



Barclays Research

Our analysts deliver differentiated market insights, actionable ideas and collaborative research across asset classes, through publications, global conferences, one-to-one analyst interactions and Premier Events.

For more information, please reach out to BarclaysResearchMarketing@barclays.com

September 2023



Macro | Credit | Equity | QPS | ESG

Barclays Research

Designed for your needs

CORE	FOCUS	SIGNATURE
Timely market commentary and insights	Deep dives, differentiated analysis and high conviction calls	Paradigm changing perspectives

Data Science



Leveraging data in investing

Barclays' Data and Investment Sciences teams partner with fundamental analysts and strategists.

Integrated ESG Research



Insights into the ESG transition

Barclays Research is integrating ESG with a focus on materiality and forward-looking indicators.

Thematic Research



Navigates disruptive trends

Our Thematics research identifies investments that stand to benefit from long-term structural shifts.

Premier Events

Barclays Research hosts approximately

350+

Premier Events each year across asset classes

Providing exclusive access to...

- Analysts
- Policy makers
- Industry Experts
- Cross-Asset Expertise
- Corporate Management Teams

...through

- Flagship Conferences
- Investor Field Trips
- Corporate Events
- Investor Meetings

The Flip Side

Podcast features lively debates between Barclays' Research analysts on important topics facing economies and businesses around the globe.



Impact Series

A series of in-depth reports exploring the social impact of economic, demographic and disruptive changes affecting markets, sectors and society at large.



The Eagle Eye

A fortnightly newsletter to provide you with curated insights on the forces fueling the world's biggest market decisions.

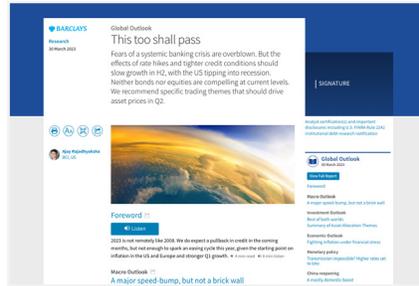


Flagship Publication



Equity Gilt Study

Now in its 68th year, the Equity Gilt Study provides multi-disciplinary analysis on longer-term market trends, analyzing asset returns across different markets and geographies.



Global Outlook

Published quarterly, the Global Outlook provides an assessment of macro themes across all major economies and evaluates their likely implications for global financial markets.



Collaborative Research

Our Signature Research delivers truly differentiated perspectives that challenge conventional wisdom. These are collaborative efforts across our global research franchise.

Our Impact



#3

Global Fixed Income Research Survey

Institutional Investor, 2022 with 62 ranked analysts



#5

European Equity Research Survey

Institutional Investor, 2023 with 29 ranked analysts



#8

All-America and All-Canada Equity Research Survey

Institutional Investor, 2022 with 18 ranked analysts

Credit Research

Actionable company, sector and strategy insights

Macro & Strategy Research

Actionable analysis of developed and emerging economies

Equity Research

Industry sector research fueled by deep expertise

ESG Research

Thematic Research

Data & Investment Sciences

Quantitative Portfolio Strategy

Barclays Live

As a client, you gain exclusive access via desktop, mobile or tablet to research, tools and events through our comprehensive client portal.



Barclays Live App

Work seamlessly on your phone, tablet and desktop



Watchlist

Customized research and charts in your tiles



You Might Like

Suggested research and personalized reading lists



Analytics

Relative value analysis, yield curves, historical market data, and quantitative models



Markets

Monitor market data across asset classes



Multimedia

Infographics, reports and videos

Macro & Strategy Research

An integrated offering across economics, rates, FX, commodities and emerging markets, combining impactful and timely insights with long-term thematic ideas across developed and emerging markets.

Flagship Macro Reports

- Global Outlook
- Global Economics Weekly
- Global Rates Weekly
- FX and EM Macro Strategy Quarterly
- Thoughts for the Week Ahead
- The Emerging Markets Quarterly
- Global Macro Thoughts
- The Blue Drum
- Equity Gilt Study

Research #themes

Cut through the headline noise and stay up to date on the most relevant market topics through our macro #themes

Analysts

60+ economists, rates, FX and commodities strategists form the backbone of the Barclays global macro franchise.

Barclays Ranked

3rd overall in the 2022 Institutional Investor Global Fixed Income Research Survey

Macro Research Events and Conferences

We offer timely updates on major themes and developments impacting markets. Clients can also subscribe to receive our latest market insights, differentiated research, new products and analytics.

- Quarterly Global Outlook Calls
- International Monetary Policy Forum
- Barclays Thursday Macro Call
- Flagship Conferences – Including the Global Inflation Conference
- Macro Premier Events – Access to Policy Makers and Investor Field Trips
- Research Marketing Calls



Jan 2022 – Dec 2022

Economics

Interest Rates

Emerging Markets

Foreign Exchange

Commodities

Inflation-linked

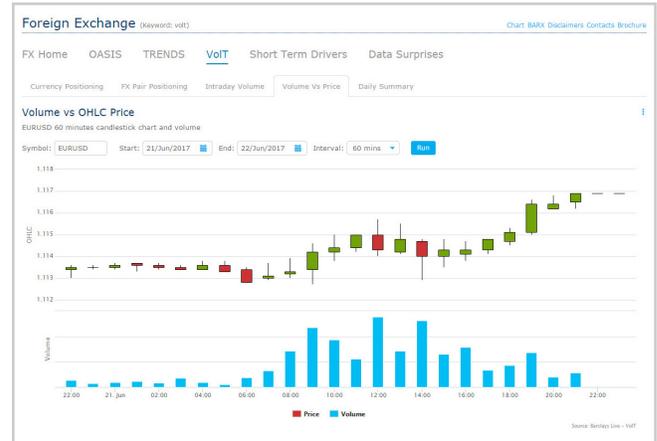
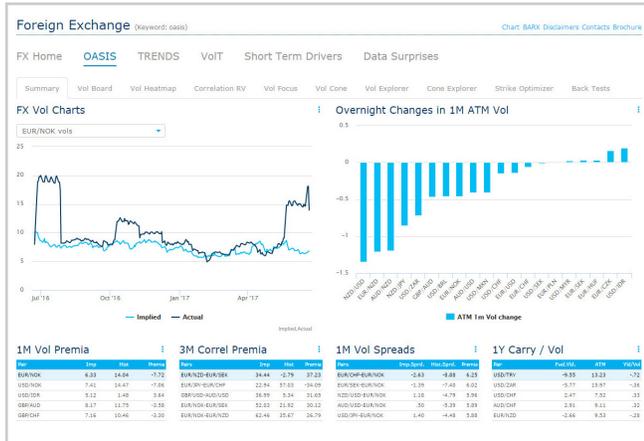
Barclays Live: Macro Analytic Tools

Sales and support teams provide 24-hour assistance, personalized tutorials, group teach-ins and email updates on how to use Barclays Live to monitor and analyze the Interest Rates, FX, and Inflation-Linked markets.

Chart

Keyword: **chart**

Access multi-currency curves and historical charts across financial markets for pre-trade relative value



OASIS

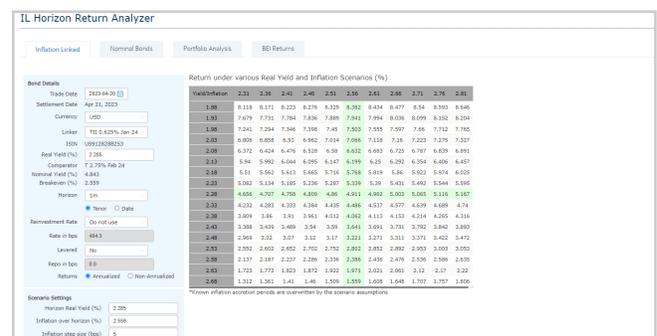
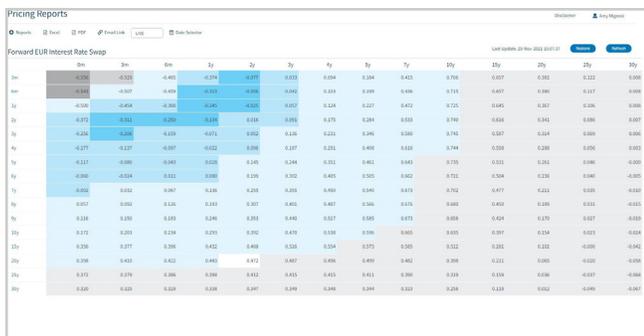
Keyword: **oasis**

Identify opportunities and themes in FX volatility and perform complex analysis across multiple asset classes.

VolT

Keyword: **volt**

Analyze foreign exchange trade volume and positioning trends.



Market Matrix Reports

Keyword: **marketmatrix**

Isolate richness and cheapness across products and view historical pricing in one click

Inflation-Linked Toolkit

Keyword: **inflation**

Monitor inflation-linked analytics through our suite of calculators and curve/charting tools.

Credit Research

Offering strategy and fundamental research with thematic views, trade ideas and Premier Events across a wide range of credit products and geographies.

Flagship Publications

Our suite of daily, weekly, bi-weekly, and quarterly publications provides thematic research and trade ideas.

Global Credit Outlook
European Credit Alpha
U.S. Credit Alpha
Asia Credit Alpha
CDS Index Option Dashboard
AAA Investor

Barclays Tuesday Credit Call
CDS Index Positioning
Emerging Markets Quarterly
EM Corp Credit Top Picks
IG Top Catalyst Ideas
HY Best Ideas

#themes

Stay up to date with the most relevant credit #themes

Credit Strategy

Coverage of hybrid capital, loans, CLOs, EM corporates, cross-currency relative value, derivatives and select securitized products across high grade & high yield.

Analyst Coverage (as of Dec 2022)



US: 440+; Europe: 260+; Asia: 70+; LATAM + CEEMEA: 80+; Sovereigns: 40+

Barclays Ranked

3rd overall in the 2022 Institutional Investor Global Fixed Income Research Survey
#2 for US IG Research #3 for US HY Research #1 for EU IG Research #2 for EU HY Research

Credit Calls, Events, and Conferences

Credit Casts
• 5 in 5

Credit Premier Events
• Corporate Roundtables
• Industry Experts
• Investor Meetings and Field Trips

Flagship Conferences
• US HY Conference
• European IG Conference
• European Leverage Finance Conference
• Yankee Financials Credit Forum



Jan 2022 – Dec 2022

High Grade

EM Corporate

Derivatives

Strategy

High Yield

Municipals

Sovereigns

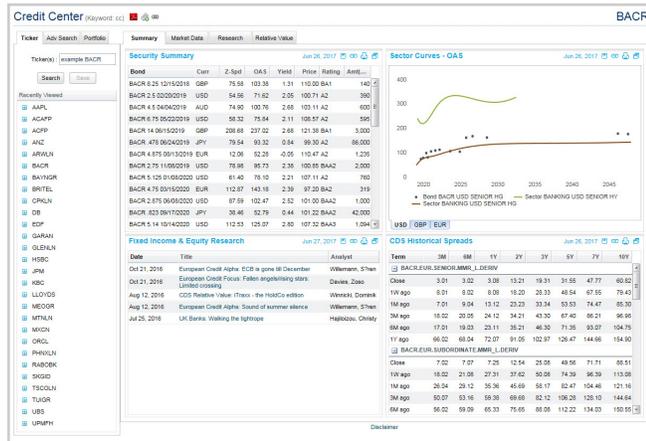
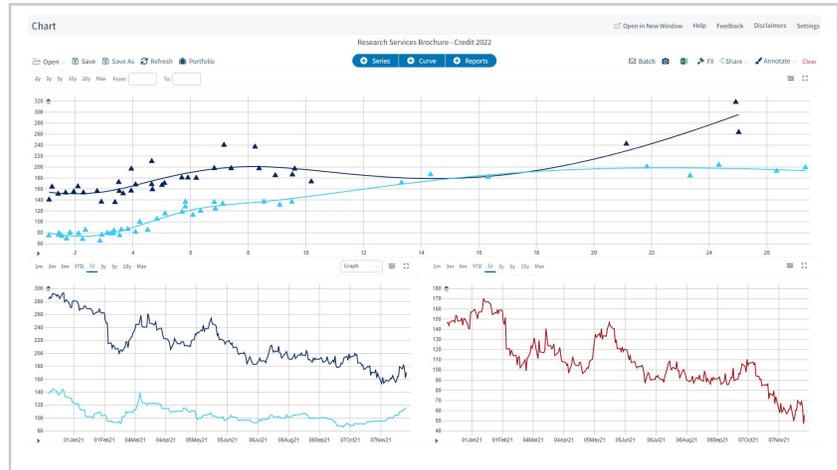
Securitized products

Barclays Live: Credit Analytic Tools

Full suite of credit analytic tools including charting tools, calculators, market monitors and screeners

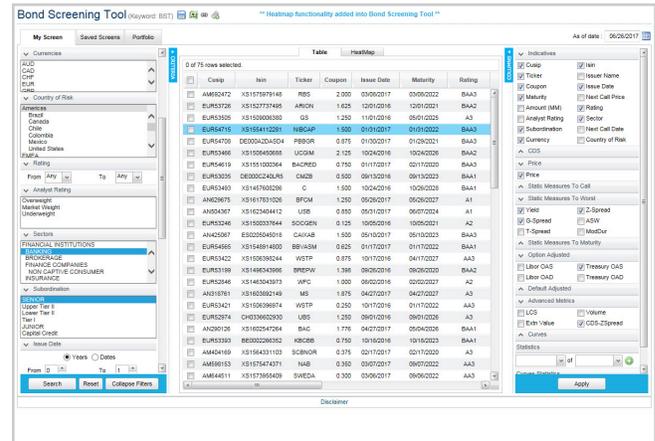
Chart
Keyword: **chart**

Access multi-currency sector and issuer curves and historical bond and derivative time series



Credit Center Keyword: **cc**

Access all relevant analytics and research across a single issuer and its sector peers in one application.



Bond Screening Tool Keyword: **bst**

Multi-input bond screener for easy identification of the bonds fitting your customized criteria.

Barclays Live Updates and Conference Calls

Research Marketing provides conference calls and updates on topical credit themes, initiations, differentiated reports, new products and relevant analytics.

Sales and support teams provide 24-hour assistance, personalized tutorials, group teach-ins and email updates on how to use Barclays Live to monitor and analyse the credit markets.

Barclays Live consistently

Top 3

in Web-Based Analytics by Institutional Investor from 2008 to 2022

Equity Research

Event analysis and deep dives into stock ideas and sector themes spanning more than 1,600 companies under coverage across the Americas and Europe.

Our Product Mix



Single Stock



Transatlantic Collaboration



Equity Strategy



Sustainable & Thematic

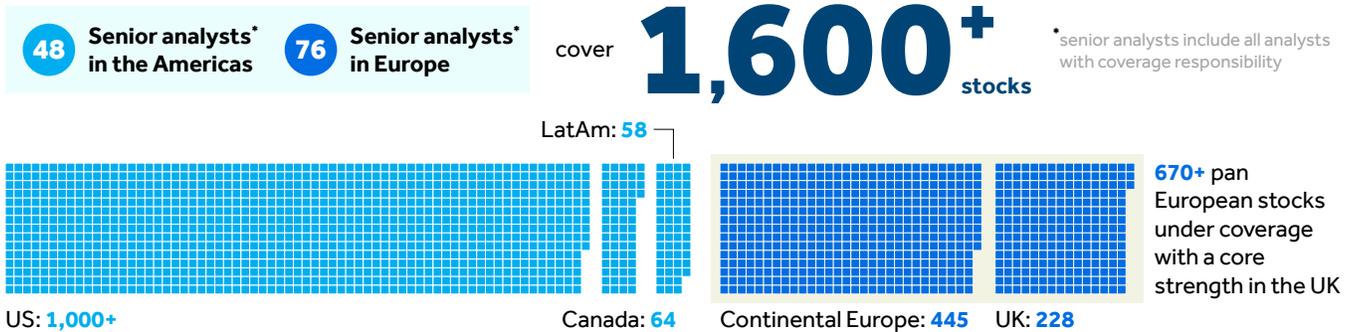


UK Mid & Small Cap



ESG

Companies Under Coverage (as of 13 March 2023)



Basic Industries	Healthcare	TMT & Internet
Consumer	Industrials	ESG & Thematic
Energy	Power & Utilities	Investment Strategy & macro
Financial Services	Retail	

15 Industry-Leading conferences

- Communications and Content Symposium
- Barclays Select Series: Midstream Corporate Access Day
- Barclays Industrial Select Conference
- Barclays Leisure and Transport Conference
- Global Healthcare Conference
- Global ESG Conference
- Crypto and Blockchain Summit
- Americas Select Franchise Conference
- Emerging Payments and FinTech Forum
- Barclays European Internet and Emerging Tech Conference
- Barclays CEO Energy-Power Conference
- Barclays Global Consumer Staples Conference
- Barclays Media and Telecom Forum
- Barclays Global Financial Services Conference
- Global Technology, Media and Telecommunications Conference

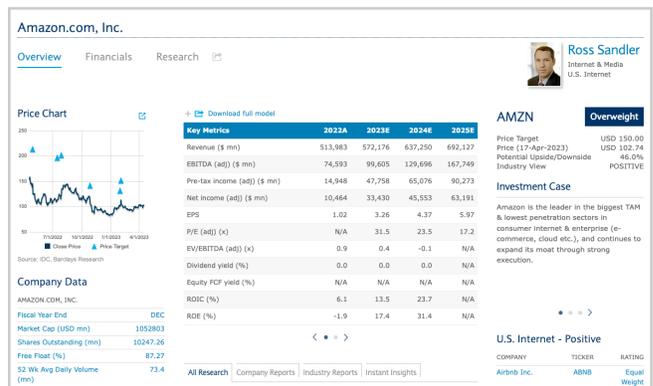
Barclays Live

Company Pages

(as of 18 April 2023)

Access company research, upside/downside scenario ranges and company financials, including three-year forecasts across income statement, balance sheet and cashflow.

Available on Barclays Live.

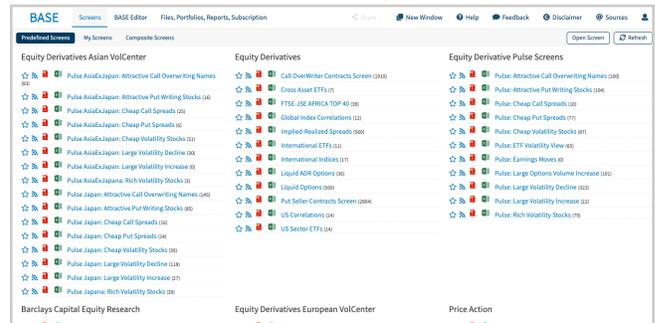


This company page is for illustrative purposes only and should not be relied upon.



CB Insight Keyword: **cbinsight**

Access convertible bond data and analytics, including Barclays' proprietary trading models, customizable market monitors, and a bond pricer for new and existing issues with user-defined inputs.



BASE Keyword: **BASE**

Barclays Analytical Search Engine (BASE) is a robust search tool designed by Research that takes user-defined criteria to generate a list of equities and equity derivatives.

Barrenjoey

Barclays Research is pleased to offer Barrenjoey's high quality, thought-leading and timely Australian and New Zealand Research. Based out of Australia, Barrenjoey brings together experienced strategists and sector analysts who leverage their deep knowledge of the local markets, industry contacts and data insights to deliver innovative content to clients.



1

Top-ranked sector heads with 15+ years' experience



2

Targeting 200+ stocks under coverage in Australia and New Zealand



3

Working with Barclays to provide global distribution of Barrenjoey's content

QPS Research

Providing our clients with innovative insights into all aspects of the investment process, across asset classes.

Unique Content

For over two decades, the Barclays Quantitative Portfolio Strategy team has used its extensive research and portfolio management experience to provide our clients with research that is:



Objective

Analysis based on rigorous and innovative empirical studies and models. No subjective views: “let the data speak”



Practical

Realistic and implementable research findings in response to questions from practitioners



Academically Recognized

Published in key industry journals
Journal of Portfolio Management / Journal of Fixed Income / Journal of Alternative Investments



Broad in Nature

Covering all major asset classes including cross-asset research and aimed at a variety of institutional clients

QPS Research Symposia

QPS analysts moderate discussions with e-voting in an effort to get client feedback.

Hosted annually by Barclays

QPS hosts a global research symposium held annually in London and New York which highlights the team’s new research and methods.

Barclays Ranked

3rd overall in the 2022 Institutional Investor Global Fixed Income Research Survey

#1 in Europe for Quantitative Analysis **#2** in US for Quantitative Analysis **Top ranked** for the past 15 years

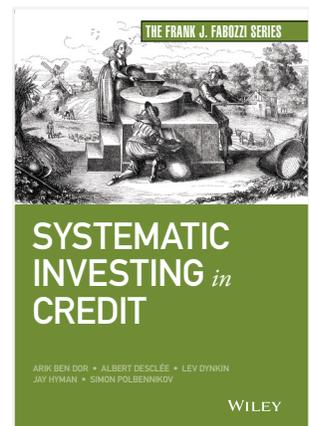
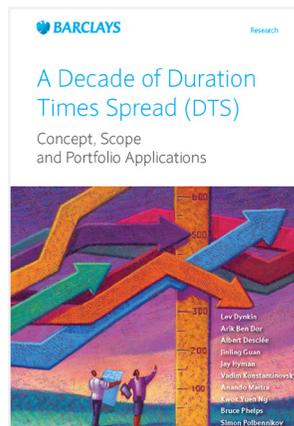
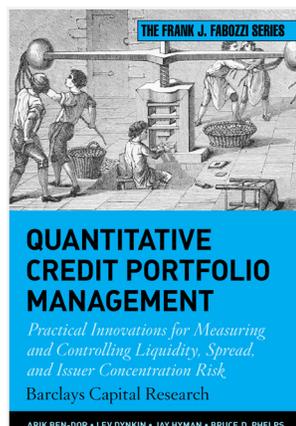
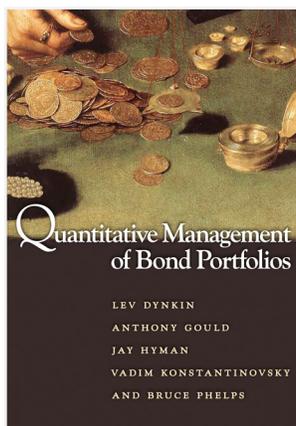
Asset Allocation	Choice of Investment Style
Benchmark Customisation	Risk Building
Innovative Selection Signals	

QPS Research Categories

Choice of Investment Style	<ul style="list-style-type: none"> • Smart beta in fixed income markets • Properties of systematic investment styles • Value of security selection vs asset allocation
Portfolio Construction Methodologies	<ul style="list-style-type: none"> • Duration Times Spread (DTS) — a novel risk measure introduced by QPS that became industry standard • Portfolio/index hedging and replication • Topical studies on ESG investing, Risk Parity, FX hedging, Diversification, Factor Modelling, Style Premia
Analytics and Sector/Issuer/Issue Level Periodic Scorecards	<ul style="list-style-type: none"> • Modeling liquidity in bond markets: Liquidity Cost Scores (LCS), Trade Efficiency Scores (TES) • Excess Spread to Peers (ESP) – relative value in credit markets • Equity Momentum in Credit (EMC) – identifying value in corporate bonds of an issuer based on momentum of its equity • Issuance Rate model – underweighting issuers or sectors with increasing leverage • Global Rates Carry – selecting sovereign markets with higher promised yield • Spread per unit of Debt To Earning Ratio (SPiDER) – relative value in equity and credit markets • Bond in Equity Asset Momentum (BEAM) — ranking equities based on momentum of corporate bonds of the same issuer
Analysis of Manager's Performance	<ul style="list-style-type: none"> • Measure of Manager Skill for identifying hedge funds performance persistence • Algorithmic Evaluation of Returns for comparing performance and risk of a given hedge fund to its peers • Studies of active manager performance and of the value of skill in different environments
Bespoke Portfolio Optimization Tools	<ul style="list-style-type: none"> • Optimal Risk Budgeting with Skill (ORBS) • Maximum Likelihood Scenario Definition • Try and Hold model for long-horizon credit portfolios

Published Books

Our team has published four books over the past 14 years, reflecting our client-driven research



ESG Research

Our global ESG research team is embedded across Barclays Research to help produce actionable ESG insights, enabling investors to assess the global impact of regulatory, environmental and societal changes on markets and industries. Our integrated approach, incorporating ESG considerations throughout our research globally and across asset classes, aims to assist clients in making better investment decisions and higher risk-adjusted returns.

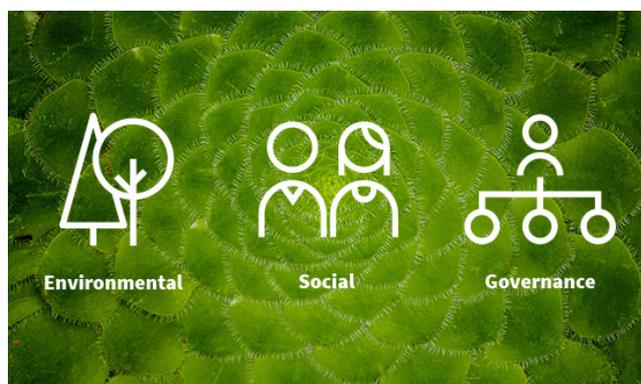
ESG Research Team

Subject matter experts

Our ESG analysts bring expertise as former practitioners in a range of key ESG domains including policy, regulation, climate science, biodiversity and corporate governance, as well as fundamental analysis skills.

Global local approach

Based in New York, London, Hong Kong, and Mumbai, our analysts can both capture global trends and highlight regional differences.



Actionable ESG insights

Our research translates the complex and fast-evolving ESG landscape into actionable investment recommendations, acknowledging the wide diversity of approaches investors are taking to ESG. Our research takes a forward-looking view, helping clients navigate the trade-offs and ambiguities prevalent in this space.

Topics we cover include

- **ESG investment strategies and trends**
Fund flows, launches, strategies, and performance.
- **Corporate ESG performance, strategy, and reporting**
Extreme weather and climate adaptation, labour relations, human rights, biodiversity
- **ESG regulation & policy**
Investor and corporate disclosure regulations, green spending packages

Integrated approach

ESG analysts partner with our FICC and equity analysts to identify material ESG risks and opportunities to incorporate these into our fundamental analysis and investment ideas. This collaborative model considers the environmental, social, and governance dimensions of a company's operations and actions within the context of its broader investment case.

The ESG team also works closely with

- **Sustainable & Thematic Research**
to explore megatrends and long-term investment opportunities
- **Data and Investment Sciences**
to leverage alternative data and machine learning
- **Quantitative Portfolio Strategy (QPS)**
using data to understand the links between ESG factors and performance

Barclays ESG Indicators and company snapshots

For more than **650 companies**, we also provide distilled, single-company summaries of material ESG risks and opportunities, financial impacts, company ESG/sustainability strategy, and key ESG KPIs. We juxtapose this fundamental view with the broader market view via our ESG indicators, which show an aggregated view of overall rating and degree of consensus among leading third-party ESG score providers.

ESG (Environmental, Social and Governance)

All Strategy Fundamental Indicators Team

24 Mar 2020

Technical reference document for ESG Indicators

Environmental **Social** **Governance**

Investors wishing to take a "positive screening" approach to ESG investing need to measure the ESG characteristics of companies, and to grade them appropriately. There is currently no standard for how...

Barclays ESG Indicators

Barclays ESG Indicators provide an aggregated view of E, S, G factor scores across third-party vendors despite disparate scoring methodologies and score distributions. These aggregated scores are used to construct Barclays ESG Indicators, which bucket the performance of companies into one of five groups. We also provide an icon to indicate the strength (or lack) of agreement among the score providers we have chosen. You can search for Barclays ESG Indicators by company name in the search bar below.

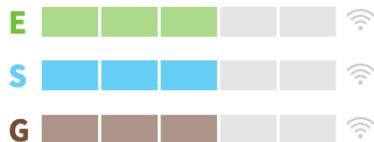
Updating and expanding our ESG Indicators

We have expanded our ESG indicator coverage to include all names for which either V.E. or Sustainalytics provide distinct E, S, and G pillar scores. As a result, more than 6,000 legal entities are now available. To accommodate this expanded universe, we have made a small adjustment to their definition.

Blocks represent an aggregated view of E, S, and G factor scores, respectively, across third-party score providers (one block indicates a very low average score, five a very high average score). Icons show the dispersion of those scores (no bars indicates only one source provider, two bars indicate dispersion between providers, full bars indicate aligned scores). For more details on Barclays ESG Indicators, [click here](#).

Source: Barclays Research, Sustainalytics, Vigeo Eiris, (V.E), an affiliate of Moody's

Sample Company



Do you want to find out more? Reach out to ESGResearch@barclays.com

Disclaimer

BARCLAYS

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Barclays may at any time acquire, hold or dispose of long or short positions (including hedging and trading positions) and trade or otherwise effect transactions for their own account or the account of their customers in the products referred to herein which may impact the performance of a product.

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NOT A BENCHMARK

The information provided does not constitute a financial benchmark and should not be used as a submission or contribution of input data for the purposes of determining a financial benchmark.

ENVIRONMENTAL, SOCIAL, AND GOVERNANCE ('ESG') RELATED DATA

There is currently no globally accepted framework or definition (legal, regulatory or otherwise) of, nor market consensus as to what constitutes, an 'ESG', 'green', 'sustainable', 'climate-friendly' or an equivalent company, investment, strategy or consideration or what precise attributes are required to be eligible to be categorised by such terms. This means there are different ways to evaluate a company or an investment and so different values may be placed on certain ESG credentials as well as adverse ESG-related impacts of companies and ESG controversies. The evolving nature of ESG considerations, models and methodologies means it can be challenging to definitively and universally classify a company or investment under an ESG label and there may be areas where such companies and investments could improve or where adverse ESG-related impacts or ESG controversies exist. The evolving nature of sustainable finance related regulations and the development of jurisdiction-specific regulatory criteria also means that there is likely to be a degree of divergence as to the interpretation of such terms in the market.

We expect industry guidance, market practice, and regulations in this field to continue to evolve. Any references to 'sustainable', 'sustainability', 'green', 'social', 'ESG', 'ESG considerations', 'ESG factors', 'ESG issues' or other similar or related terms in this document are as used in our public disclosures and not to any jurisdiction-specific regulatory definition or other interpretation of these terms unless specified otherwise.

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Any past or simulated past performance including back-testing, modelling or scenario analysis contained herein is no indication as to future performance. Past performance is not necessarily indicative of future results. No representation is made as to the accuracy of the assumptions made within, or completeness of, any modelling, scenario analysis or back-testing and no representation is made that any returns will be achieved.

OPINIONS SUBJECT TO CHANGE

All opinions and estimates are given as of the date hereof and are subject to change. The value of any investment may also fluctuate as a result of market changes. Barclays is not obliged to inform the recipients of this communication of any change to such opinions or estimates.

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Not For Further Distribution or Distribution To Retail Investors.

For Discussion Purposes Only.

IMPORTANT DISCLOSURES

For important regional disclosures you must read, visit the link relevant to your region. Please contact your Barclays representative if you are unable to access.

EMEA

<https://www.home.barclays/disclosures/important-emea-disclosures.html>.

APAC

<https://www.home.barclays/disclosures/important-apac-disclosures.html>.

U.S.

<https://www.home.barclays/disclosures/important-us-disclosures.html>.

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