Bloomberg MSCI Sterling Liquid Corporate ESG Weighted SRI Index

The Bloomberg MSCI Sterling Liquid Corporate ESG Weighted SRI Bond Index measures the investment grade, fixed-rate, taxable, sterling-denominated securities issued by corporate issuers, and applies additional ESG criteria for security eligibility. The index negatively screens issuers that are involved in business activities that are restricted because they are inconsistent with certain values-based business involvement criteria. Additionally, the index includes bonds with minimum GBP350mn amount outstanding. The index was created in December 2019, with history backfilled to January 1, 2014.

From December 1, 2022 onwards, bonds must additionally have ESG Rating of at least BB. Also, bonds that do not have an ESG Rating or ESG Controversy score are excluded. Issuers are capped at 5% by market value.

Rules for Inclusion: Fixed Income Criteria

Sector	Corporate (industrial, utility and financial institutions) issuers only.		
Eligible Currencies	Principal and interest must be denominated in GBP.		
Quality	Securities 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; when only one agency rates a bond, that rating is used. In cases where explicit bond level ratings may not be available, other sources may be used to classify securities by credit quality:		
	 Expected ratings at issuance may be used to ensure timely index inclusion or to properly classify split-rated issuers. 		
	• Unrated securities may use an issuer rating for index classification purposes if available. Unrated subordinated securities are included if a subordinated issuer rating is available.		
Amount Outstanding	GBP350mn minimum par amount outstanding.		
Coupon	Fixed-rate coupon.		
	• Callable fixed-to-floating rate bonds are eligible during their fixed-rate term only.		
	• Bonds with a step-up coupon that changes according to a predetermined schedule are eligible.		
Maturity	At least one year until final maturity, regardless of optionality.		
EM Country Definition	Bloomberg uses a fixed list of emerging market countries that is reviewed annually to define country eligibility in dedicated EM hard currency, local currency, and inflation-linked benchmarks. Criteria for inclusion in the EM country list are rules-based and include:		
	 Countries that meet one of the following two criteria: World Bank Income group classifications of low/middle income OR International Monetary Fund (IMF) classification as a non-advanced country. 		



- Additional countries that bond investors classify as EM due to factors such as investability concerns, the presence of capital controls, and/or geographic considerations may also be included on the list and are also reviewed on an annual basis. As of April 2014, 4 additional markets are included in the Bloomberg EM country list: Czech Republic, Israel, South Korea and Taiwan. Taxability Only fully taxable issues are eligible. Market of Issue Publicly issued in global and regional markets. Seniority of Debt Senior and subordinated issues are included. **Security Types** Included Excluded Bullet, putable, sinkable/amortizing and Treasuries, government-related, securitized callable bonds and covered bonds Contingent capital securities, including Original issue zero coupon bonds traditional CoCos and contingent write-down **Underwritten MTN** securities, with explicit capital ratio or solvency/balance sheet-based triggers Fixed-rate and fixed-to-float (including fixedto-variable) capital securities
 - Bonds with equity type features (eg, warrants, convertibles, preferreds)
 - Inflation-linked bonds, floating-rate issues
 - Private placements, retail bonds
 - Structured notes, pass-through certificates
 - Illiquid securities with no available internal or third-party pricing source

Environment, Social and Governance (ESG) Rules

Timing and Coverage	 From December 1, 2022, securities must have an MSCI ESG Rating of BB or higher, and unrated issuers from sectors with ratings are excluded. 	
	• Prior to April 8, 2021, MSCI ESG Ratings, Controversy Scores and Business Involvement data were applied at the ticker level, where every bond within the same ticker would have the same MSCI ESG Rating, with MSCI mapping ESG data from the entity with the largest debt outstanding (by market value) to all companies with the same Bloomberg ticker.	
	• From April 9, 2021, MSCI ESG data is applied at the bond level which may result in bonds with the same Bloomberg ticker having different MSCI ESG Ratings.	
	• Factor tilts are based on beginning of the month ratings.	
	 MSCI ESG Ratings are generally updated annually, but may be reviewed more frequently as needed. 	
Business Involvement Screens	The index excludes issuers involved in the following business lines/activities as per the Bloomberg MSCI screen:	
	• Tobacco	
	Civilian Firearms	
	Military Weapons	

- o Landmine Manufacturing
- o Cluster Bomb Manufacturing
- o Depleted Uranium Weapons
- o Chemical and Biological Weapons Components
- o Nuclear Weapons and Components
- o Conventional Weapons Systems and Components

From February 2020, the index additionally excludes issuers with 5% or more in revenue from the business activities related to:

- Thermal Coal
- Generation of Thermal Coal
- Oil Sands

From December 1, 2022, the index excludes issuers involved in the following business lines/activities as per the standard Bloomberg MSCI screens:

- Alcohol
- Tobacco
- Gambling
- Adult Entertainment
- Genetically Modified Organisms (GMO)
- Nuclear Power
- Civilian Firearms
- Conventional Weapons
- Nuclear Weapons
- Controversial Weapons
 - o Landmine Manufacturing
 - o Cluster Bomb Manufacturing
 - o Depleted Uranium Weapons
 - o Chemical and Biological Weapons Components
- Thermal Coal
- Fossil Fuels

As the index is using the standard SRI definition from December 1 2022, which screens out bonds with any ties to Cluster Bombs or Landmines, the 2 older screens for the manufacturers of these are removed.

Involvement is defined for each restricted activity and may be based on % of revenue, total revenue, or any tie regardless of revenue (see Figures 7-8 on pages 14-16 for standard screen threshold in ESG Methodology on the <u>Bloomberg Terminal</u> or on the <u>website</u>).

MSCI ESG Controversy Score	Excludes any issuer with a "Red" MSCI ESG Controversy Score (equal to zero), which measures an issuer's involvement in major ESG controversies and how well they adhere to international norms and principles.			
	From December 1, 2022, the index will additionally exclude bonds that do not have an ESG Controversy Score (are unrated).			
Factor Tilts	The weight of each index eligible issuer (and security) is adjusted by a fixed multiplier (see table), which is determined by its MSCI ESG Rating (AAA, AA, A, BBB, BB, B, CCC, NR).	ESG Rating	Tilt	
		AAA, AA	2.0x	
		A, BBB, BB	1.0x	
	Before December 1, 2022, bonds with ESG Ratings B or CCC were adjusted by 0.5x multiplier, and bonds with ESG Ratings of NR had 1.0x multiplier.			

Rebalancing Rules

Issuer Capping Methodology	From December 1, 2022, issuers that exceed 5% of the market value of the uncapped Sterling Liquid Corporate ESG Weighted SRI Index are limited at 5%. The excess market value over the 5% cap is redistributed on a pro rata basis to all other issuers' bonds in the index that are under the 5% cap. The process is repeated until no issuer exceeds the 5% limit. For example, an issuer that represents 6% of the uncapped index will have 1% of the index's market value redistributed to each bond from all issuers under the 5% cap on a pro rata basis. The 5% issuer cap is applied each month as the index is rebalanced.
Frequency	For each index, Bloomberg maintains two universes of securities: the Returns (Backward) and the Projected (Forward) Universes. The composition of the Returns Universe is rebalanced at each monthend and represents the fixed set of bonds on which index returns are calculated for the next month. The Projected Universe is a forward-looking projection that changes daily to reflect issues dropping out of and entering the index but is not used for return calculations. On the last business day of the month (the rebalancing date), the composition of the latest Projected Universe becomes the Returns Universe for the following month.
Index Changes	During the month, indicative changes to securities (credit rating change, sector reclassification, amount outstanding changes, corporate actions, and ticker changes) are reflected daily in the Projected and Returns Universe of the index. These changes may cause bonds to enter or fall out of the Projected 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 next rebalanced.
Reinvestment of Cash Flows	Intra-month cash flows from interest and principal payments contribute to monthly index returns but are not reinvested at a short-term reinvestment rate between rebalance dates. At each rebalancing, cash is effectively reinvested into the Returns Universe for the following month so that index results over two or more months reflect monthly compounding.
New Issues	Qualifying securities issued/announced, but not necessarily settled, on or before the month-end rebalancing date, qualify for inclusion in the following month's index if required security reference information and pricing are readily available.

Pricing and Related Issues

Sources & Frequency	All index-eligible bonds are priced on a daily basis by Bloomberg's evaluated pricing service, BVAL.		
Pricing Quotes	Bonds are marked on a dollar price basis.		
Timing	 4:15pm (London time). On early market closes, prices are taken as of 12:00pm (London time), unless otherwise noted. If the last business day of the month is a UK holiday, prices from the previous business day are used. 		
Bid or Offer Side	Bonds in the index are priced on the bid side. The initial price for new corporate issues entering the index is the offer side; after the first month, the bid price is used.		
Settlement Assumptions	T+1 calendar day settlement basis for all bonds. At month-end, settlement is assumed to be the first calendar day of the following month, even if the last business day is not the last day of the month, to allow for one full month of accrued interest to be calculated.		
Verification	Daily price moves for each security are analyzed by the index pricing team. Index users may also challenge price levels, which are then reviewed and updated as needed.		
Calendar	The Bloomberg MSCI Sterling Liquid Corporate ESG Weighted SRI Index follows the UK bond market holiday schedule. For month-end dates, the European calendar may also be employed in the event a UK holiday falls on a month-end date but European markets remain open.		

Accessing Index Data

Bloomberg Terminal®	Bloomberg benchmarks are the global standard for capital markets investors.
	 INDE<go> - The Bloomberg Indices dashboard page, which contains daily, monthly, and year-to- date index returns for key indices from each index family as well as a link to index publications.</go>
	• IN <go> - The Bloomberg Index Browser displays the latest performance results and statistics for the indices as well as history. IN presents the indices that make up Bloomberg's global, multi-asset class index families into a hierarchical view, facilitating navigation and comparisons. The "My Indices" tab allows a user to focus on a set of favorite indices.</go>
	 DES<go> - The index description page provides transparency into an individual index including membership information, aggregated characteristics and returns, and historical performance.</go>
	 INP<go> - The Bloomberg Indices Publications page, which includes methodologies, factsheets, monthly reports, announcements and technical notes. A user may also subscribe to index publications via the "Actions" button.</go>
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Bloomberg Indices Website (www.bloomberg.com/ indices)	The index website makes available limited index information including:
	Index methodology and factsheets
	Current performance numbers for select indices

Data Distribution	Index subscribers may choose to receive index data in files. Files may include:			
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	Clients may receive standard files or may customize file contents			
	Index data is also available via authorized redistributors			
Index Ticker	135362GB: Total Return Sterling Unhedged			

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