of the non-ESG versions of the same benchmark

#### Impact Monitor Screens

 Excludes any issuer with a "Red" MSCI ESG Impact Monitor score (less than 2), which measures an issuer's involvement in major ESG controversies and how well they adhere to international norms and principles

- Lower or higher ESG rating thresholds may be applied for custom indices
- Negative screening is available for business activities covered by MSCI Business Issuer Screening Research (BISR) that may also be used in Barclays MSCI Socially Responsible Indices

#### **SRI Exposure**

				MV%	MV%	
	#	#	MV	GBP	GBP	
SRI Exposure	Issuers	Bonds	(£bn)	Corp	Agg	
SRI Business Involvemen	ıt					
Nuclear Power	9	59	37.8	20.0%	2.64%	
Military Weapons	3	24	12.9	6.8%	0.90%	
GMO	3	4	2.7	1.4%	0.19%	
Alcohol	3	4	2.5	1.3%	0.18%	
Tobacco	-	-	-	-	-	
Gambling	-	-	-	-	-	
Civilian Firearms	-	-	-	-	-	
Adult Entertainment	-	-	-	-	-	
Total						
BBB+ SRI Exposure	15	67	42.1	22.3%	2.9%	
GBP Corp ESG BBB+	127	380	189.1	100%	13.2%	

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics - Financial

	Sterling Agg Sustainability	Sector Neutral	Sterling Agg	
# Bonds	613	613	950	
# Issuers	210	210	329	
Market Value	2170.2	2170.2	2448.1	
OAD	9.4	9.2	9.3	
OAS	28.3	41.0	41.2	
OASD	9.0	8.9	9.0	
Yield to Mat	2.19	2.32	2.34	
DTS	3.35	4.36	4.41	
Liquidity Cost Score	0.27	0.34	0.34	
Credit Quality	AA1/AA2	AA2/AA3	AA2/AA3	
Credit QualNum	3.74	4.15	4.13	

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Annual Index Returns 2007-12 (Total Return %, GBP)



Source: MSCI ESG Research, Barclays Research

#### Composition by ESG Rating

ESG	Sterling Agg Sustainability					Sterling Aggregate				
Rating	Total	Tsy	Gov	Corp	Sec	Total	Tsy	Gov	Corp	Sec
AAA	4.4	-	2.1	2.2	-	3.9	-	1.9	2.0	-
AA	8.4	-	3.7	4.6	0.1	7.4	-	3.3	4.1	0.1
А	81.6	76.5	0.7	4.3	0.1	72.3	67.8	0.6	3.8	0.1
BBB	3.2	-	1.1	2.1	-	3.2	-	1.0	2.2	-
<bbb< td=""><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>7.5</td><td>-</td><td>0.4</td><td>6.4</td><td>0.8</td></bbb<>	-	-	-	-	-	7.5	-	0.4	6.4	0.8
NR	2.5	-	-	-	2.5	5.6	-	0.7	2.6	2.3
Total	100	76.5	7.6	13.2	2.7	100	67.8	7.9	21.0	3.3

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics – Non-Financial

Sector	Sterling Agg Sustainability			St	erling A	99
	ENV	SOC GOV		ENV	SOC	GOV
Tsy	4.7	7.9	6.8	4.7	7.9	6.8
Corp	7.2	6.2	6.5	6.5	5.5	5.4
Gov Related	7.4	6.3	6.8	7.3	6.1	6.6
Other	8.8	4.9	5.2	6.0	4.5	2.2
Combined	5.3	7.6	6.7	5.3	7.3	6.4

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Realized Monthly Tracking Error vs. Sterling Aggregate Index


# BARCLAYS MSCI STERLING AGGREGATE ESG WEIGHTED INDEX

Inception Date	Currency	Ticker
1/1/2007	GBP	ESAM

The Barclays MSCI Sterling Aggregate ESG Weighted Index is a fixed-rate, investment-grade corporate bond benchmark that adjusts the market value weight of index eligible issuers based on ESG Ratings and ESG Ratings Momentum. This benchmark is designed to overweight issuers that have higher ESG ratings and/or positive ratings momentum while underweighting issuers that have lower ratings and/or negative momentum. Security eligibility follows the same underlying rules as the Barclays Sterling Aggregate Index, with different weighting tilts applied for each rating/ratings momentum combination. A variant of this benchmark is available that preserved the Class 2 sector weights of the full Barclays US Aggregate Index. The index was launched in June 2013 with history available back to January 2007.

# **Eligible Bond Universe**

#### Eligible Sectors: Treasury, Gov-Related, Securitized, Corporate Minimum Issue Size: GBP250mn

#### Credit Quality

- Rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&P and Fitch; when a rating from only two agencies is available, the lower is used
- Expected ratings at issuance may be used when other indexeligible bonds from the same issuer hold the same actual rating as the expected rating

Maturity: At least one year to final maturity, regardless of optionality. Fixed-rate perpetuals are not included

Seniority of Debt: Senior and subordinated issues are included Taxability: Only fully taxable issues are eligible

Currency: Principal and coupon must be denominated in GBP

**Coupon**: Issues must pay fixed-rate coupon, callable fixed-to-float bonds are eligible during their fixed-rate only

**Rebalancing**: The index is rebalanced at each month-end, setting a fixed universe (Returns) from which index returns are calculated for the next month. A forward-looking projection (Statistics) changes daily to reflect current eligibility, but is not used to compute returns

### Environment, Social, and Governance Rules

#### ESG Weighting

- The weight of each index eligible issuer (and security) is adjusted by a fixed multiplier based on both its ESG Rating (AAA, AA, A, BBB, BB, B, CCC, NR) and its ESG Ratings momentum (Positive, Neutral, Negative since last evaluation)
- Security weights are normalized using adjusted market values
- ESC ratings are available for Treasury, government-related, corporate, and covered bond issuers. They are not applied to MBS, ABS, and CMBS issues, which are left unadjusted
- Ratings are applied at the Barclays ticker level, and every bond within the same ticker will have the same ESG rating.
- ESG ratings are generally updated annually, but may be reviewed more frequently as needed

#### Related Index and Sub-Index Information

Index	Bloomberg Ticker	IndexID
Sterling Agg ESG Weighted	ESAM	29719
Sterling Agg ESG Wtg Sctr Neutral CL1	ESAN	29557
Sterling Agg ESG Wtg Sctr Neutral CL2	-	29720
Sterling Corporate ESG Weighted	ESCM	29716
Sterling Corp ESG Wtg Sector Neutral	ESC1	29556
Sterling Intermediate Corp ESG Wtg	-	29717
Sterling Long Corp ESG Weighted	-	29718
Sterling Corporate SRI + ESG	-	29729

#### Eligible Securities/Included

- Bullet, callable, putable, sinkable/amortizing
- Fixed-rate and fixed-to-floating capital securities

#### Eligible Securities/Excluded

- Industrial and Utility issuers that > 50% or government-owned
- Bonds with equity type features (eg, warrants, convertibles, contingent capital securities, preferreds, DRDs)
- Private placements, retail bonds
- Structured notes, pass-through certificates
- Inflation-linked bonds, floating-rate issues
- Illiquid securities with no available internal or 3rd-party pricing

**Pricing:** Index prices are sourced primarily from Barclays market makers, though third-party pricing may be used. Prices are quoted on the bid side, with the exception of new issues, which are priced on the offer side upon entering the index. T+1 settlement is used for all dates except month-end, when bonds are assumed to settle on first calendar day of the following month

**Weighting:** Index eligible securities are market value weighted. For Sector Neutral versions of different ESG indices, security weights are market value weighted within each sector (Class 1 or Class 2), but sector weights are designed to match the same sector exposure of the non-ESG versions of the same benchmark

#### Factors Used to Adjust Weights Based on Ratings/Momentum

Rating	Tilt	Momentum	Tilt
AAA, AA, A	1.5x	Positive	2.0x
BBB	1.0x	Neutral	1.0x
BB	0.8x	Negative	0.5x
В	0.75x		
CCC	0.67x		
NR	0.75x		
MBS/ABS/CMBS	1.0x		

# Underlying Index SRI Exposure

SRI Exclusion Criteria	# Issuers	# Bonds	MV (£bn)	MV% GBP Corp	MV% GBP Agg
Business Involvement Sc	reen				
Nuclear Power	67	11	41.5	12.3%	2.57%
Military Weapons	25	4	13.4	4.0%	0.83%
Tobacco	12	2	7.4	2.2%	0.46%
GMO	5	4	3.1	0.9%	0.19%
Alcohol	5	4	3.0	0.9%	0.18%
Gambling	-	-	-	-	-
Civilian Firearms	-	-	-	-	-
Adult Entertainment	-	-	-	-	-
Impact Monitor Screen					
MSCI "Red" Impact	28	11	20.7	6.1%	1.3%
Total					
Excl from GBP Corp/Agg	30	115	73.9	21.8%	4.6%
Full GBP Corp Index	231	670	338.4	100%	21.0%
Note: Exclusions are not	mutually	exclusive	e		

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

### Index Characteristics - Financial

	Sterling Agg ESG Weighted	Sector Neutral	Sterling Agg
# Bonds	950	950	950
# Issuers	329	329	329
OAD	9.4	9.3	9.3
OAS	29.0	40.5	41.2
OASD	9.0	8.9	9.0
Yield to Mat	2.20	2.32	2.34
DTS	3.43	4.36	4.41
Liquidity Cost Score	0.27	0.34	0.34
Credit Quality	AA1/AA2	AA2/AA3	AA2/AA3
Credit QualNum	3.78	4.12	4.13

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

### Annual Index Returns 2007-12 (Total Return %, GBP)



Source: MSCI ESG Research, Barclays Research

# Composition by ESG Rating

ESG	Sterling Agg ESG Weighted					Sterling Aggregate				
Rating	Total	Tsy	Gov	Corp	Sec	Total	Tsy	Gov	Corp	Sec
AAA	3.3	-	1.5	1.9	-	3.9	-	1.9	2.0	-
AA	8.4	-	3.7	4.7	0.1	7.4		3.3	4.1	0.1
A	81.3	76.3	0.7	4.2	0.1	72.3	67.8	0.6	3.8	0.1
BBB	1.5	-	0.4	1.1	-	3.2	-	1.0	2.2	-
<bbb< td=""><td>2.3</td><td>-</td><td>0.1</td><td>1.9</td><td>0.2</td><td>7.5</td><td>-</td><td>0.4</td><td>6.4</td><td>0.8</td></bbb<>	2.3	-	0.1	1.9	0.2	7.5	-	0.4	6.4	0.8
NR	3.2	-	0.3	1.0	2.0	5.6	-	0.7	2.6	2.3
Total	100	76.3	6.6	14.7	2.3	100	67.8	7.9	21.0	3.3

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics - Non-Financial

Sector	Sterling Agg ESG Weighted			St	erling A	99
	ENV SOC GOV			ENV	SOC	GOV
Tsy	4.7	7.9	6.8	4.7	7.9	6.8
Corp	7.0	6.0	6.3	6.5	5.5	5.4
Gov Related	7.5	6.1	7.1	7.3	6.1	6.6
Other	6.6	4.6	2.9	6.0	4.5	2.2
Combined	5.2	7.5	6.7	5.3	7.3	6.4

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

### Realized Monthly Tracking Error vs. Sterling Aggregate Index



# BARCLAYS MSCI GLOBAL CORPORATE SOCIALLY RESPONSIBLE (SRI) INDEX

Inception Date	Currency	Ticker
1/1/2007	Multi-Currency	RGCM

The Barclays MSCI Global Corporate Socially Responsible Index is a multi-currency, fixed-rate, investment-grade corporate bond benchmark that negatively screens issuers that are involved in alcohol, tobacco, gambling, military weapons, nuclear power, adult entertainment, civilian firearms, and genetically modified organisms. Security eligibility follows the same underlying rules as the Barclays Global Corporate Index, with additional ESG negative screening using MSCI ESG Business Involvement Screening Research (BISR) and MSCI Impact Monitor Scores. Screening based on other business activities or ratings that are tracked by MSCI ESG Research are also available. The index was launched in June 2013 with history available back to January 2007.

Related Index and Sub-Index Info		
Index	Bloomberg Ticker	IndexID
Global Corporate Socially Responsible	RGCM	29746
Global Intermediate Corporate SRI	-	29747
Global Long Corporate SRI	-	29748
Global Corporate ex Pred Lending	-	29750
Global Corporate ex Weapons	-	29751
Global Corporate Catholic Values	RGCC	29752
Global Corporate SRI + ESG	-	29749
Global Aggregate SRI Sector Neutral	-	29759

### **Eligible Bond Universe**

Eligible Sectors: Corporate (Industrial, Utility, and Financials) Minimum Issue Size: Fixed minimum issue sizes are set for all local currency markets and are available on Barclays Live. For the largest markets: USD300mn, CAD300mn, GBP300mn, EUR300mn, JPY35bn

## Credit Quality

- Rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&P and Fitch; when a rating from only two agencies is available, the lower is used
- Expected ratings at issuance may be used when other indexeligible bonds from the same issuer hold the same actual rating as the expected rating

Maturity: At least one year to final maturity, regardless of optionality. Fixed-rate perpetuals are not included

Seniority of Debt: Senior and subordinated issues are included

Taxability: Only fully taxable issues are eligible

**Currency**: Eligible currencies must be freely tradable and hedgable. A full list of the 23 eligible currencies is available on Barclays Live

**Coupon:** Issues must pay fixed-rate coupon, callable fixed-to-float bonds are eligible during their fixed-rate only

Market of Issue: Publicly issued in the global and local markets Rebalancing: The index is rebalanced at each month-end, setting a fixed universe (Returns) from which index returns are calculated for the next month. A forward-looking projection (Statistics) changes daily to reflect current eligibility, but is not used to compute returns

### Environment, Social, and Governance Rules

#### **Business Involvement Screens**

Excludes issuers involved in the following business lines/activities:

- Alcohol
- Tobacco
- Gambling
- Adult Entertainment
- Genetically Modified Organisms (GMO)
- Nuclear Power
- Civilian Firearms
- Military Weapons (including mines, cluster bombs, chemical weapons)

Involvement is defined for each restricted activity and may be based on % of revenue, total revenue, or any tie regardless of revenue

#### Eligible Securities/Included

- Bullet, callable, putable, sinkable/amortizing
- Fixed-rate and fixed-to-floating capital securities

#### Eligible Securities / Excluded

- Industrial and Utility issuers that > 50% or government-owned
- Bonds with equity type features (eg, warrants, convertibles, contingent capital securities, preferreds, DRDs)
- Private placements, retail bonds, USD 25/USD 50 par bonds
- Structured notes, pass-through certificates
- Inflation-linked bonds, floating-rate issues
- Illiquid securities with no available internal or 3rd-party pricing

**Pricing:** Index prices are sourced primarily from Barclays market makers, though third-party pricing may be used. Prices are quoted on the bid side, with the exception of new issues, which are priced on the offer side upon entering the index. T+1 settlement is used for all dates except month-end, when bonds are assumed to settle on first calendar day of the following month

**Weighting:** Index eligible securities are market value weighted. For Sector Neutral versions of different ESG indices, security weights are market value weighted within each sector (Class 1 or Class 2), but sector weights are designed to match the same sector exposure of the non-ESG versions of the same benchmark

#### Impact Monitor Screens

 Excludes any issuer with a "Red" MSCI ESG Impact Monitor score (less than 2), which measures an issuer's involvement in major ESG controversies and how well they adhere to international norms and principles

#### Other Available Screens

- Screening is available for other business activities that may be restricted for certain investors including predatory lending, child labor, stem cell, abortion/contraception, etc. These are not however screened from the standard SRI Index
- Involvement in countries that are subject to sanctions in certain markets (Iran, Burma, Cuba, etc.) can also be negatively screened in custom indices

## **SRI Index Exclusions**

SRI Exclusion Criteria	# Issuers	# Bonds	MV (\$bn)	MV% Globa I Corp	MV% Global Agg
Business Involvement	Screen				
Nuclear Power	773	50	639.5	9.0%	1.51%
Military Weapons	251	22	267.3	3.8%	0.63%
GMO	157	15	153.7	2.2%	0.36%
Alcohol	115	14	106.4	1.5%	0.25%
Tobacco	81	8	81.1	1.1%	0.19%
Gambling	20	8	11.4	0.2%	0.03%
Adult Entertainment	-	-	-	-	-
Civilian Firearms	-	-	-	-	-
Impact Monitor Screer	n				
MSCI "Red" Impact	369	29	461.8	6.5%	1.1%
Total					
Excl from Global Corp	142	1,515	1,420.6	20.1%	3.4%
Global Agg Corp Index	1,333	7,979	7,071.8	100%	16.8%
Note: Exclusions are no	t mutual	ly exclusiv	/e		

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

# Index Characteristics – Financial

	Global Corp SRI	Global Corp
# Bonds	6,464	7,979
# Issuers	1,191	1,333
Market Value	5,651.1	7,071.8
OAD	5.9	6.1
OAS	136.2	133.5
OASD	5.94	6.1
Yield to Mat	2.645	2.651
DTS	8.39	8.47
Liquidity Cost Score	0.797	0.785
Credit Quality	A3/BAA1	A2/A3
Credit QualNum	8.019	7.933

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

### Index Returns 2007-12 (Total Return %, USD Unhedged)



Source: MSCI ESG Research, Barclays Research

# Composition by ESG Rating

ESG	Global Corporate SRI				G	lobal C	orporat	e
Rating	Total	IND	UTL	FIN	Total	IND	UTL	FIN
AAA	7.5	3.3	0.2	4.0	6.4	2.7	0.5	3.2
AA	14.5	7.7	1.0	5.9	15.7	7.4	1.2	7.1
А	19.3	12.3	1.0	6.0	18.7	11.4	2.6	4.8
BBB	14.8	8.4	0.3	6.2	16.4	8.6	1.1	6.7
BB	20.8	7.4	0.7	12.7	19.6	8.1	1.4	10.1
В	4.7	2.6	0.3	1.9	6.7	4.0	0.6	2.2
ССС	10.5	3.1	0.1	7.4	10.0	3.4	0.7	5.9
NR	8.0	2.9	2.3	2.8	6.6	2.4	2.0	2.2
Total	100	47.5	5.8	46.7	100	47.9	10.0	42.2

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

# Index Characteristics – Non-Financial

ESG Theme Score	Global Corp ESG SRI	Global Corp
"E" Pillar	6.1	6.0
Climate	8.1	8.0
Env Opport	6.0	6.2
Natural Resource	4.8	4.7
Waste Management	6.4	5.9
"S" Pillar	4.9	4.9
Social Opport	4.8	4.8
Human Capital	5.7	5.5
Product Safety	4.4	4.4
"G" Pillar	5.1	5.2
Business Ethics	4.8	4.8
Corp Governance	6.7	6.7
Public Policy	3.0	2.8

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

# Realized Monthly Tracking Error vs. Global Corporate Index



# BARCLAYS MSCI GLOBAL CORPORATE SUSTAINABILITY INDEX

Inception Date	Currency	Ticker
1/1/2007	Multi-Currency	SGLC

The Barclays MSCI Global Corporate Sustainability Index is a fixedrate, investment-grade corporate bond benchmark that includes issuers with MSCI ESG ratings of BBB or higher. This benchmark is designed to positively screen "best in class" issuers that are more effective at managing the ESG risks most relevant to their industry peer group. Security eligibility follows the same underlying rules as the Barclays Global Corporate Index, with additional ESG negative screening using MSCI Impact Monitor Scores. This index is a market value weighted benchmark, but a variant is available that preserved the Class 2 sector weights for the full Barclays Global Corporate Index. The index was launched in June 2013 with history available back to January 2007.

Related Index and Sub-Index Information						
Index	Bloomberg Ticker	IndexID				
Global Corporate Sustainability	SGLC	29753				
Global Int Corp Sustainability	-	29754				
Global Long Corp Sustainability	-	29755				
Global Aggregate Sustainability	SGAM	29756				
Global Agg Sustain Sctr Neutral CL1	SGAN	29760				
Global Agg Sustain Sctr Neutral CL2	-	29761				
Global Intermediate Agg Sustainability	-	29757				
Global Long Agg Sustainability	-	29758				

# **Eligible Bond Universe**

Eligible Sectors: Corporate (Industrial, Utility, and Financials) Minimum Issue Size: Fixed minimum issue sizes are set for all local currency markets and are available on Barclays Live. For the largest markets: USD300mn, CAD300mn, GBP300mn, EUR300mn, JPY35bn

## Credit Quality

- Rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&P and Fitch; when a rating from only two agencies is available, the lower is used
- Expected ratings at issuance may be used when other indexeligible bonds from the same issuer hold the same actual rating as the expected rating

Maturity: At least one year to final maturity, regardless of optionality. Fixed-rate perpetuals are not included

Seniority of Debt: Senior and subordinated issues are included

Taxability: Only fully taxable issues are eligible

**Currency**: Eligible currencies must be freely tradable and hedgable. A full list of the 23 eligible currencies is available on Barclays Live

**Coupon**: Issues must pay fixed-rate coupon, callable fixed-to-float bonds are eligible during their fixed-rate only

Market of Issue: Publicly issued in the global and local markets Rebalancing: The index is rebalanced at each month-end, setting a fixed universe (Returns) from which index returns are calculated for the next month. A forward-looking projection (Statistics) changes daily to reflect current eligibility, but is not used to compute returns

### Environment, Social, and Governance Rules

#### ESG Rating

- Includes issuers with an ESG rating of BBB or higher using MSCI's IVA Rating or Sovereign Rating model
- ESG ratings are available for Treasury, government-related, corporate, and covered bond issuers. They are not applied to MBS, ABS, and CMBS issues
- Unrated issuers from sectors with ratings are excluded
- Ratings are applied at the Barclays ticker level. Every bond within the same ticker will have the same ESG rating
- ESG ratings are generally updated annually, but may be reviewed more frequently as needed

#### Eligible Securities/Included

- Bullet, callable, putable, sinkable/amortizing
- Fixed-rate and fixed-to-floating capital securities

#### Eligible Securities / Excluded

- Industrial and Utility issuers that > 50% or government-owned
- Bonds with equity type features (eg, warrants, convertibles, contingent capital securities, preferreds, DRDs)
- Private placements, retail bonds, USD 25/USD 50 par bonds
- Structured notes, pass-through certificates
- Inflation-linked bonds, floating-rate issues
- Illiquid securities with no available internal or 3rd-party pricing

**Pricing:** Index prices are sourced primarily from Barclays market makers, though third-party pricing may be used. Prices are quoted on the bid side, with the exception of new issues, which are priced on the offer side upon entering the index. T+1 settlement is used for all dates except month-end, when bonds are assumed to settle on first calendar day of the following month

**Weighting:** Index eligible securities are market value weighted. For Sector Neutral versions of different ESG indices, security weights are market value weighted within each sector (Class 1 or Class 2), but sector weights are designed to match the same sector exposure of the non-ESG versions of the same benchmark

#### Impact Monitor Screens

 Excludes any issuer with a "Red" MSCI ESG Impact Monitor score (less than 2), which measures an issuer's involvement in major ESG controversies and how well they adhere to international norms and principles

#### Other Available Screens

- Lower or higher ESG rating thresholds may be applied for custom indices
- Negative screening is available for business activities covered by MSCI Business Issuer Screening Research (BISR) that may also be used in Barclays MSCI Socially Responsible Indices

# **SRI Exposure**

	#		MV		MV% Global			
SRI Exposure	Issuers	# Bonds	(\$bn)	l Corp	Agg			
SRI Business Involvem	ent							
Nuclear Power	26	472	478.3	12.4%	1.32%			
Military Weapons	14	226	251.4	6.5%	0.69%			
GMO	9	107	103.4	2.7%	0.29%			
Alcohol	7	86	87.4	2.3%	0.24%			
Tobacco	1	1	0.5	0.0%	0.00%			
Gambling	3	12	6.8	0.2%	0.02%			
Adult Entertainment	-	-	-	-	-			
Civilian Firearms	-	-	-	-	-			
Total								
BBB+ SRI Exposure	59	726	700.1	18.1%	1.9%			
Global Corp ESG BBB+	590	4,257	3,865.1	100%	10.7%			

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

# Index Characteristics - Financial

	Global Corp Sustainability	Sector Neutral	Global Corp
# Bonds	4,257	4,257	7,979
# Issuers	590	590	1,333
Market Value	3865.1	3865.1	7071.8
OAD	5.9	5.8	6.1
OAS	125.7	126.5	133.5
OASD	6.0	5.9	6.1
Yield to Mat	2.51	2.50	2.65
DTS	7.72	7.71	8.47
Liquidity Cost Score	0.75	0.74	0.79
Credit Quality	A2/A3	A2/A3	A2/A3
Credit QualNum	7.74	7.68	7.93

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

### Index Returns 2007-12 (Total Return %, USD Unhedged)



Source: MSCI ESG Research, Barclays Research

# Composition by ESG Rating

ESG	Global Corp Sustainability				G	lobal C	orporat	e
Rating	Total	IND	UTL	FIN	Total	IND	UTL	FIN
AAA	11.7	5.0	0.8	5.9	6.4	2.7	0.5	3.2
AA	28.7	13.6	2.2	12.9	15.7	7.4	1.2	7.1
А	34.2	20.8	4.7	8.7	18.7	11.4	2.6	4.8
BBB	25.4	13.9	1.9	9.6	16.4	8.6	1.1	6.7
BB	-	-	-	-	19.6	8.1	1.4	10.1
В	-	-	-	-	6.7	4.0	0.6	2.2
ССС	-	-	-	-	10.0	3.4	0.7	5.9
NR	-	-	-	-	6.6	2.4	2.0	2.2
Total	100	53.3	9.61	37.1	100	47.9	10.0	42.2

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

# Index Characteristics – Non-Financial

ESG Theme Score	Global Corp Sustainability	Sector Neutral	Global Corp
"E" Pillar	6.7	6.7	6.0
Climate	8.2	8.2	8.0
Env Opport	6.9	6.9	6.2
Natural Resource	5.0	5.1	4.7
Waste Management	5.9	6.0	5.9
"S" Pillar	5.4	6.2	4.9
Social Opport	5.2	5.1	4.8
Human Capital	5.9	6.0	5.5
Product Safety	5.2	5.3	4.4
"G" Pillar	6.2	5.5	5.2
Business Ethics	5.8	5.9	4.8
Corp Governance	7.3	7.2	6.7
Public Policy	4.5	4.5	2.8

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

# Realized Monthly Tracking Error vs. Global Corporate Index



# BARCLAYS MSCI GLOBAL CORPORATE ESG WEIGHTED INDEX

Inception Date	Currency	Ticker
1/1/2007	Multi-Currency	EGCM

The Barclays MSCI Global Corporate ESG Weighted Index is a fixedrate, investment-grade corporate bond benchmark that adjusts the market value weight of index eligible issuers based on ESG Ratings and ESG Ratings Momentum. This benchmark is designed to overweight issuers that have higher ESG ratings and/or positive ratings momentum while underweighting issuers that have lower ratings and/or negative momentum. Security eligibility follows the same underlying rules as the Barclays Global Corporate Index, with different weighting tilts applied for each rating/ratings momentum combination. A variant of this benchmark is available that preserved the Class 2 sector weights of the full Barclays Global Corporate Index. The index was launched in June 2013 with history available back to January 2007.

#### **Related Index and Sub-Index Information** Index Bloomberg IndexID Ticker Global Corporate ESG Weighted FGCM 29762 Global Corp ESG Wtg Sector Neutral 29765 Global Intermediate Corp ESG Wtg 29763 Global Long Corp ESG Weighted 29764 Global Agg ESG Weighted EGAM 29766 Global Agg ESG Wtg Sctr Neutral CL1 29767 Global Agg ESG Wtg Sctr Neutral CL2 29768

29749

### **Eligible Bond Universe**

Eligible Sectors: Corporate (Industrial, Utility, and Financials) Minimum Issue Size: Fixed minimum issue sizes are set for all local currency markets and are available on Barclays Live. For the largest markets: USD300mn, CAD300mn, GBP300mn, EUR300mn, JPY35bn

## Credit Quality

- Rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&P and Fitch; when a rating from only two agencies is available, the lower is used
- Expected ratings at issuance may be used when other indexeligible bonds from the same issuer hold the same actual rating as the expected rating

Maturity: At least one year to final maturity, regardless of optionality. Fixed-rate perpetuals are not included

Seniority of Debt: Senior and subordinated issues are included

Taxability: Only fully taxable issues are eligible

**Currency**: Eligible currencies must be freely tradable and hedgable. A full list of the 23 eligible currencies is available on Barclays Live

**Coupon:** Issues must pay fixed-rate coupon, callable fixed-to-float bonds are eligible during their fixed-rate only

Market of Issue: Publicly issued in the global and local markets Rebalancing: The index is rebalanced at each month-end, setting a fixed universe (Returns) from which index returns are calculated for the next month. A forward-looking projection (Statistics) changes daily to reflect current eligibility, but is not used to compute returns

### Environment, Social, and Governance Rules

### ESG Weighting

- The weight of each index eligible issuer (and security) is adjusted by a fixed multiplier based on both its ESG Rating (AAA, AA, A, BBB, BB, B, CCC, NR) and its ESG Ratings momentum (Positive, Neutral, Negative since last evaluation)
- Security weights are normalized using adjusted market values
- ESG ratings are available for Treasury, government-related, corporate, and covered bond issuers. They are not applied to MBS, ABS, and CMBS issues, which are left unadjusted
- Ratings are applied at the Barclays ticker level, and every bond within the same ticker will have the same ESG rating.
- ESG ratings are generally updated annually, but may be reviewed more frequently as needed

#### Eligible Securities/Included

Global Corporate SRI + ESG

- Bullet, callable, putable, sinkable/amortizing
- Fixed-rate and fixed-to-floating capital securities

#### Eligible Securities/Excluded

- Industrial and Utility issuers that > 50% or government-owned
- Bonds with equity type features (eg, warrants, convertibles, contingent capital securities, preferreds, DRDs)
- Private placements, retail bonds, USD 25/USD 50 par bonds
- Structured notes, pass-through certificates
- Inflation-linked bonds, floating-rate issues
- Illiquid securities with no available internal or 3rd-party pricing

**Pricing:** Index prices are sourced primarily from Barclays market makers, though third-party pricing may be used. Prices are quoted on the bid side, with the exception of new issues, which are priced on the offer side upon entering the index. T+1 settlement is used for all dates except month-end, when bonds are assumed to settle on first calendar day of the following month

**Weighting:** Index eligible securities are market value weighted. For Sector Neutral versions of different ESG indices, security weights are market value weighted within each sector (Class 1 or Class 2), but sector weights are designed to match the same sector exposure of the non-ESG versions of the same benchmark

#### Factors Used to Adjust Weights Based on Ratings/Momentum

	5	5	
Rating	Tilt	Momentum	Tilt
AAA, AA, A	1.5x	Positive	2.0x
BBB	1.0x	Neutral	1.0x
BB	0.8x	Negative	0.5x
В	0.75x		
CCC	0.67x		
NR	0.75x		
MBS/ABS/CMBS	1.0x		

# Underlying Index SRI Exposure

SRI Exclusion Criteria	# Issuers	# Bonds	MV (\$bn)	MV% Globa I Corp	MV% Global Agg	
Business Involvement Screen						
Nuclear Power	773	50	639.5	9.0%	1.51%	
Military Weapons	251	22	267.3	3.8%	0.63%	
GMO	157	15	153.7	2.2%	0.36%	
Alcohol	115	14	106.4	1.5%	0.25%	
Tobacco	81	8	81.1	1.1%	0.19%	
Gambling	20	8	11.4	0.2%	0.03%	
Adult Entertainment	-	-	-	-	-	
Civilian Firearms	-	-	-	-	-	
Impact Monitor Screen	ı					
MSCI "Red" Impact	369	29	461.8	6.5%	1.1%	
Total						
Excl from Global Corp	142	1,515	1,420.6	20.1%	3.4%	
Global Agg Corp Index	1,333	7,979	7,071.8	100%	16.8%	
Note: Exclusions are no	t mutual	ly exclusiv	/e			

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

# Index Characteristics – Financial

	Global Corp ESG Weighted	Sector Neutral	Global Corp
# Bonds	7,979	7,979	7,979
# Issuers	1,333	1,333	1,333
OAD	6.0	) 6.0	
OAS	128.9	.9 129.3	
OASD	6.0	6.0	6.1
Yield to Mat	2.57	2.56	2.65
DTS	8.12	8.10	8.47
Liquidity Cost Score	0.77	0.76	0.79
Credit Quality	A2/A3	A2/A3	A2/A3
Credit QualNum	7.83	7.79	7.93

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

## Index Returns 2007-12 (Total Return %, USD Unhedged)



Source: MSCI ESG Research, Barclays Research

# Composition by ESG Rating

ESG	Global Corp ESG Weighted			G	lobal C	orporat	e	
Rating	Total	IND	UTL	FIN	Total	IND	UTL	FIN
AAA	9.7	4.6	0.5	4.6	6.4	2.7	0.5	3.2
AA	26.7	12.8	2.1	11.8	15.7	7.4	1.2	7.1
А	30.7	19.4	4.2	7.1	18.7	11.4	2.6	4.8
BBB	8.6	4.6	0.8	3.2	16.4	8.6	1.1	6.7
BB	13.0	4.9	0.8	7.3	19.6	8.1	1.4	10.1
В	4.2	2.4	0.5	1.3	6.7	4.0	0.6	2.2
ССС	3.4	1.1	0.3	2.1	10.0	3.4	0.7	5.9
NR	3.7	1.3	1.1	1.3	6.6	2.4	2.0	2.2
Total	100	51.1	10.3	38.6	100	47.9	10.0	42.2

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

### Index Characteristics - Non-Financial

ESG Theme Score	Global Corp ESG Weighted	Sector Neutral	Global Corp	
"E" Pillar	6.6	6.6	6.0	
Climate	8.2	8.2	8.0	
Env Opport	6.7	6.7	6.2	
Natural Resource	4.9	4.9	4.7	
Waste Management	5.9	5.9	5.9	
"S" Pillar	5.2	5.9	4.9	
Social Opport	5.0	5.0	4.8	
Human Capital	5.7	5.7	5.5	
Product Safety	4.9	4.9	4.4	
"G" Pillar	5.9	5.2	5.2	
Business Ethics	5.6	5.6	4.8	
Corp Governance	7.2	7.1	6.7	
Public Policy	3.8	3.8	2.8	

### Realized Monthly Tracking Error vs. Global Corporate Index



# BARCLAYS MSCI GLOBAL AGGREGATE SOCIALLY RESPONSIBLE (SRI) INDEX

Inception Date	Currency	Ticker		
1/1/2007	Multi-Currency	-		

The Barclays MSCI Global Aggregate Socially Responsible Index is a fixed-rate, investment-grade corporate bond benchmark that negatively screens issuers that are involved in alcohol, tobacco, gambling, military weapons, nuclear power, adult entertainment, civilian firearms, and genetically modified organisms. Security eligibility follows the same underlying rules as the Barclays Global Aggregate Index, with additional ESG negative screening using MSCI ESG Business Involvement Screening Research (BISR) and MSCI Impact Monitor Scores. Screening based on other business activities or ratings that are tracked by MSCI ESG Research are also available. The index was launched in June 2013 with history available back to January 2007.

## Related Index and Sub-Index Info

Index	Bloomberg Ticker	IndexID
Global Aggregate SRI Sector Neutral	-	29759
Global Corporate Socially Responsible	RGCM	29746
Global Intermediate Corporate SRI	-	29747
Global Long Corporate SRI	-	29748
Global Corporate ex Pred Lending	-	29750
Global Corporate ex Weapons	-	29751
Global Corporate Catholic Values	RGCC	29752
Global Corporate SRI + ESG	-	29749

#### **Eligible Bond Universe**

Eligible Sectors: Treasury, Gov-Related, Securitized, Corporate Minimum Issue Size: Fixed minimum issue sizes are set for all local currency markets and are available on Barclays Live. For the largest markets: USD300mn, CAD300mn, GBP300mn, EUR300mn, JPY35bn

### **Credit Quality**

- Rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&P and Fitch; when a rating from only two agencies is available, the lower is used
- Expected ratings at issuance may be used when other indexeligible bonds from the same issuer hold the same actual rating as the expected rating

Maturity: At least one year to final maturity, regardless of optionality. Fixed-rate perpetuals are not included

Seniority of Debt: Senior and subordinated issues are included

Taxability: Only fully taxable issues are eligible

**Currency**: Eligible currencies must be freely tradable and hedgable. A full list of the 23 eligible currencies is available on Barclays Live

**Coupon**: Issues must pay fixed-rate coupon, callable fixed-to-float bonds are eligible during their fixed-rate only

Market of Issue: Publicly issued in the global and local markets Rebalancing: The index is rebalanced at each month-end, setting a fixed universe (Returns) from which index returns are calculated for the next month. A forward-looking projection (Statistics) changes daily to reflect current eligibility, but is not used to compute returns

### Environment, Social, and Governance Rules

#### **Business Involvement Screens**

Excludes issuers involved in the following business lines/activities:

- Alcohol
- Tobacco
- Gambling
- Adult Entertainment
- Genetically Modified Organisms (GMO)
- Nuclear Power
- Civilian Firearms
- Military Weapons (including mines, cluster bombs, chemical weapons)

Involvement is defined for each restricted activity and may be based on % of revenue, total revenue, or any tie regardless of revenue

#### Eligible Securities/Included

- Bullet, callable, putable, sinkable/amortizing
- Fixed-rate and fixed-to-floating capital securities

#### Eligible Securities / Excluded

- Industrial and Utility issuers that > 50% or government-owned
- Bonds with equity type features (eg, warrants, convertibles, contingent capital securities, preferreds, DRDs)
- Private placements, retail bonds, USD 25/USD 50 par bonds
- Structured notes, pass-through certificates
- Inflation-linked bonds, floating-rate issues
- Illiquid securities with no available internal or 3rd-party pricing

**Pricing:** Index prices are sourced primarily from Barclays market makers, though third-party pricing may be used. Prices are quoted on the bid side, with the exception of new issues, which are priced on the offer side upon entering the index. T+1 settlement is used for all dates except month-end, when bonds are assumed to settle on first calendar day of the following month

**Weighting:** Index eligible securities are market value weighted. For Sector Neutral versions of different ESG indices, security weights are market value weighted within each sector (Class 1 or Class 2), but sector weights are designed to match the same sector exposure of the non-ESG versions of the same benchmark

#### Impact Monitor Screens

 Excludes any issuer with a "Red" MSCI ESG Impact Monitor score (less than 2), which measures an issuer's involvement in major ESG controversies and how well they adhere to international norms and principles

#### Other Available Screens

- Screening is available for other business activities that may be restricted for certain investors including predatory lending, child labor, stem cell, abortion/contraception, etc. These are not however screened from the standard SRI Index
- Involvement in countries that are subject to sanctions in certain markets (Iran, Burma, Cuba, etc.) can also be negatively screened in custom indices

# **SRI Index Exclusions**

SRI Exclusion Criteria	# Issuers	# Bonds	MV (\$bn)	MV% Globa I Corp	MV% Global Agg				
Business Involvement Screen									
Nuclear Power	773	50	639.5	9.0%	1.51%				
Military Weapons	251	22	267.3	3.8%	0.63%				
GMO	157	15	153.7	2.2%	0.36%				
Alcohol	115	14	106.4	1.5%	0.25%				
Tobacco	81	8	81.1	1.1%	0.19%				
Gambling	20	8	11.4	0.2%	0.03%				
Adult Entertainment	-	-	-	-	-				
Civilian Firearms	-	-	-	-	-				
Impact Monitor Screen	n								
MSCI "Red" Impact	369	29	461.8	6.5%	1.1%				
Total	Total								
Excl from Global Corp	142	1,515	1,420.6	20.1%	3.4%				
Global Agg Corp Index	1,333	7,979	7,071.8	100%	16.8%				
Note: Exclusions are no	t mutual	ly exclusiv	/e						

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

# Index Characteristics – Financial

	Global Agg SRI	Global Agg
# Bonds	13,565	15,243
# Issuers	1,884	2,039
Market Value	40578.0	42217.4
OAD	6.1	6.2
OAS	56.0	58.6
OASD	6.0	6.1
Yield to Mat	1.83	1.86
DTS	3.10	3.32
Liquidity Cost Score	0.31	0.33
Credit Quality	AA2/AA3	AA2/AA3
Credit QualNum	4.35	4.47

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Returns 2007-12 (Total Return %, USD Unhedged)



Source: MSCI ESG Research, Barclays Research

#### Composition by ESG Rating

				•						
ESG	Global Agg SRI						Globa	I Aggre	egate	
Rating	Total	Tsy	Gov	Corp	Sec	Total	Tsy	Gov	Corp	Sec
AAA	3.7	1.1	1.3	1.0	0.2	3.6	1.1	1.3	1.1	0.2
AA	11.8	6.1	2.8	2.0	1.0	12.1	5.8	2.7	2.6	0.9
A	48.5	41.2	4.2	2.7	0.4	47.2	39.6	4.0	3.1	0.4
BBB	10.7	6.6	1.3	2.1	0.7	11.3	6.3	1.6	2.8	0.7
<bbb< td=""><td>9.0</td><td>0.6</td><td>2.2</td><td>5.0</td><td>1.2</td><td>10.1</td><td>0.5</td><td>2.2</td><td>6.1</td><td>1.2</td></bbb<>	9.0	0.6	2.2	5.0	1.2	10.1	0.5	2.2	6.1	1.2
NR	16.4	-	2.2	1.1	13.1	15.8	-	2.1	1.1	12.5
Total	100	55.6	14.0	13.9	16.6	100	53.4	13.9	16.8	16.0

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

## Index Characteristics - Non-Financial

Sector	Glob	oal Age	) SRI	GI	obal A	gg
	ENV	SOC	GOV	ENV	SOC	GOV
Tsy	5.1	7.9	6.8	5.1	7.9	6.8
Corp	6.1	4.9	5.1	6.0	4.9	5.2
Gov Related	5.9	6.6	6.4	5.8	6.5	6.3
Other	5.7	5.8	3.7	5.7	5.7	3.7
Combined	5.4	7.2	6.4	5.4	7.1	6.3

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

# Realized Monthly Tracking Error vs. Global Aggregate Index



# BARCLAYS MSCI GLOBAL AGGREGATE SUSTAINABILITY INDEX

Inception Date	Currency	Ticker
1/1/2007	Multi-Currency	SGAM

The Barclays MSCI Global Aggregate Sustainability Index is a fixedrate, investment-grade corporate bond benchmark that includes issuers with MSCI ESG ratings of BBB or higher. This benchmark is designed to positively screen "best in class" issuers that are more effective at managing the ESG risks most relevant to their industry peer group. Security eligibility follows the same underlying rules as the Barclays Global Aggregate Index, with additional ESG negative screening using MSCI Impact Monitor Scores. This index is a market value weighted benchmark, but a variant is available that preserved the Class 2 sector weights for the full Barclays Global Aggregate Index. The index was launched in June 2013 with history available back to January 2007.

Deleted lass	I	de la sela d	
Related Inc	iex and Su	ID-INGEX	intor mation

Index	Bloomberg Ticker	IndexID
Global Aggregate Sustainability	SGAM	29756
Global Agg Sustain Sctr Neutral CL1	SGAN	29760
Global Agg Sustain Sctr Neutral CL2	-	29761
Global Intermediate Agg Sustainability	-	29757
Global Long Agg Sustainability	-	29758
Global Corporate Sustainability	SGLC	29753
Global Int Corp Sustainability	-	29754
Global Long Corp Sustainability	-	29755

# **Eligible Bond Universe**

Eligible Sectors: Treasury, Gov-Related, Securitized, Corporate Minimum Issue Size: Fixed minimum issue sizes are set for all local currency markets and are available on Barclays Live. For the largest markets: USD300mn, CAD300mn, GBP300mn, EUR300mn, JPY35bn

## Credit Quality

- Rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&P and Fitch; when a rating from only two agencies is available, the lower is used
- Expected ratings at issuance may be used when other indexeligible bonds from the same issuer hold the same actual rating as the expected rating

Maturity: At least one year to final maturity, regardless of optionality. Fixed-rate perpetuals are not included

Seniority of Debt: Senior and subordinated issues are included

Taxability: Only fully taxable issues are eligible

**Currency**: Eligible currencies must be freely tradable and hedgable. A full list of the 23 eligible currencies is available on Barclays Live

**Coupon**: Issues must pay fixed-rate coupon, callable fixed-to-float bonds are eligible during their fixed-rate only

Market of Issue: Publicly issued in the global and local markets Rebalancing: The index is rebalanced at each month-end, setting a fixed universe (Returns) from which index returns are calculated for the next month. A forward-looking projection (Statistics) changes daily to reflect current eligibility, but is not used to compute returns

### Environment, Social, and Governance Rules

#### ESG Rating

- Includes issuers with an ESG rating of BBB or higher using MSCI's IVA Rating or Sovereign Rating model
- ESG ratings are available for Treasury, government-related, corporate, and covered bond issuers. They are not applied to MBS, ABS, and CMBS issues
- Unrated issuers from sectors with ratings are excluded
- Ratings are applied at the Barclays ticker level. Every bond within the same ticker will have the same ESG rating
- ESC ratings are generally updated annually, but may be reviewed more frequently as needed

#### Eligible Securities/Included

- Bullet, callable, putable, sinkable/amortizing
- Fixed-rate and fixed-to-floating capital securities

#### Eligible Securities / Excluded

- Industrial and Utility issuers that > 50% or government-owned
- Bonds with equity type features (eg, warrants, convertibles, contingent capital securities, preferreds, DRDs)
- Private placements, retail bonds, USD 25/USD 50 par bonds
- Structured notes, pass-through certificates
- Inflation-linked bonds, floating-rate issues
- Illiquid securities with no available internal or 3rd-party pricing

**Pricing:** Index prices are sourced primarily from Barclays market makers, though third-party pricing may be used. Prices are quoted on the bid side, with the exception of new issues, which are priced on the offer side upon entering the index. T+1 settlement is used for all dates except month-end, when bonds are assumed to settle on first calendar day of the following month

**Weighting:** Index eligible securities are market value weighted. For Sector Neutral versions of different ESG indices, security weights are market value weighted within each sector (Class 1 or Class 2), but sector weights are designed to match the same sector exposure of the non-ESG versions of the same benchmark

#### Impact Monitor Screens

 Excludes any issuer with a "Red" MSCI ESG Impact Monitor score (less than 2), which measures an issuer's involvement in major ESG controversies and how well they adhere to international norms and principles

#### Other Available Screens

- Lower or higher ESG rating thresholds may be applied for custom indices
- Negative screening is available for business activities covered by MSCI Business Issuer Screening Research (BISR) that may also be used in Barclays MSCI Socially Responsible Indices

### Socially Responsible Index Exclusions

SRI Exposure	# Issuers	# Bonds	MV (\$bn)	MV% Global Corp	MV% Global Agg			
SRI Business Involvemen	nt							
Nuclear Power	26	472	478.3	12.4%	1.32%			
Military Weapons	14	226	251.4	6.5%	0.69%			
GMO	9	107	103.4	2.7%	0.29%			
Alcohol	7	86	87.4	2.3%	0.24%			
Tobacco	1	1	0.5	0.0%	0.00%			
Gambling	3	12	6.8	0.2%	0.02%			
Adult Entertainment	-	-	-	-	-			
Civilian Firearms	-	-	-	-	-			
Total								
BBB+ SRI Exposure	59	726	700.1	18.1%	1.9%			
Global Corp ESG BBB+	590	4,257	3,865.1	100%	10.7%			

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

Index Characteristics – Financial

#### Global Agg Sector Neutral **Global Agg** Sustainability # Bonds 9,393 9,393 15,243 # Issuers 985 985 2,039 Market Value 36238.7 36238.7 42217.4 OAD 6.2 6.2 6.2 OAS 49.2 55.7 58.6 OASD 6.1 6.1 6.1 Yield to Mat 1.75 1.82 1.86 DTS 2.70 3.08 3.32 Liquidity Cost Score 0.25 0.31 0.33 Credit Quality AA2/AA3 AA2/AA3 AA2/AA3 Credit QualNum 4.09 4.33 4.47

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

# Index Returns 2007-12 (Total Return %, USD Unhedged)



Source: MSCI ESG Research, Barclays Research

# Composition by ESG Rating

ESG	Global Agg Sustainability					Global Aggregate				
Rating	Total	Tsy	Gov	Corp	Sec	Total	Tsy	Gov	Corp	Sec
AAA	4.2	1.2	1.5	1.3	0.2	3.6	1.1	1.3	1.1	0.2
AA	14.1	6.8	3.1	3.1	1.1	12.1	5.8	2.7	2.6	0.9
A	55.0	46.2	4.7	3.7	0.5	47.2	39.6	4.0	3.1	0.4
BBB	12.6	7.4	1.8	2.7	0.8	11.3	6.3	1.6	2.8	0.7
<bbb< td=""><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>10.1</td><td>0.5</td><td>2.2</td><td>6.1</td><td>1.2</td></bbb<>	-	-	-	-	-	10.1	0.5	2.2	6.1	1.2
NR	14.2	-	-	-	14.2	15.8	-	2.1	1.1	12.5
Total	100	55.6	14.0	13.9	16.6	100	53.4	13.9	16.8	16.0

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

# Index Characteristics - Non-Financial

Sector		lobal Ag tainabi		Global Agg				
	ENV	SOC	GOV	ENV	SOC	GOV		
Tsy	5.1	7.9	6.8	5.1	7.9	6.8		
Corp	6.7 5.	5.5	6.2	6.0	4.9	5.2		
Gov Related	6.0	7.1	7.1	5.8	6.5	6.3		
Other	6.3	6.4	4.5	5.7	5.7	3.7		
Combined	5.4	7.5	6.7	5.4	7.1	6.3		

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

# Realized Monthly Tracking Error vs. Global Aggregate Index



# BARCLAYS MSCI GLOBAL AGGREGATE ESG WEIGHTED INDEX

Inception Date	Currency	Ticker
1/1/2007	Multi-Currency	EGAM

The Barclays MSCI Global Aggregate ESG Weighted Index is a fixedrate, investment-grade corporate bond benchmark that adjusts the market value weight of index eligible issuers based on ESG Ratings and ESG Ratings Momentum. This benchmark is designed to overweight issuers that have higher ESG ratings and/or positive ratings momentum while underweighting issuers that have lower ratings and/or negative momentum. Security eligibility follows the same underlying rules as the Barclays Global Aggregate Index, with different weighting tilts applied for each rating/ratings momentum combination. A variant of this benchmark is available that preserved the Class 2 sector weights of the full Barclay Global Aggregate Index. The index was launched in June 2013 with history available back to January 2007.

# **Eligible Bond Universe**

Eligible Sectors: Treasury, Gov-Related, Securitized, Corporate Minimum Issue Size: Fixed minimum issue sizes are set for all local currency markets and are available on Barclays Live. For the largest markets: USD300mn, CAD300mn, GBP300mn, EUR300mn, JPY35bn

## Credit Quality

- Rated investment grade (Baa3/BBB-/BBB- or higher) using the middle rating of Moody's, S&P and Fitch; when a rating from only two agencies is available, the lower is used
- Expected ratings at issuance may be used when other indexeligible bonds from the same issuer hold the same actual rating as the expected rating

Maturity: At least one year to final maturity, regardless of optionality. Fixed-rate perpetuals are not included

Seniority of Debt: Senior and subordinated issues are included

Taxability: Only fully taxable issues are eligible

**Currency**: Eligible currencies must be freely tradable and hedgable. A full list of the 23 eligible currencies is available on Barclays Live

**Coupon:** Issues must pay fixed-rate coupon, callable fixed-to-float bonds are eligible during their fixed-rate only

Market of Issue: Publicly issued in the global and local markets Rebalancing: The index is rebalanced at each month-end, setting a fixed universe (Returns) from which index returns are calculated for the next month. A forward-looking projection (Statistics) changes daily to reflect current eligibility, but is not used to compute returns

### Environment, Social, and Governance Rules

### ESG Weighting

- The weight of each index eligible issuer (and security) is adjusted by a fixed multiplier based on both its ESG Rating (AAA, AA, A, BBB, BB, B, CCC, NR) and its ESG Ratings momentum (Positive, Neutral, Negative since last evaluation)
- Security weights are normalized using adjusted market values
- ESG ratings are available for Treasury, government-related, corporate, and covered bond issuers. They are not applied to MBS, ABS, and CMBS issues, which are left unadjusted
- Ratings are applied at the Barclays ticker level, and every bond within the same ticker will have the same ESG rating.
- ESG ratings are generally updated annually, but may be reviewed more frequently as needed

#### **Related Index and Sub-Index Information**

Bloomberg Ticker	IndexID
EGAM	29766
-	29767
-	29768
EGCM	29762
-	29765
-	29763
-	29764
-	29749
	Ticker EGAM -

#### Eligible Securities/Included

- Bullet, callable, putable, sinkable/amortizing
- Fixed-rate and fixed-to-floating capital securities

#### Eligible Securities/Excluded

- Industrial and Utility issuers that > 50% or government-owned
- Bonds with equity type features (eg, warrants, convertibles, contingent capital securities, preferreds, DRDs)
- Private placements, retail bonds, USD 25/USD 50 par bonds
- Structured notes, pass-through certificates
- Inflation-linked bonds, floating-rate issues
- Illiquid securities with no available internal or 3rd-party pricing

**Pricing:** Index prices are sourced primarily from Barclays market makers, though third-party pricing may be used. Prices are quoted on the bid side, with the exception of new issues, which are priced on the offer side upon entering the index. T+1 settlement is used for all dates except month-end, when bonds are assumed to settle on first calendar day of the following month

**Weighting:** Index eligible securities are market value weighted. For Sector Neutral versions of different ESG indices, security weights are market value weighted within each sector (Class 1 or Class 2), but sector weights are designed to match the same sector exposure of the non-ESG versions of the same benchmark

#### Factors Used to Adjust Weights Based on Ratings/Momentum

,	3	5	
Rating	Tilt	Momentum	Tilt
AAA, AA, A	1.5x	Positive	2.0x
BBB	1.0x	Neutral	1.0x
BB	0.8x	Negative	0.5x
В	0.75x		
ССС	0.67x		
NR	0.75x		
MBS/ABS/CMBS	1.0x		

# Underlying Index SRI Exposure

SRI Exposure	# Issuers	# Bonds	MV (\$bn)	MV% Global Corp	MV% Global Agg
		DOHUS	(1001)	Corp	Agg
SRI Business Involvemer	nt				
Nuclear Power	26	472	478.3	12.4%	1.32%
Military Weapons	14	226	251.4	6.5%	0.69%
GMO	9	107	103.4	2.7%	0.29%
Alcohol	7	86	87.4	2.3%	0.24%
Tobacco	1	1	0.5	0.0%	0.00%
Gambling	3	12	6.8	0.2%	0.02%
Adult Entertainment	-	-	-	-	-
Civilian Firearms	-	-	-	-	-
Total					
BBB+ SRI Exposure	59	726	700.1	18.1%	1.9%
Global Corp ESG BBB+	590	4,257	3,865.1	100%	10.7%

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

### Index Characteristics – Financial

	Global Agg ESG Weighted	Sector Neutral	Global Agg
# Bonds	15,243	15,243	15,243
# Issuers	2,039	2,039	2,039
OAD	6.3	6.2	6.2
OAS	41.4	48.0	58.6
OASD	6.2	6.1	6.1
Yield to Mat	1.66	1.74	1.86
DTS	2.30	2.66	3.32
Liquidity Cost Score	0.27	0.31	0.33
Credit Quality	AA1/AA2	AA2/AA3	AA2/AA3
Credit QualNum	3.92	4.10	4.47

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

### Index Returns 2007-12 (Total Return %, USD Unhedged)



Source: MSCI ESG Research, Barclays Research

# Composition by ESG Rating

ESG	Gl	obal Ag	jg ESG \	Weight	ed		Globa	l Aggre	egate					
Rating	Total	Tsy	Gov	Corp	Sec	Total	Tsy	Gov	Corp	Sec				
AAA	3.4	0.9	1.1	1.2	0.2	3.6	1.1	1.3	1.1	0.2				
AA	15.2	7.4	3.4	3.3	1.2	12.1	5.8	2.7	2.6	0.9				
A	59.3	49.9	5.1	3.8	0.5	47.2	39.6	4.0	3.1	0.4				
BBB	4.3	2.4	0.6	1.1	0.3	11.3	6.3	1.6	2.8	0.7				
<bbb< td=""><td>4.4</td><td>0.2</td><td>1.0</td><td>2.6</td><td>0.6</td><td>10.1</td><td>0.5</td><td>2.2</td><td>6.1</td><td>1.2</td></bbb<>	4.4	0.2	1.0	2.6	0.6	10.1	0.5	2.2	6.1	1.2				
NR	13.4	-	0.9	0.5	12.1	15.8	-	2.1	1.1	12.5				
Total	100	60.8	12.0	12.4	14.9	100	53.4	13.9	16.8	16.0				

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

#### Index Characteristics - Non-Financial

Sector		al Agg /eighte		Global Agg				
	ENV	SOC	GOV	ENV	SOC	GOV		
Tsy	5.1	8.0	6.9	5.1	7.9	6.8		
Corp	6.6 5.2		5.9	6.0	4.9	5.2		
Gov Related	5.9	7.0	6.9	5.8	6.5	6.3		
Other	5.9	6.2	4.4	5.7	5.7	3.7		
Combined	5.5	7.4	6.7	5.4	7.1	6.3		

Source: MSCI ESG Research, Barclays Research (as of May 31, 2013)

### Realized Monthly Tracking Error vs. Global Aggregate Index



# APPENDIX: ACCESSING BARCLAYS MSCI ESG FIXED INCOME INDICES

# Index-Level Data

Index levels for the new index series back to 2007 can be accessed on the indices page on Barclays Live (live.barclays.com, keyword: index), POINT®, Bloomberg, and through a number of other third part data redistributors.

# Accessing the Barclays MSCI Indices on Barclays Live

The Barclays MSCI ESG Fixed Income Index pages can be accessed two ways on Barclays Live

- From the **Benchmark Index Map**, click directly on one of the four **ESG** Index pages in the Global column (Global, USD, EUR, GBP). The benchmark map can be found using:
  - Menu Navigation: Analytics & Research> Indices>Benchmark Indices>Index Map or
  - Keyword: typing keyword "index" into the search box on the right hand side

# FIGURE 17

Locating Barclays MSCI ESG Fixed Income Indices on Barclays Live



Source: Barclays Research

# Barclays MSCI ESG Index Pages on Barclays Live

The Barclays MSCI ESG Index pages offers index level returns and analytics for all indices available in the series. There are five tabs available on this page:

- Current Returns: Daily and MTD Returns (Price, Coupon, Total Return), Index Values
- Excess and Periodic Returns: MTD and YTD Returns, 3 Month, 6 Month, 12 Month Trailing Returns, MTD and YTD Excess Returns
- Basic Statistics: Modified Adjusted Duration, Convexity, OAS, Yield to Worst
- Other Statistics: Average Quality
- Sector Weights: Amount Outstanding, Market Value, Average Price

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idices > Benchmark Indice: ««	s > Aggregate/Bond Indices > Index Map												
ndices	Barclays-MSCI ESG FI-US							<b>b</b> Ge	oup Time :	Series 🕨	Group Return	s Calculator	<b>8</b> ] •
lome		-											
Publications Analytic Tools	<ul> <li>Instructions</li> <li>Select the Index group that</li> </ul>	you want to	analyze fror	n the drop	down list	and use t	he small s	crollbar t	o view the	complete li	st of indices i	n the group.	
Benchmark Indices	<ul> <li>To Change the Index group,</li> <li>To change the columns displ</li> </ul>								GO.				
Aggregate/Bond Indices	<ul> <li>To analyze a specific Index,</li> </ul>												
Index Map	Index Group Barclays-MSCIESG	FI-USD		•	Index Ma	p ÞEo	lit Custom	Group					
Reports			-				_	_		-	_		
nflation Linked	As Of Jun 06, 2013	-	1	Currenc	y Default		Return	s Type 🖸	efault 💽	4	Go		
Government	Excess and	1											
Index Products	Current Periodic Returns Returns	Basic Stati:		Other Statistic		Sector Weights			Cu	stom View	s: Indexid	Cu	stomiz
		Index ID	Number Issues (Returns)	Returns Mod Adj US Dur	Daily Total Return		MTD Coupon Return	MTD Other Return		Since Inception Tot Ret	Inception (or Start) Date	Currency	Retur Typ
	US Corporate ESG Indices												
	US Corporate SRI	29,530	3,559	6.79	0.04	-0.27	0.07	0.00	-0.20	50.59	1/1/07	USD	Unhedge
	US Corp Sustainability	29,534	2,233	6.97	0.02	-0.23	0.07	0.00	-0.16	49.24	1/1/07	USD	Unhedge
	Sector Neutral CL2	29,689	2,233	6.91	0.02	-0.21	0.07	0.00	-0.15	-0.15	1/1/07	USD	Unhedge
	US Corp ESG Weighted	29,693	4,632	7.02	0.03	-0.26	0.07	0.00	-0.19	-0.19	1/1/07	USD	Unhedge
		29,539	4,632	7.04	0.04	-0.25	0.07	0.00	-0.19	51,46	1/1/07	USD	Unhedge
	Sector Neutral CL2	27,007				-0.25	0.07	0.00	-0.18	-0.18	1/1/07	USD	Unhedge
	US Corporate SRI+ESG Index	29,564	3,192	6.91	0.04	0.20							
			3,192 4,175	6.91 6.90	0.04	-0.28	0.07	0.00	-0.21	-0.21	1/1/07	USD	Jnhedge
	US Corporate SRI+ESG Index	29,564					0.07	0.00	-0.21	-0.21	1/1/07 1/1/07		
	US Corporate SRI+ESG Index Catholic Values	29,564 29,569	4,175	6.90	0.05	-0.28						USD	- Unhedge
	US Corporate SRI+ESG Index Catholic Values SRI Ex Controversial Weaps	29,564 29,569 29,568	4,175 3,740	6.90 6.83	0.05	-0.28 -0.28	0.07	0.00	-0.21	-0.21	1/1/07	USD USD	Unhedge Unhedge
	US Corporate SRI+ESG Index Catholic Values SRI Ex Controversial Weaps US Corp Sustainability BB+	29,564 29,569 29,568 29,616	4,175 3,740 3,298	6.90 6.83 7.02	0.05 0.05 0.02	-0.28 -0.28 -0.25	0.07	0.00	-0.21 -0.18	-0.21 -0.18	1/1/07 1/1/07	USD USD	Unhedge Unhedge
	US Corporate SRI+ESG Index Catholic Values SRI Ex Controversial Weaps US Corp Sustainability BB+ Corporate	29,564 29,569 29,568 29,616	4,175 3,740 3,298	6.90 6.83 7.02	0.05 0.05 0.02	-0.28 -0.28 -0.25	0.07	0.00	-0.21 -0.18	-0.21 -0.18	1/1/07 1/1/07	USD USD USD	Unhedge Unhedge Unhedge
	US Corporate SRI+ESG Index Catholic Values SRI Ex Controversial Weaps US Corp Sustainability BB+ Corporate US Credit ESG Indices	29,564 29,569 29,568 29,616 2,765	4,175 3,740 3,298 4,632	6.90 6.83 7.02 7.04	0.05 0.05 0.02 0.05	-0.28 -0.28 -0.25 -0.27	0.07	0.00	-0.21 -0.18 -0.20	-0.21 -0.18 2,324.02	1/1/07 1/1/07 1/1/73	USD USD USD USD	Unhedge Unhedge Unhedge Unhedge Unhedge
	US Corporate SRI+ESG Index Catholic Values SRI Ex Controversial Weaps US Corp Sustainability BB+ Corporate US Credit ESG Indices US Credit ESG Indices	29,564 29,569 29,568 29,616 2,765 29,531	4,175 3,740 3,298 4,632 4,305	6.90 6.83 7.02 7.04 6.74	0.05 0.02 0.05 0.05	-0.28 -0.28 -0.25 -0.27 -0.25	0.07 0.07 0.07	0.00	-0.21 -0.18 -0.20 -0.18	-0.21 -0.18 2,324.02 49.71	1/1/07 1/1/07 1/1/73 1/1/07	USD USD USD USD USD	Unhedge Unhedge Unhedge Unhedge

Source: Barclays Research

# Time Series Data from Barclays Live

Historical index returns and analytics can be generated from the Time Series tab on the index overview page. Historical monthly ESG Index data are available from index inception on January 1, 2007 for most indices.

- From the Overview screen, click the Time Series tab
- On the Time Series tab, select the following inputs (default setting is in bold):
  - Frequency (Daily, Weekly, Semi-Monthly, Monthly, Quarterly, Semi-annually, Annually)
  - Base Currency (USD, EUR, GBP, CAD, CHF, AUD)
  - Returns Type (Unhedged into USD, Hedged into USD)

- Period (Predefined date ranges: 3 month, 6 month, 9 month, year to date, 1 year, 3 year, 5 year, 10 year)
- User Specified Date Range (user defined start and end dates)
- Once the inputs are selected, click the **Go** button to display an index time series on screen
- View the time series output on Barclays Live
  - From the display screen, the list of available attributes viewable as a time series can be changed to any of the predefined tabs or an index user's customized view
  - A displayed time series can then be exported to Excel by clicking the Excel icon

# **MSCI** Website

The Environmental, Social & Governance Research page on www.msci.com offers total returns and index values for a number of flagship indices within the series. Research papers and other related index information can also be found on the site.

# Bloomberg

Index tickers are available on Bloomberg. These tickers all display the total return index levels as well as other index attributes such as yield and duration. A list of total return tickers for major indices can be found in Figure 19.

# FIGURE 19

# Bloomberg Tickers for Major Barclays MSCI ESG Fixed Income Indices

			Total Return (USD)	Total Return (EUR)	Total Return (GBP)
ESG Type	Fullname	Base Ticker	Unhedged Hedged	Unhedged Hedged	Unhedged Hedged
Global					
SRI	Barclays MSCI Global Corporate SRI Index	RGCM	RGCMTRUU RGCMTRUH	RGCMTREU RGCMTREF	RGCMTRGU RGCMTRGH
	Barclays MSCI Global Corporate Catholic Values Index	RGCC	RGCCTRUU RGCCTRUH	RGCCTREU RGCCTREH	RGCCTRGU RGCCTRGH
SUSTAINABILITY	Barclays MSCI Global Corporate ESG Sustainability Index	SGLC			SGLCTRGU SGLCTRGH
	Barclays MSCI Global Aggregate ESG Sustainability Index	SGAM	SGAMTRUU SGAMTRUH	SGAMTREU SGAMTREH	SGAMTRGU SGAMTRGH
	Barclays MSCI Global Aggregate ESG Sustainability Index: Sector Neutral	SGAN			SGANTRGU SGANTRGH
	Barclays MSCI Global Corporate ESG Sustainability Index: Sector Neutral	SGC1	SGC1TRUU SGC1TRUH	SGC1TREU SGC1TREH	SGC1TRGU SGC1TRGH
ESG WEIGHTED	Barclays MSCI Global Corporate ESG Weighted Index	EGCM	EGCMTRUU EGCMTRUH	EGCMTREU EGCMTREH	EGCMTRGU EGCMTRGH
	Barclays MSCI Global Aggregate ESG Weighted Index	EGAM	EGAMTRUU EGAMTRUH	EGAMTREU EGAMTREH	EGAMTRGU EGAMTRGH
	Barclays MSCI Global Corporate ESG Weighted Index: Sector Neutral	EGCN	EGCNTRUU EGCNTRUH	EGCNTREU EGCNTREH	EGCNTRGU EGCNTRGH
	Barclays MSCI Global Aggregate ESG Weighted Index: Sector Neutral Class 1	EGAN	EGANTRUU EGANTRUH	EGANTREU EGANTREH	EGANTRGU EGANTRGH
USD					
SRI	Barclays MSCI US Corporate SRI Index	RUCM	RUCMTRUU RUCMTRUH	RUCMTREU RUCMTREH	RUCMTRGU RUCMTRGH
	Barclays MSCI US Credit SRI Index	RCRD	RCRDTRUU RCRDTRUH	RCRDTREU RCRDTREH	RCRDTRGU RCRDTRGH
	Barclays MSCI US Corporate Catholic Values Index	RCAT	RCATTRUU RCATTRUH	RCATTREU RCATTREH	RCATTRGU RCATTRGH
SUSTAINABILITY	Barclays MSCI US Corporate ESG Sustainability Index	SUCM	SUCMTRUU SUCMTRUH	SUCMTREU SUCMTREH	SUCMTRGU SUCMTRGH
	Barclays MSCI US Credit ESG Sustainability Index	SUDM	SUDMTRUU SUDMTRUH	SUDMTREU SUDMTREH	SUDMTRGU SUDMTRGH
	Barclays MSCI US Aggregate ESG Sustainability Index	SUAM	SUAMTRUU SUAMTRUH	SUAMTREU SUAMTREH	SUAMTRGU SUAMTRGH
	Barclays MSCI US Corporate ESG Sustainability Index: Sector Neutral	SUCN	SUCNTRUU SUCNTRUH	SUCNTREU SUCNTREH	SUCNTRGU SUCNTRGH
	Barclays MSCI US Credit ESG Sustainability Index: Sector Neutral	SUDN	SUDNTRUU SUDNTRUH	SUDNTREU SUDNTREH	SUDNTRGU SUDNTRGH
	Barclays MSCI US Aggregate ESG Sustainability Index: Sector Neutral Class 1	SUAN	SUANTRUU SUANTRUH	SUANTREU SUANTREH	SUANTRGU SUANTRGH
ESG WEIGHTED	Barclays MSCI US Corporate ESG Weighted Index	UCEW	UCEWTRUU UCEWTRUH	UCEWTREU UCEWTREH	UCEWTRGU UCEWTRGH
	Barclays MSCI US Credit ESG Weighted Index	UDEW	UDEWTRUU UDEWTRUH	UDEWTREU UDEWTREH	UDEWTRGU UDEWTRGH
	Barclays MSCI US Aggregate ESG Weighted Index	UAEW	UAEWTRUU UAEWTRUH	UAEWTREU UAEWTREH	UAEWTRGU UAEWTRGH
	Barclays MSCI US Corporate ESG Weighted Index: Sector Neutral	UCW1	UCW1TRUU UCW1TRUH	UCW1TREU UCW1TREF	UCW1TRGU UCW1TRGH
	Barclays MSCI US Credit ESG Weighted Index: Sector Neutral	UDW1	UDW1TRUU UDW1TRUH	UDW1TREU UDW1TREH	UDW1TRGU UDW1TRGH
	Barclays MSCI US Government/Credit ESG Weighted Index: Sector Neutral	UGW1	UGW1TRUU UGW1TRUH	UGW1TREU UGW1TREF	UGW1TRGU UGW1TRGH
	Barclays MSCI US Aggregate ESG Weighted Index: Sector Neutral Class 1	UAW1	UAW1TRUU UAW1TRUH	UAW1TREU UAW1TREF	UAW1TRGU UAW1TRGH
EUR					
SRI	Barclays MSCI Euro Corporate SRI Index	RECM	RECMTRUU RECMTRUH	RECMTREU RECMTREH	RECMTRGU RECMTRGH
	Barclays MSCI Euro Corporate Catholic Values Index	RECC	RECCTRUU RECCTRUH	RECCTREU RECCTREH	RECCTRGU RECCTRGH
SUSTAINABILITY	Barclays MSCI Euro Corporate ESG Sustainability Index	SECM	SECMTRUU SECMTRUH	SECMTREU SECMTREH	SECMTRGU SECMTRGH
	Barclays MSCI Euro Aggregate ESG Sustainability Index	SEAG	SEAGTRUU SEAGTRUH	SEAGTREU SEAGTREH	SEAGTRGU SEAGTRGH
	Barclays MSCI Euro Corporate ESG Sustainability Index: Sector Neutral	SECN	SECNTRUU SECNTRUH	SECNTREU SECNTREH	SECNTRGU SECNTRGH
	Barclays MSCI Euro Aggregate ESG Sustainability Index: Sector Neutral Class 1	SEAN	SEANTRUU SEANTRUH	SEANTREU SEANTREH	SEANTRGU SEANTRGH
ESG WEIGHTED	Barclays MSCI Euro Corporate ESG Weighted Index	EECM	EECMTRUU EECMTRUH	EECMTREU EECMTREH	EECMTRGU EECMTRGH
	Barclays MSCI Euro Aggregate ESG Weighted Index	EAAM	EAAMTRUU EAAMTRUH	EAAMTREU EAAMTREH	EAAMTRGU EAAMTRGH
	Barclays MSCI Euro Corporate ESG Weighted Index: Sector Neutral	EECN	EECNTRUU EECNTRUH	EECNTREU EECNTREH	EECNTRGU EECNTRGH
	Barclays MSCI Euro Aggregate ESG Weighted Index: Sector Neutral Class 1	EEAN	EEANTRUU EEANTRUH	EEANTREU EEANTREH	EEANTRGU EEANTRGH
GBP					
SRI	Barclays MSCI Sterling Corporate SRI Index	RSCM	RSCMTRUU RSCMTRUH	RSCMTREU RSCMTREH	RSCMTRGU RSCMTRGH
	Barclays MSCI Sterling Corporate Catholic Values Index	RSCA	RSCATRUU RSCATRUH	RSCATREU RSCATREH	RSCATRGU RSCATRGH
SUSTAINABILITY	Barclays MSCI Sterling Corporate ESG Sustainability Index	SSCM	SSCMTRUU SSCMTRUH	SSCMTREU SSCMTREH	SSCMTRGU SSCMTRGH
	Barclays MSCI Sterling Aggregate ESG Sustainability Index	SSAM	SSAMTRUU SSAMTRUH	SSAMTREU SSAMTREH	SSAMTRGU SSAMTRGH
	Barclays MSCI Sterling Aggregate ESG Sustainability Index: Sec Neut Class 1	SSAN	SSANTRUU SSANTRUH	SSANTREU SSANTREH	SSANTRGU SSANTRGH
	Barclays MSCI Sterling Corporate ESG Sustainability Index: Sector Neutral	SSCN	SSCNTRUU SSCNTRUH	SSCNTREU SSCNTREH	SSCNTRGU SSCNTRGH
		ESCM	ESCMTRUIL ESCMTRUH	ESCMTREU ESCMTREH	ESCMTRGU ESCMTRGH
ESG WEIGHTED	Barclays MSCI Sterling Corporate ESG Weighted Index	LUCIVI	ESCHITICO ESCHITICOL		
ESG WEIGHTED	Barclays MSCI Sterling Corporate ESG Weighted Index Barclays MSCI Sterling Aggregate ESG Weighted Index	ESAM			ESAMTRGU ESAMTRGH
ESG WEIGHTED				ESAMTREU ESAMTREH	ESAMTRGU ESAMTRGH

# Index Constituent Data & Licensing

Access to Barclays MSCI ESG Fixed Income Index constituents, weights, and ESG ratings requires a data license with Barclays or MSCI and is not part of standard data sets that an investor may be receiving from either firm.

As part of the core index data license, users will receive underlying securities and weights, bond level security attributes (sector classifications, returns, duration, etc.), and bond level ESG Ratings, ESG Pillar Scores, ESG Impact Monitor scores, and SRI Exclusion Flags. Additional ESG data fields and business involvement screens may be licensed upon request.

Constituents can be accessed through direct data feeds or analytics platforms such as the Barclays POINT® portfolio and index analytics platform. POINT® will have historical index constituents available back to index inception and allows multi-asset portfolio versus benchmark comparisons, risk estimation, and performance attribution. For more information on licensing, please contact your Barclays or MSCI representative.

Use of these indices in retail products or passive investment products also requires a product license. Please contact your Barclays Index or MSCI ESG sales representative for more information on licensing terms.

# FIGURE 20 Barclays-MSCI ESG Fixed Income Indices on POINT®

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Today 🔄 Barclays MSCI US Corporate	ESG Weighter	×														
er 🕂	Statistics I	Jniverse	Eontents													
5/31/2013 💌 🕨 💻	Drag a colun	nn header l	here to group by that column													
ESG Quality	Identifier		Amount Out Description	Coupon		Yield to W	DAS	OAD Class 1	Class 2	Class 3	Class 4					ESG IVA Upd
ncy USD		A	900,000 AGILENT TECHNOLOGIES INC	6.50			130.1	3.95 CORPORATES		TECHNOLOGY	TECHNOLOGY	AAA	8.8	5.2	9.7	12/28/2012
Public	00846UAE	A	750,000 AGILENT TECHNOLOGIES INC	5.500		1.107	73.5	2.16 CORPORATES		TECHNOLOGY	TECHNOLOGY	AAA	8.8	5.2	9.7	12/28/2012
	00846UAG	A	750,000 AGILENT TECHNOLOGIES INC	5.000			166.3	6.10 CORPORATES		TECHNOLOGY	TECHNOLOGY	AAA	8.8	5.2	9.7	12/28/2012
of 5/31/2013	00846UAH	A	600,000 AGILENT TECHNOLOGIES INC	3.200			159.8	8.20 CORPORATES		TECHNOLOGY	TECHNOLOGY	AAA	8.8	5.2	9.7	12/28/2012
rns Universe: Summary	022249AU	AA	225,000 ALUMINUM CO OF AMERICA	6.750			355.0	9.59 CORPORATES		BASIC_INDUSTRY	METALS_AND_MINING	A	4.3	6	4.8	12/28/2012
rns Universe: Contents (4632)	022249BA	AA	187,500 ALUMINUM CO OF AMERICA	6.500			308.3	4.31 CORPORATES		BASIC_INDUSTRY	METALS_AND_MINING	A	4.3	6	4.8	12/28/2012
stics Universe: Summary	013817AJ	AA	468,750 ALCOA INC-GLOBAL	5.900	D 2/1/2027	6.080	351.0	9.53 CORPORATES	INDUSTRIAL	BASIC_INDUSTRY	METALS_AND_MINING	A	4.3	6	4.8	12/28/2012
stics Universe: Contents (4632)	013817AK	AA	468,750 ALCOA INC-GLOBAL	5.950	0 2/1/2037	6.282	329.4	12.59 CORPORATES	INDUSTRIAL	BASIC_INDUSTRY	METALS_AND_MINING	A	4.3	6	4.8	12/28/2012
	013817AL	AA	562,500 ALCOA INC-GLOBAL	5.550	D 2/1/2017	3.118	240.0	3.33 CORPORATES	INDUSTRIAL	BASIC_INDUSTRY	METALS_AND_MINING	A	4.3	6	4.8	12/28/2012
AA [195]	013817AP	AA	562,125 ALCOA INC	5.720	0 2/23/2019	4.248	304.1	4.95 CORPORATES	INDUSTRIAL	BASIC_INDUSTRY	METALS_AND_MINING	A	4.3	6	4.8	12/28/2012
A [531]	013817AQ	AA	470,387 ALCOA INC	5.870	0 2/23/2022	5.530	363.2	6.96 CORPORATES	INDUSTRIAL	BASIC_INDUSTRY	METALS_AND_MINING	A	4.3	6	4.8	12/28/2012
[715]	013817AS	AA	562,500 ALCOA INC	6.750	0 7/15/2018	4.118	306.7	4.38 CORPORATES	INDUSTRIAL	BASIC_INDUSTRY	METALS_AND_MINING	A	4.3	6	4.8	12/28/2012
BB [845]	013817AU	AA	750,000 ALCOA INC	6.150	0 8/15/2020	4.980	342.2	5.93 CORPORATES	INDUSTRIAL	BASIC_INDUSTRY	METALS_AND_MINING	A	4.3	6	4.8	12/28/2012
B[1107]	013817AV	AA	937,500 ALCOA INC	5.400	0 4/15/2021	5.130	340.4	6.52 CORPORATES	INDUSTRIAL	BASIC_INDUSTRY	METALS_AND_MINING	A	4.3	6	4.8	12/28/2012
[437]	00751YAA	AAP	200,000 ADVANCE AUTO PARTS INC	5.750	5/1/2020	4.310	282.6	5.88 CORPORATES	INDUSTRIAL	CONSUMER_CYCLICAL	RETAILERS	в	2.6	10	3.1	5/24/2013
CC [541]	00751YAB	AAP	200,000 ADVANCE AUTO PARTS INC	4.500	0 1/15/2022	4.509	261.1	7.19 CORPORATES	INDUSTRIAL	CONSUMER_CYCLICAL	RETAILERS	В	2.6	10	3.1	5/24/2013
IR [261]	037833AH	AAPL	4,500,000 APPLE INC	0.450	5/3/2016	0.645	11.3	2.91 CORPORATES		TECHNOLOGY	TECHNOLOGY	A	5.9	8.5	4.4	7/25/2012
	037833AJ	AAPL	12,000,000 APPLE INC	1.000		1.388	36.9	4.83 CORPORATES	INDUSTRIAL	TECHNOLOGY	TECHNOLOGY	A	5.9	8.5	4.4	7/25/2012
	037833AK	AAPL	16,500,000 APPLE INC	2.400		2.910	72.5	9.06 CORPORATES	INDUSTRIAL	TECHNOLOGY	TECHNOLOGY	A	5.9	8.5	4.4	7/25/2012
	037833AL	AAPL	9,000,000 APPLE INC	3.850	5/4/2043	4.312	108.5	17.80 CORPORATES		TECHNOLOGY	TECHNOLOGY	A	5.9	8.5	4.4	7/25/2012
	002920AC	ABBEY	208,501 ABBEY NATIONAL PLC	7.950			371.5	9.99 CORPORATES	FINANCIAL.	BANKING	BANKING	BB	6.4	1.3	5	11/12/2012
	002927AA	ABBEY	293,091 ABBEY NATIONAL PLC	8,963			388.0	9.24 CORPORATES	FINANCIAL.		BANKING	BB	6.4	1.3	5	11/12/2012
	002799AJ	ABBEY	800,000 ABBEY NATIONAL PLC	4.000			120.0	2.77 CORPORATES	FINANCIAL.		BANKING	BB	6.4	1.3	5	11/12/2012
	884315AG	ABBNVX	187,500 THOMAS & BETTS	5.625			121.1	7.08 CORPORATES		INDUSTRIAL_OTHER	INDUSTRIAL OTHER	NR	-1	-1	-1	I I I I I I I I I I I I I I I I I I I
	00037BAA	ABBNVX	375,000 ABB FINANCE USA INC	1.625		1.611	83.5	3.83 CORPORATES		CAPITAL GOODS	DIVERSIFIED MANUF		-1	-1	-1	
	00037BAB	ABBNVX	937,500 ABB FINANCE USA INC	2.875		2,960	98.4	8.08 CORPORATES		CAPITAL GOODS	DIVERSIFIED MANUF		-1	-1	-1	
	00037BAC	ABBNVX	562,500 ABB FINANCE USA INC	4.375			115.4	16.97 CORPORATES		CAPITAL GOODS	DIVERSIFIED MANUF		-1	-1	-1	
	00287YAA	ABBV	1,166,655 ABBVIE INC	1.200		0.977	56.4	2.40 CORPORATES		CONSUMER NON CYCLICAL	PHARMACEUTICALS	B	5.8	4.2	1.5	8/27/2012
	002071AA	ABBV		1.750		1.718	82.1	4.29 CORPORATES		CONSUMER_NON_CYCLICAL	PHARMACEUTICALS	B	5.8	4.2	1.5	8/27/2012
	00287YAC	ABBV	1,333,320 ABBVIE INC	2.900			115.0	8.46 CORPORATES			PHARMACEUTICALS	B	5.8	4.2		8/27/2012
		ABBV	1,033,323 ABBVIE INC					16.84 CORPORATES		CONSUMER_NON_CYCLICAL	PHARMACEUTICALS	B	5.8	4.2	1.5	8/27/2012
	00287YAD		866,658 ABBVIE INC	4.400			135.3			CONSUMER_NON_CYCLICAL	PHARMACEUTICALS				1.5	
	00287YAF	ABBV	333,330 ABBVIE INC	2.000		1.998	85.6	5.20 CORPORATES		CONSUMER_NON_CYCLICAL		B	5.8	4.2	1.5	8/27/2012
	03073EAF	ABC	995,472 AMERISOURCEBERGEN CORP	5.875		1.107	73.6	2.16 CORPORATES		CONSUMER_NON_CYCLICAL	HEALTHCARE	BBB	8.1	5.2	3.2	5/25/2012
	03073EAG	ABC	800,000 AMERISOURCEBERGEN CORP	4.875			126.4	5.71 CORPORATES		CONSUMER_NON_CYCLICAL	HEALTHCARE	BBB	8.1	5.2	3.2	5/25/2012
	03073EAJ	ABC	1,000,000 AMERISOURCEBERGEN CORP	3.50			110.2	7.47 CORPORATES		CONSUMER_NON_CYCLICAL		BBB	8.1	5.2	3.2	5/25/2012
	035229CJ	ABIBB	675,000 ANHEUSER-BUSCH CO INC	6.800			163.8	12.03 CORPORATES		CONSUMER_NON_CYCLICAL			4.9	7	6.9	6/8/2012
	035229CL	ABIBB	562,500 ANHEUSER-BUSCH CO INC	6.000	D 11/1/2041	4.492	137.4	15.51 CORPORATES	INDUSTRIAL	CONSUMER_NON_CYCLICAL	FOOD_AND_BEVERAGE	A	4.9	7	6.9	6/8/2012
	4															
	Aggregation	1														
	Universes		Ouantity Coupon Matur	ty Date	Price Vield	to Worst	OAS	OAD Moody's Rat	ing S&P Ratin	ig Market Value	Market Value (%)				-	
	Total		4,211,124,709 4.643	9/9/2023	110.055409	2.84			2/A3	A/A- 4,679,870,877	100.00000					
	AAA				107.668076	2.09			L/A2	A+/A 346,611,704	7,40644					
	AA		999,463,490 4.516		110.072269	2.81			2/A3	A+/A 1,110,656,968	23,73264					
	A				110.096356	2.84				-/888+ 1,261,838,584	26.96311					
	BBB				110.231933	2.87			2/A3	A/A- 715,995,576	15.29947					
	BB				110.425179	2.97				-/BBB+ 733,918,553	15.68245					
nics	B				109.456026	3.10				/BBB+ 172,290,538	3.68152					

Source: Barclays Research

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