2024 ASA SPRING FAIR VALUE CONFERENCE

APRIL 25

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ESG and Investor Returns: Why Should We Care?

Carla S. Nunes, CFA, ABV
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Carla S. Nunes, CFA, ABV is a Managing Director in the Office of Professional Practice of Kroll (previously Duff & Phelps). She has over 25 years of experience. In that role, Carla provides firm-wide technical guidance on a variety of valuation, financial reporting and tax issues. She also co-authors Kroll's annual U.S. and European Goodwill Impairment Studies. In addition, Carla is the Global Leader of Kroll's Valuation Digital Solutions group, which produces cost of capital thought leadership content and data housed in the Cost of Capital Navigator.

- In 2011, Carla completed a one-year rotation in Kroll's London office, where she promoted the firm's IFRS education efforts and marketing initiatives, as well dealing with IFRS implementation issues.
- Prior to this role, Carla was part of the Valuation Advisory Services business unit, performing engagements primarily for financial reporting and tax purposes at Kroll's predecessor firms, PricewaterhouseCoopers, Standard & Poor's, and Duff & Phelps.
- Carla has conducted numerous business and asset valuations for a variety of purposes, including purchase price allocations, goodwill impairment testing, M&A, corporate tax restructuring and debt analysis. She has been involved in multiple valuation assignments for a wide range of industries, including pharma & biotech, healthcare, vitamin retail, specialty chemicals, industrial manufacturing and gaming & hospitality. Carla has substantial experience with cross-border valuations, working with multinational corporations to address complex tax, international cost of capital and foreign exchange issues.
- Carla is one of Kroll's experts addressing valuation issues related to cost of capital. She is a co-author of the "Valuation Handbook" series and is a co-creator of the Kroll Cost of Capital Navigator. Carla is a frequent speaker in webinars and conferences on the topics of cost of capital, goodwill impairment and valuation in general.
- Carla has recently completed her term as Practitioner Director in the Board of the Financial Management Association (FMA) International and she is a member of the Education Committee of the International Institute of Business Valuers (iiBV). Carla is also a board member of the Simon Women's Alliance, and she was a Fellow of the (defunct) Kroll Institute.
- Carla received her MBA in finance from the University of Rochester's Simon School, an honors degree in business administration from Lisbon's School of Economics and Management (ISEG Lisbon) and completed coursework for a Masters of Taxation from Villanova University School of Law. Additionally, she holds a Chartered Financial Analyst (CFA) designation, an Accredited in Business Valuation (ABV) credential, and has passed the exam and fulfilled all the requirements for the Certified in Entity and Intangibles Valuations (CEIV) credential (now-discontinued). Carla also holds a certification awarded by the Wharton ESG Executive Certificate for Financial Professionals Program.
- Carla was a co-author of the Kroll's "ESG and Global Investor Returns Study" (2023) which examined the relationship between historical returns of over 13,000 publicly traded companies across a variety of geographies and industries and their ESG ratings to determine the correlation of ESG ratings to company performance.

Background

Flavors of Investing – Lots of Terminology

Often Used Interchangeably, BUT They're NOT Necessarily the Same and they keep changing!

Sustainable

- Focus on the relationship between a company and the environment
- Looks at how a company (or an investment) impacts the world
- A sustainable portfolio is about intentionally including companies that are making a "positive" difference in the world
- Sustainable investing is a broader concept and includes SRI and climate/ environmental (although the terms are often used interchangeably)

ESG

- ESG is an investment framework
- Tends to focus on public markets
- ESG looks at how the world impacts a company or investment
- Market participants consider in their decision-making the ways in which ESG risks and opportunities can have material impact on a company's financial performance, both positive and negative.

Climate

- Arguably a narrow concept than environmental issues (e.g., natural resources, biodiversity), but often used interchangeably
- Environment is one of the pillars in ESG and often the one that gets most attention

Impact

- Typically refers to private investments
- Direct connection between values-based priorities and the use of investors' capital
- Funds report not just on financial performance (returns), but also try to generate and quantify a positive environmental and/or social impact (e.g., how many schools were built)

SRI

- Typically refers to public (listed) companies
- Investing strategy that entails screening investments to exclude businesses that conflict with the investor's values (sometimes called "ethical investing")
- Original "sin stocks" included alcohol, tobacco, weapons and gambling
- Now the selection may be based on a wider range of social and environmental criteria (e.g., no "carbon" stocks)

Background

- Many questions have arisen on what qualifies an initiative or an investment to be labeled as climate-, ESG-, or sustainability-focused. Accusations of **greenwashing** have risen significantly.
- **Lack of consistency and standardization** about what these terms mean contribute to ESG.
- The **voluntary** nature of much of the reporting means that many companies and funds selectively disclose information that portrays them more favorably. According to the **Carrots & Sticks** project (analysis by Kroll):
  - In 2020 there were over 600 sustainability reporting provisions globally, with almost 60% being mandatory and with the balance being voluntary.
  - In 2023 database expanded to cover 130 countries. In May 2023, the number of sustainability reporting provisions had increased to over 2,400, with 55% being voluntary in nature.
- This has led to a greater effort by international standard setters and regulators to propose and, in some cases, adopt mandatory disclosure rules.

ESG: The Land of Confusion

Governing Principles

- UN Global Compact
- Sustainable Development Goals
- PRI Principles for Responsible Investment
- World Economic Forum

Reporting Frameworks

- CDSB Climate Disclosure Standards Board
- GRI Empowering Sustainable Decisions
- SASB Sustainability Accounting Standards Board
- IFC International Finance Corporation, World Bank Group — Creating Markets, Creating Opportunities
- CDP
- ICGN
- TCFD Task Force on Climate-Related Financial Disclosures
- <IR>

Ratings Agencies

- Sustainalytics
- S&P Global
- Morningstar
- RobecoSAM — We are Sustainability Investing.
- Trucost
- ISS
- Dow Jones Sustainability Indexes
- MSCI
- vigeo eiris
- FTSE Russell
- Refinitiv

Investor Resources

- RepRisk
- CSRHUB
- MioTech
- OWL analytics
- TruValue Labs
- Util
- Climate Action 100+
- arabesque s-ray
- covalence ESG ratings
- Impact Lens
- S-Factor
- Marklabs

Data Aggregators

Reporting

- NOSSA DATA
- Impact Management Project
- OneReport
- GRI Certified Software & Tools Program
- The Reporting Exchange
- scope 5
- Metrio
- CSRware
- Certified B Corporation
- measurabl

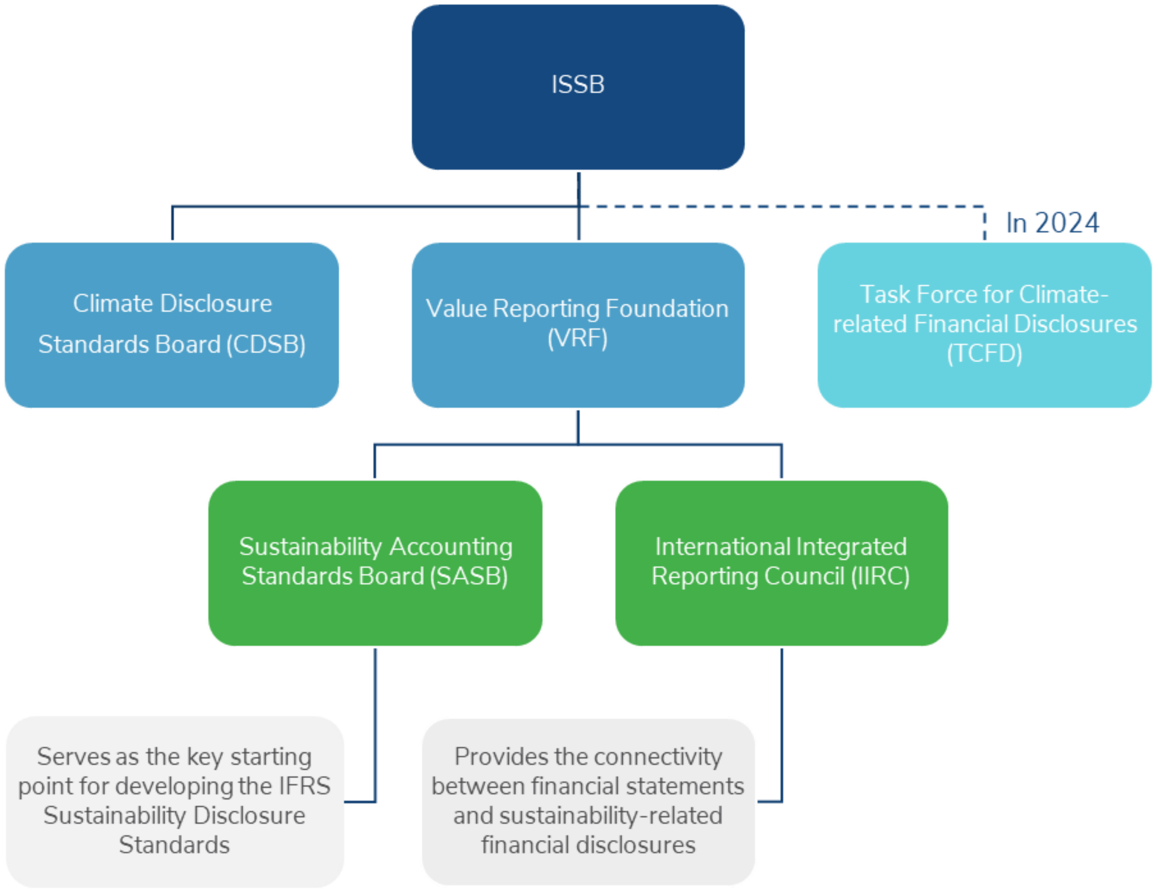
Metric Specific Monitoring

- ecovadis
- materiality.sasb.org
- SINAI
- Datamaran®
- TCS
- normative
- ecoact
- Turnkey Group
- Emitwise
- wbcsd

ESG Disclosure and Regulatory Developments

International Sustainability Standards Board (ISSB)

- Created in November 2021, following widespread support during the United Nations Climate Conference (COP26) in Glasgow.
- The IFRS Foundation now oversees two global standard setting boards:
  - (1) the IASB, responsible for international financial reporting standard (IFRS) and
  - (2) the ISSB, tasked with setting IFRS Sustainability Disclosure Standards.
- **In 2022, the IFRS Foundation integrated other independent organizations that had been previously producing voluntary climate, or more broadly ESG and sustainability disclosure standards. In 2024, the TCFD will be transferred to ISSB's supervision.**
- **ISSB's Objective:** Deliver a comprehensive global baseline of sustainability-related (climate and other ESG) disclosure standards that provide investors and other capital market participants with information about companies' sustainability-related risks and opportunities, thereby allowing more informed investment decisions.



Source: Kroll ESG and Global Investment Returns Study, Exhibit 3

Important Corporate Reporting Initiatives with Potential Global Reach

International Sustainability Standards Board (ISSB)

- *IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information*
- *IFRS S2 Climate-related Disclosures*

European Union (EU)

- Corporate Sustainability Reporting Directive (CSRD)
- *European Sustainability Reporting Standards* (ESRS) developed by EFRAG

United Kingdom (UK) Department for Business and Trade (DBT)

- UK Sustainability Disclosure Standards (SDS)
- *Corporate disclosures on sustainability-related risks and opportunities will be in line with ISSB (IFRS S1 and IFRS S2), with any diversion only if strictly necessary*

United States Securities and Exchange Commission (SEC)

- "The Enhancement and Standardization of Climate-Related Disclosures for Investors" (March 2024)

State of California

- Climate Corporate Data Accountability Act (CCDAA) (CA SB 253)
- Climate-Related Financial Risk Act (CRFRA) (CA SB 261)

This is by no means an exhaustive list. ESG and/or sustainability-related regulation has also been recently adopted or proposed by national and subnational governments and regulators across the globw.

Fund Reporting Initiatives with Potential Global Reach

European Union (EU)

Sustainable Finance Disclosure Regulation (SFDR):
- Article 6
- Article 8
- Article 9

United Kingdom Financial Conduct Authority (FCA)

UK Sustainability Disclosure Requirements (SDR)

Applies to issuers of bonds and shares listed on a UK regulated market and UK-based investment managers. Focus is to provide greater transparency and consistency in the market for sustainable investment products

United States Securities and Exchange Commission (SEC)

Amendments to the Fund "Names Rule"

Proposed ESG Disclosures for Investment Advisers and Investment Companies

State of California

California Fair Investment Practices by Investment Advisers (SB 54)

Mandates that investment advisers managing venture capital or certain other private funds to report information about their portfolio companies, which includes information on the diversity of the founders they are backing

What are Scopes 1, 2 and 3 Emissions?

Greenhouse Gas (GHG) Protocol

The GHG Protocol Corporate Standard classifies a company's GHG emissions into three 'scopes'.

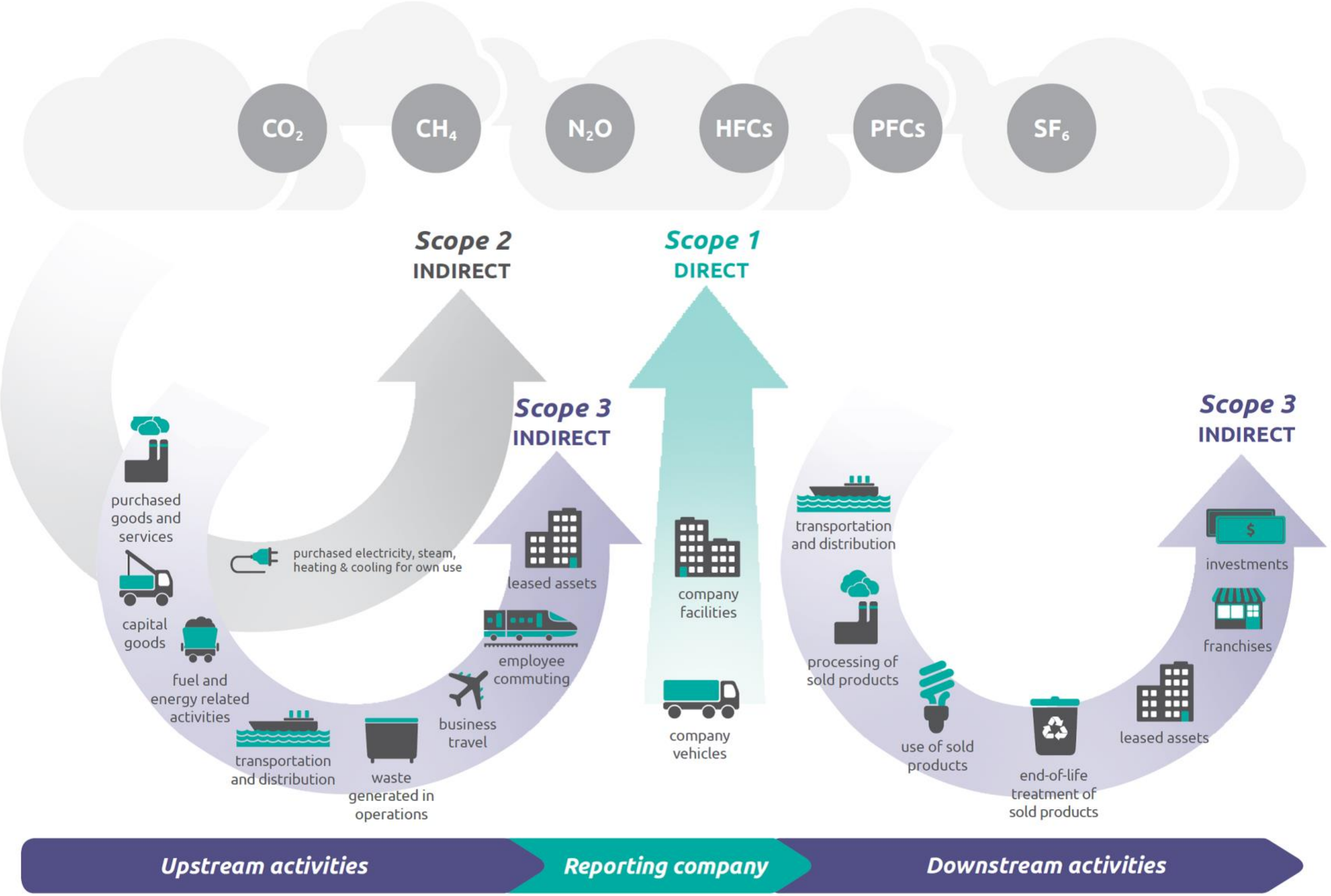
Scope 1: direct emissions from owned or controlled sources.

Scope 2: indirect emissions from the generation of purchased energy.

Scope 3: indirect emissions (not included in scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions.

What are Scopes 1, 2 and 3 Emissions?

Source: Greenhouse Gas (GHG) Protocol



What does this all mean for you?

Given the broad jurisdictional reach and low financial thresholds, many public and private business and funds will be caught off guard by these regulations

Illustrative examples of financial thresholds and timing

	Regulation	Minimum Revenue Threshold	Public/private	Earliest Potential Timing
	EU CSRD	EU €50 million*	Both	For large companies not considered public interest entities (PIEs), annual reporting begins with 2025 data. PIEs need to start reporting 2024 data in FY2025
	CA SB 253	US $1 billion	Both	Annual reporting begins in 2026 for 2025 data (2027 for Scope 3 GHG reporting).
	CA SB 261	US $500 million	Both	Biannual reporting begins in 2026.

* Organizations meeting at last two of the following three metrics on two consecutive annual balance sheet dates have to report under CSRD: total assets of €25 million, net turnover (revenue) of €50 million and an average of >=250 employees.

What does this all mean for you?

SEC – Final application will depend on whether rules are overturned

Illustrative (simplified) examples of timing

Registrant Type	All Reg. S-K and S-X disclosures, with some exceptions (*)	Item 1502(d)(2), Item 1502(e)(2), and Item 1504(c)(2) (*)	GHG Scope 1 and 2 Emissions
Large Accelerated Filers	FYB 2025	FYB 2026	FYB 2026
Accelerated Filers (if not in category below)	FYB 2026	FYB 2027	FYB 2028
Non-Accelerated and Other Filers**	FYB 2027	FYB 2028	N/A

Source: https://www.sec.gov/files/rules/final/2024/33-11275.pdf
FYB = Fiscal Year Beginning
* Item 1502(d)(2), Item 1502(e)(2), and Item 1504(c)(2) lay out requirements to provide quantitative and qualitative disclosures about material expenditures and material impacts to financial estimates and assumptions.
** Other filers include small reporting companies (SRCs) and emerging growth companies (EGCs).

Future of the U.S. Rules?

Litigation

- SEC was sued immediately after releasing its final climate disclosure rules by:
  - Certain business groups and certain Republican-led states claiming that the SEC is overextending its authority. These suits seek to overturn the rules.
  - The Sierra Club (a leading environmental group) and the Sierra Club Foundation sued the SEC because they believe the rule doesn't go far enough. The group assert that the finalized rule dropped important disclosures that had been proposed (e.g., Scope 3 emissions) and allows companies to "selectively report" climate risks, leaving investors in the dark about the full scope of risks.
  - SEC paused implementation of the rule but continued to defend its validity.
- Lawsuit challenging California's SB253 and SB261 (enacted in October 2023) was filed by business groups against the California Air Resources Board (and its representatives) in federal court. The plaintiffs are seeking a ruling that would block and overturn SB253 and SB261.

IVSC

IVS Effective January 31, 2025

- Environmental, Social and Governance (ESG) is defined as "the criteria that together establish the framework for assessing the impact of the sustainability and ethical practices, financial performance or operations of a company, asset, or liability. ESG comprises three pillars: environmental, social and governance, all of which may collectively impact performance, the wider markets and society."
- *IVS 104 Data and Inputs: Appendix Environmental, Social and Governance Considerations* states that:
  - "The *valuer* should be aware of relevant legislation and frameworks in relation to the *environmental, social and governance* factors impacting a *valuation*."
  - "A10.01 The impact of *significant ESG* factors *should* be considered in determining the *value* of a company, asset or liability"
  - "A10.02 *ESG* factors may impact *valuations* both from a qualitative and quantitative perspective and may pose risks or opportunities that *should* be considered".
  - "A10.06 *ESG* factors and the *ESG* regulatory environment *should* be considered in *valuations* to the extent that they are measurable and would be considered reasonable by a *valuer* applying *professional judgement*."

IVSC

IVSC Global Survey – ESG in the Valuation Process

- IVSC ESG Working Group launched a global survey to valuation professionals on how they are incorporating (if at all) ESG factors into their valuations.
- Survey results will assist the IVSC in its efforts to refine and enhance ESG-related standards and practices.
- Survey is open from 30 March to 31 May 2024.
- Available here: https://www.ivsc.org/esg-in-the-valuation-process/

Kroll ESG and Global Investor Returns Study

Is There Evidence That Investors Care About ESG?

Background: Academic Research

- **Academic research on ESG can be categorized into two types of studies: corporate and investor.**
- **Corporate studies** analyze how adopting ESG investing principles impacts the firm's financial performance. From a corporate manager's perspective, this can be summarized by the impact of ESG policies on the firm's cash flows and cost of capital.
- **Investor studies** refer to the market performance of ESG funds, portfolios, or indexes versus traditional ones, from the perspective of an asset manager.
- Empirical findings show **mixed results** on the relationship between sustainability and cost of capital. Some studies that show a positive relationship between sustainability and cost of capital. Others support the theory of a negative to nonexistent relationship.
- **Divergence in the ratings** assigned by different ESG ratings agencies found to be an issue. Numerous ESG ratings providers use varying different methodologies. ESG rating uncertainty could increase the cost of capital for green companies, according to a study.

Kroll ESG and Global Investment Returns Study

Executive Summary

- **Released in September 2023**
- Universe of over **13,000+** publicly-traded companies across a variety of geographies and industries around the globe.
- Investigated the relationship between a company's total stock returns (dividends plus capital appreciation) and its MSCI ESG rating over the **2013-2021 period**.
- Examined **four geographic regions** (World, North America, Western Europe, and Asia Pacific) and **12 countries/markets** (Australia, Brazil, Canada, China, France, Germany, Hong Kong SAR, India, Japan, South Korea, United Kingdom, and United States).
- Within some of these geographies, we further scrutinized the results for **11 industries** (as defined by the GICS): Energy, Materials, Industrials, Consumer Discretionary, Consumer Staples, Health Care, Financials, Information Technology, Communications Services, Utilities and Real Estate.
- Interactive ESG Dashboard available here: https://www.kroll.com/en/insights/publications/cost-of-capital/esg-global-investor-returns-study

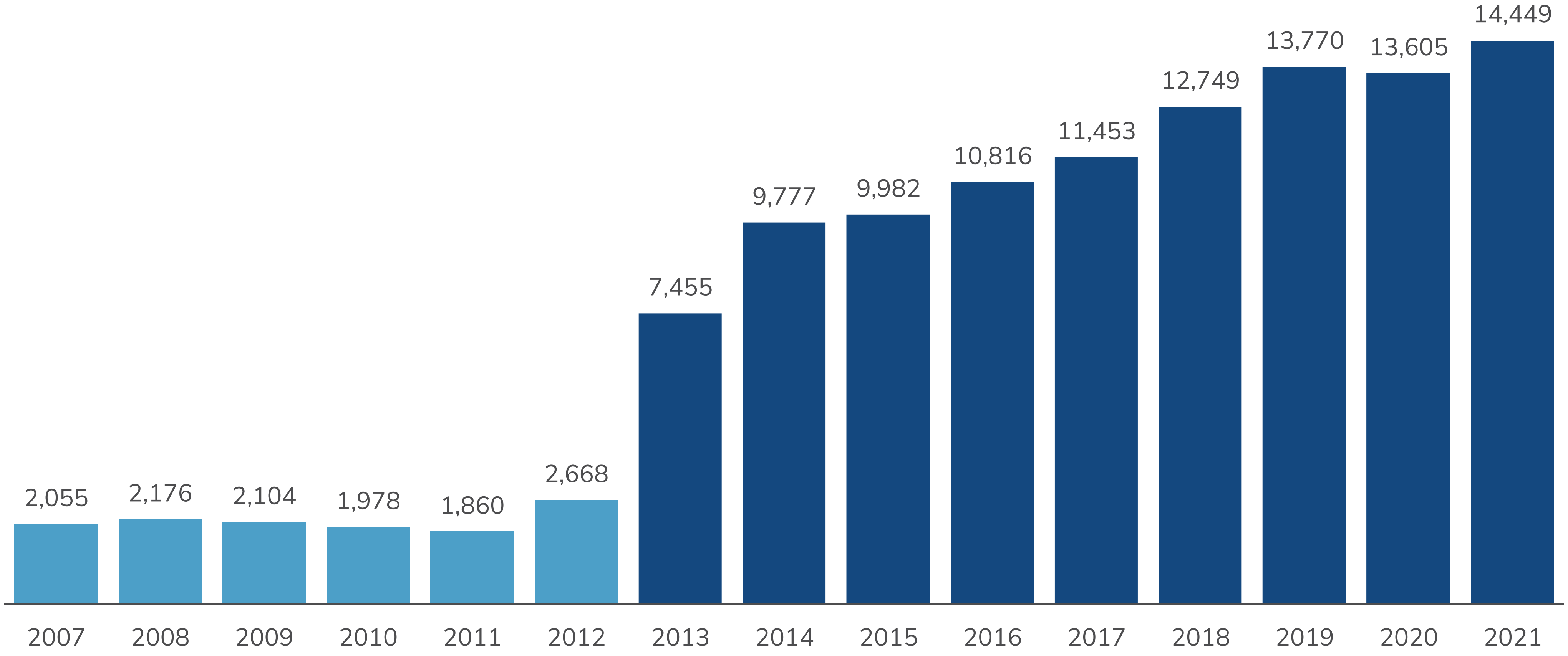
Why MSCI?

Rationale for selecting MSCI as the source of ESG ratings for the Kroll Study

In early 2021, Kroll conducted an analysis of main providers of corporate ESG ratings to decide on which source to use for our analysis. We interviewed researchers at some of these providers to better understand their rating methodology. Ultimately, our decision tried to balance some of the following key elements:

- Coverage period
- Coverage depth
- Frequency of re-rating
- Composite ESG ratings availability
- Rating methodology

Monthly Average Number of Issuers Included in the MSCI ESG Ratings Time Series



MSCI ESG Ratings System

Not the same as Credit Ratings

AAA AA

Leader
A company leading its industry in managing the most significant ESG risks and opportunities.

A BBB BB

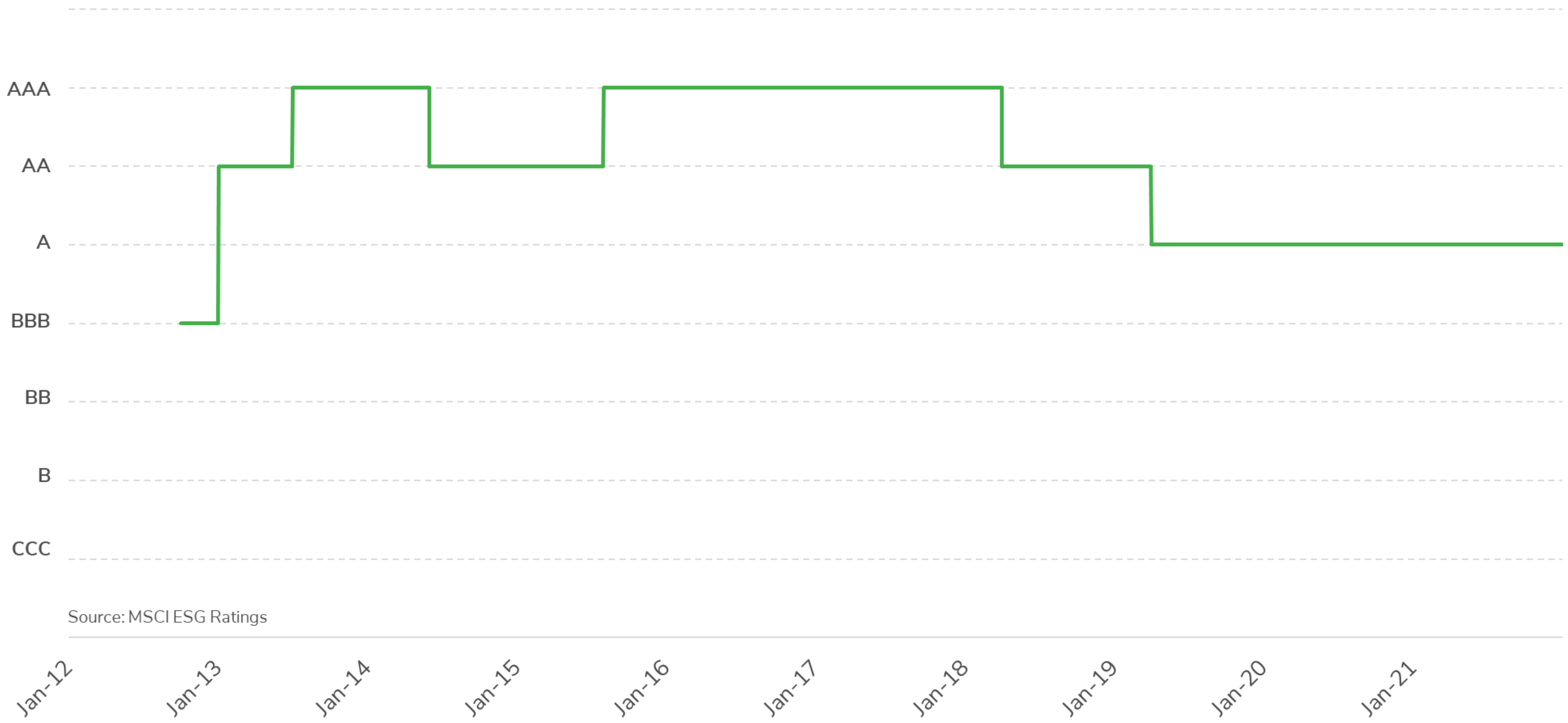
Average
A company with a mixed or unexceptional track record of managing the most significant ESG risks and opportunities relative to industry peers.

B CCC

Laggard
A company lagging its industry based on its high exposure and failure to manage significant ESG risks.

MSCI ESG Ratings Over Time

Example: Tesla



Kroll ESG and Global Investment Returns Study

Methodology Summary

- Created portfolios (or indexes) comprised of companies rated in each of MSCI's ESG rating categories and rebalanced them each month over the study period.
- Computed total returns (= dividend + capital appreciation) on a monthly basis for each index:
  - Calculated what the cumulative return was for each index since January 2013 through December 2021 (i.e., what would $1 invested in December 2012 would grow to be at the end of December 2021).
  - Annualized the cumulative returns for easy comparison of one rating category relative to another.
- Index returns are market-cap weighted based on the individual companies' total returns in each rating category.
- Returns are denominated in USD to allow for comparison across geographies.

Types of Securities Included and Excluded in the Study

Included

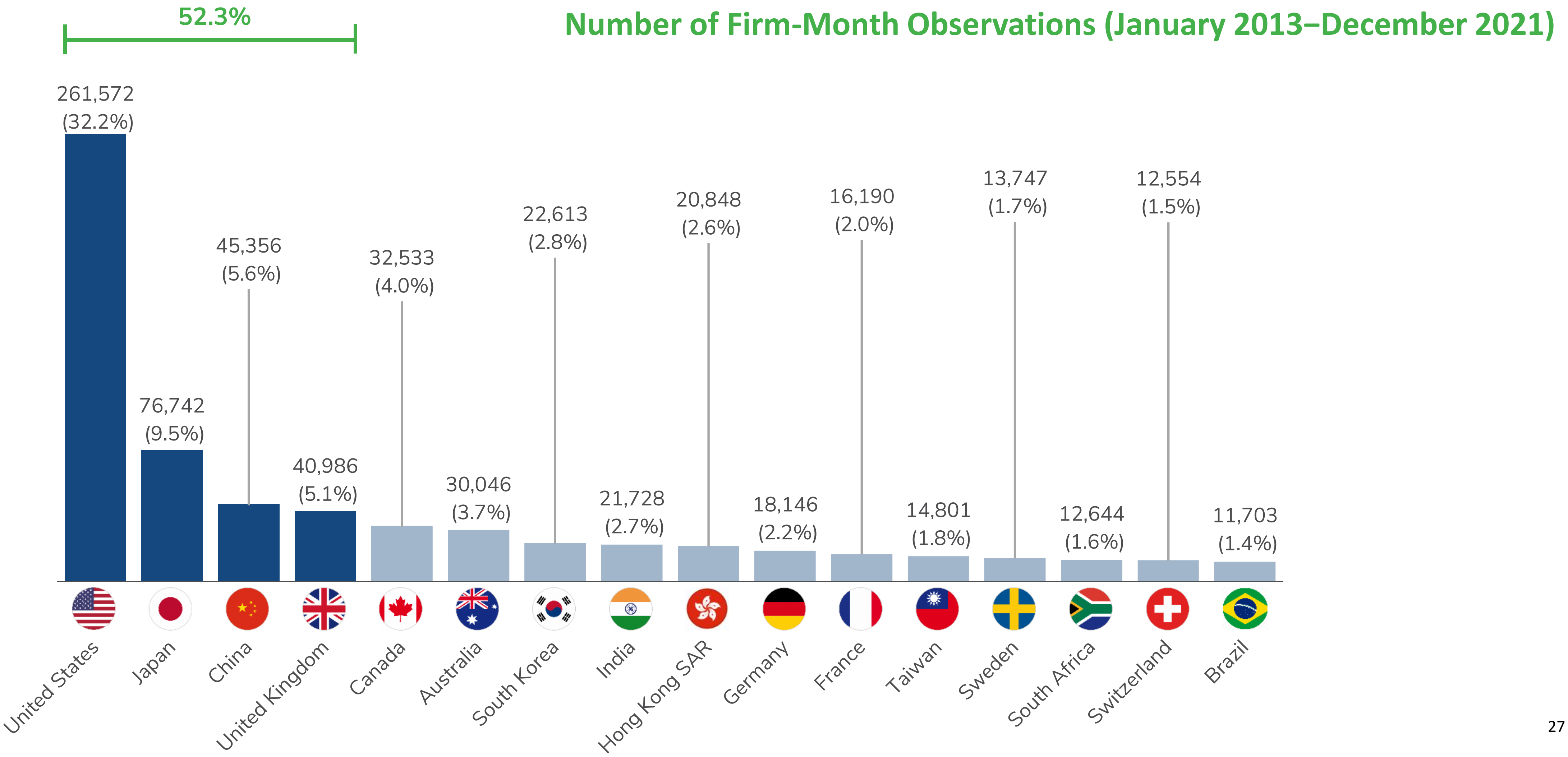
TRCS Code	Description of TRCS Code
BDR	Brazilian Depository Receipts
CEDEAR	Argentinian Depository Receipts
CHESS	CHESS Depository Interests
DEPOSITSHS	Depository Shares
FULLPAID	Fully Paid Ordinary Shares
ORD	Ordinary Shares
STAPLED	Stapled Securities
ADR	American Depository Receipts
DEPOSITSHS	Depository Shares

Source: Refinitiv

Excluded

TRCS Code	Description of TRCS Code
NA	NA
CAPSEC	Capital Securities (NYSE)
CEF	Closed-Ended Fund
CPR	Convertible Preference Shares
CRTGUA	Guarantee Certificates
CUM	Cumulative Preference Shares
DEBENT	Debenture
DEFER	Deferred Shares
DRC	Depository Receipt
DVR	Differential Voting Rights Shares
ELN	Equity-linked Note
ENHTRUST	Enhanced Trust Preferred Securities(NYSE)
GENUS	Genussscheine
INVCERT	Investment Certificates
ORDSUBR	Ordinary Subscription Receipts
PART	Participation
PARTPRF	Participating Preference Shares
PREFERRED	Preferred Shares
PRF	Preference Shares
REDEEM	Redeemable Preference Shares
RTS	Rights
SAVE	Savings Shares
UNT	Unit

Top 16 Countries/Markets Included in the World Indexes

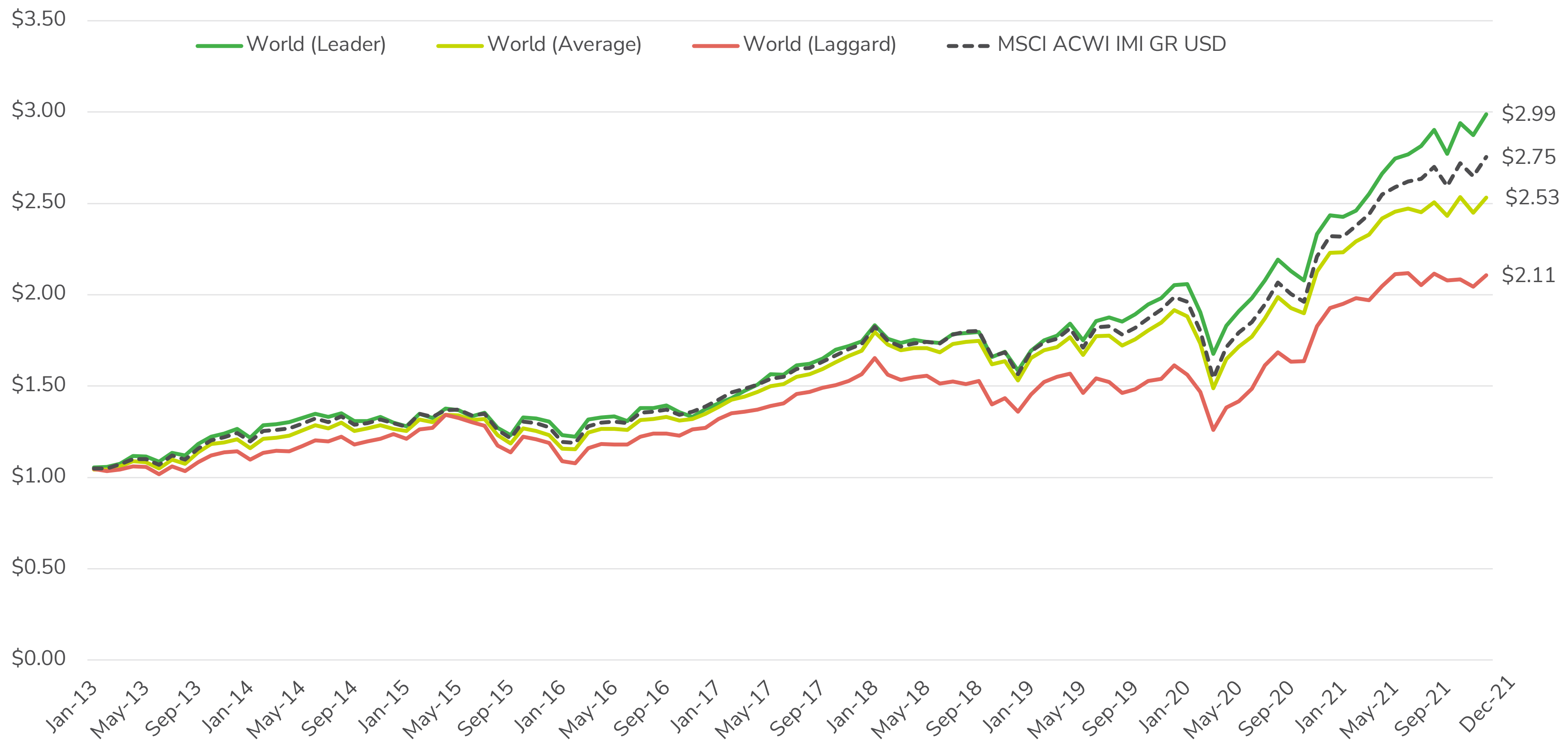


Kroll Study

Aggregate MSCI Ratings (Leader, Average, Laggard) vs. MSCI ACWI IMI Index Cumulative Return

(USD 1 Invested in December 2012)

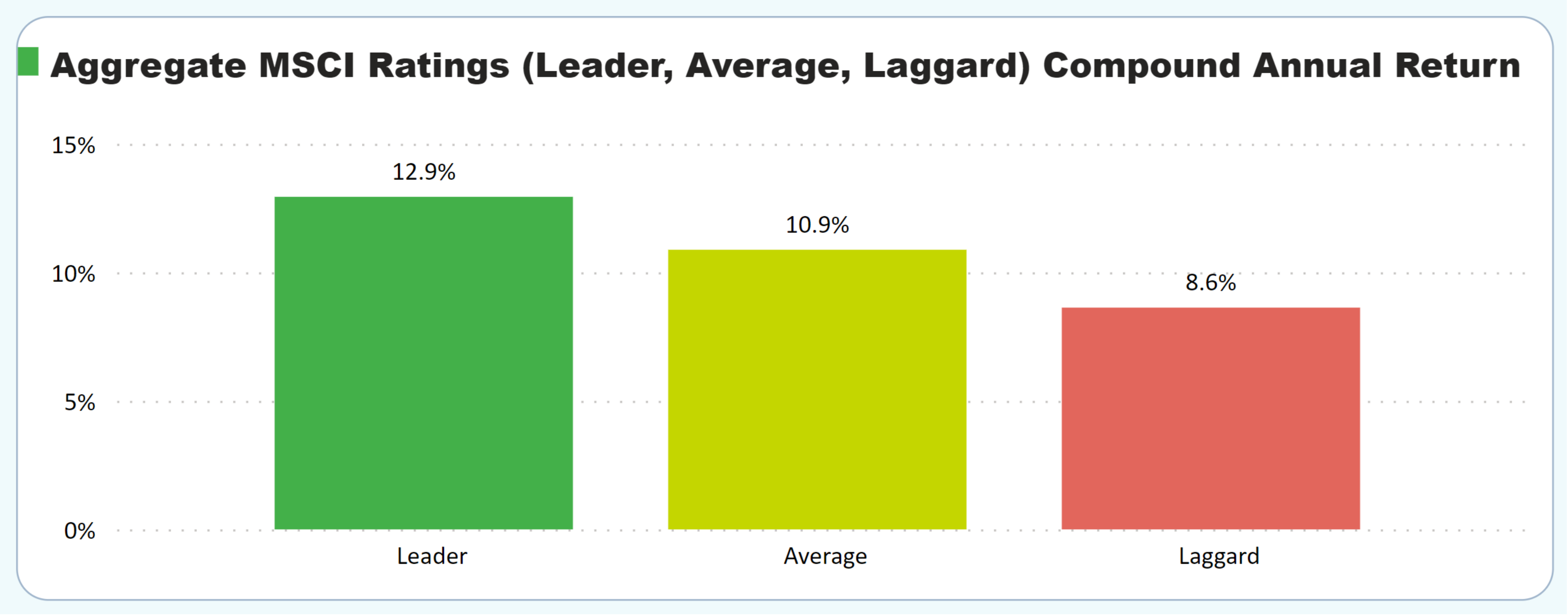
January 2013–December 2021



Source: Kroll ESG and Global Investment Returns Study

Kroll Study

High Level Results – World Portfolio



Source: Kroll ESG and Global Investment Returns Study

Filtered by Rating (is Leader, Average, Laggard, or Overall), Industry (is Overall), Region (is World)

Kroll Study

High Level Results – World Portfolio

Company Count by MSCI Rating (Leader, Average, Laggard)

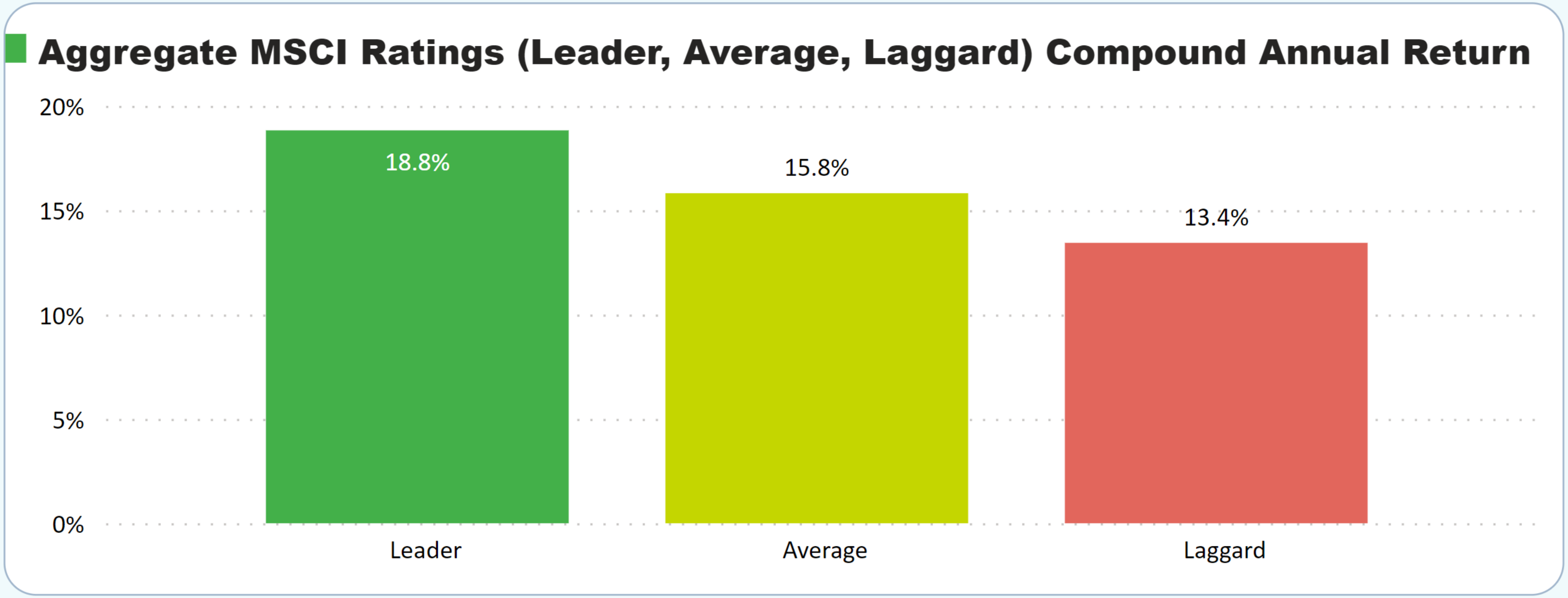
Rating	Company Count (Mo. Avg. 2013–2021)	Company Count (Dec 2021)	
Leader	941	1,486	13%
Average	4,780	6,621	64%
Laggard	1,791	2,563	24%

Source: Kroll ESG and Global Investment Returns Study

Filtered by Rating (is Leader, Average, Laggard, or Overall), Industry (is Overall), Region (is World)

Kroll Study

High Level Results – North America



Source: Kroll ESG and Global Investment Returns Study

Filtered by Rating (is Leader, Average, Laggard, or Overall), Industry (is Overall), Region (is North America)

Kroll Study

High Level Results – North America

Company Count by MSCI Rating (Leader, Average, Laggard)

Rating	Company Count (Mo. Avg. 2013–2021)	Company Count (Dec 2021)	
Leader	181	312	10%*
Average	1,904	2,198	72%*
Laggard	639	523	17%*

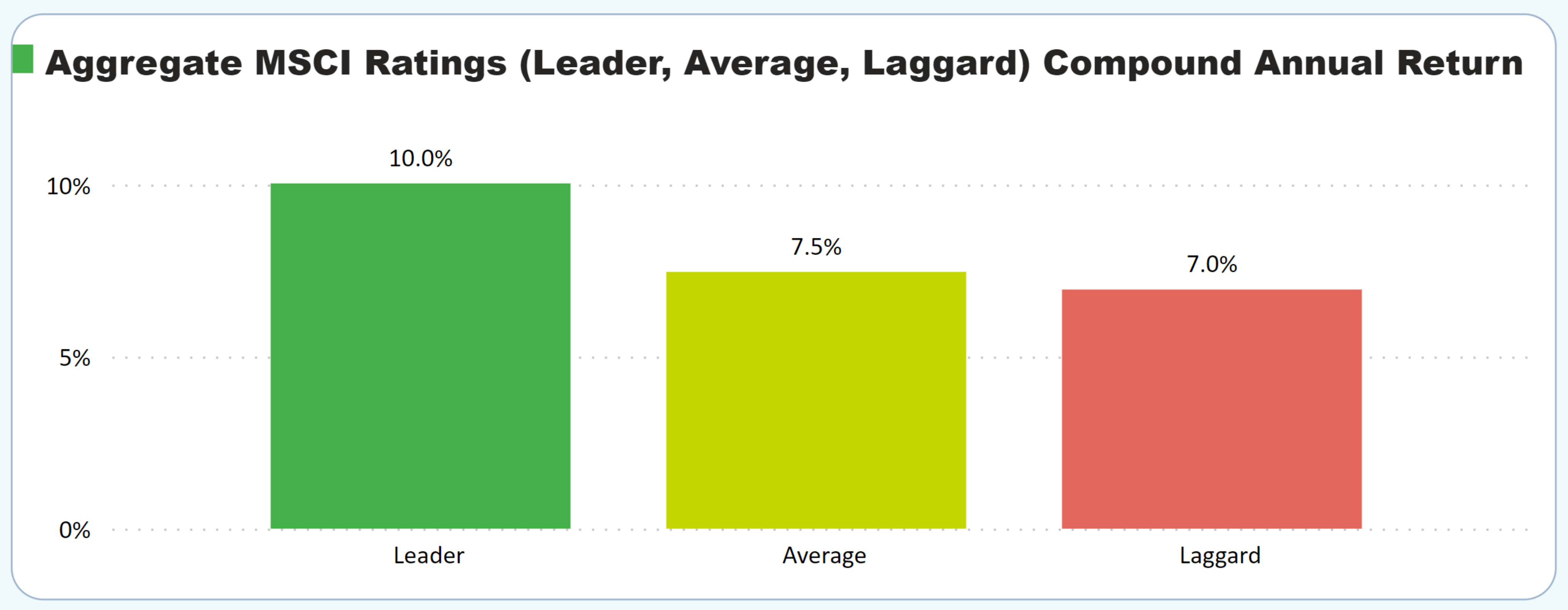
* Differences due to rounding

Source: Kroll ESG and Global Investment Returns Study

Filtered by Rating (is Leader, Average, Laggard, or Overall), Industry (is Overall), Region (is North America)

Kroll Study

High Level Results – Western Europe



Source: Kroll ESG and Global Investment Returns Study

Filtered by Rating (is Leader, Average, Laggard, or Overall), Industry (is Overall), Region (is Western Europe)

Kroll Study

High Level Results – Western Europe

Company Count by MSCI Rating (Leader, Average, Laggard)

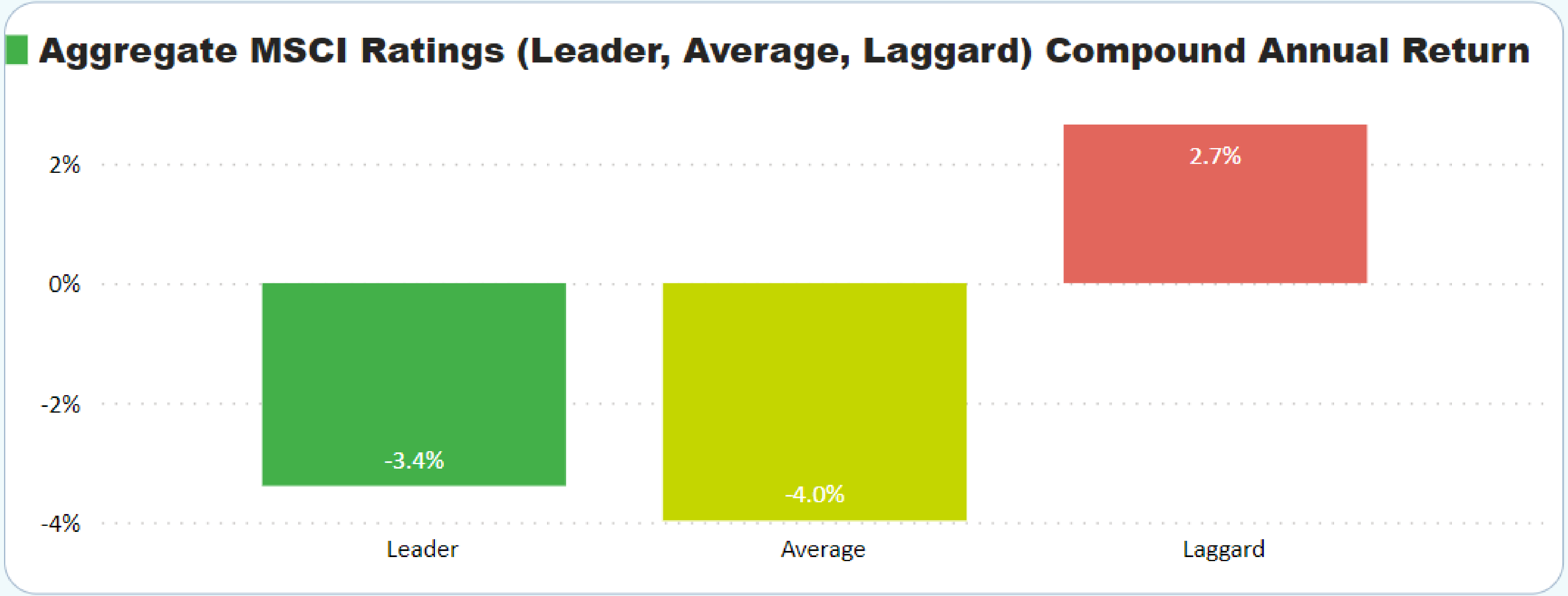
Rating	Company Count (Mo. Avg. 2013–2021)	Company Count (Dec 2021)	
Leader	409	655	34%
Average	897	1,152	60%
Laggard	126	122	6%

Source: Kroll ESG and Global Investment Returns Study

Filtered by Rating (is Leader, Average, Laggard, or Overall), Industry (is Overall), Region (is Western Europe)

Kroll Study

High Level Results – Brazil



Source: Kroll ESG and Global Investment Returns Study

Filtered by Rating (is Leader, Average, Laggard, or Overall), Industry (is Overall), Region (is Brazil)

Kroll Study

High Level Results – Brazil

Company Count by MSCI Rating (Leader, Average, Laggard)

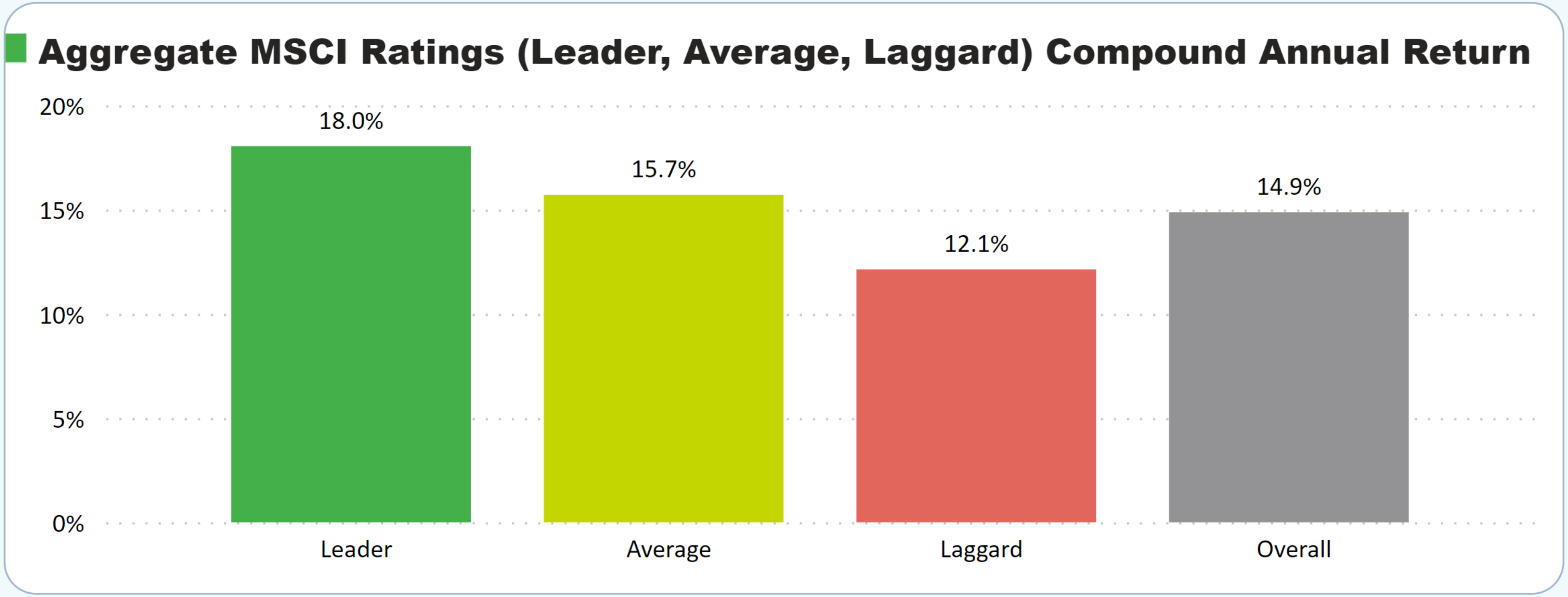
Rating	Company Count (Mo. Avg. 2013–2021)	Company Count (Dec 2021)	
Leader	15	18	14%
Average	58	110	54%
Laggard	35	55	32%

Source: Kroll ESG and Global Investment Returns Study

Filtered by Rating (is Leader, Average, Laggard, or Overall), Industry (is Overall), Region (is Brazil)

Kroll Study

High Level Results – U.S. Industry Example: Financials

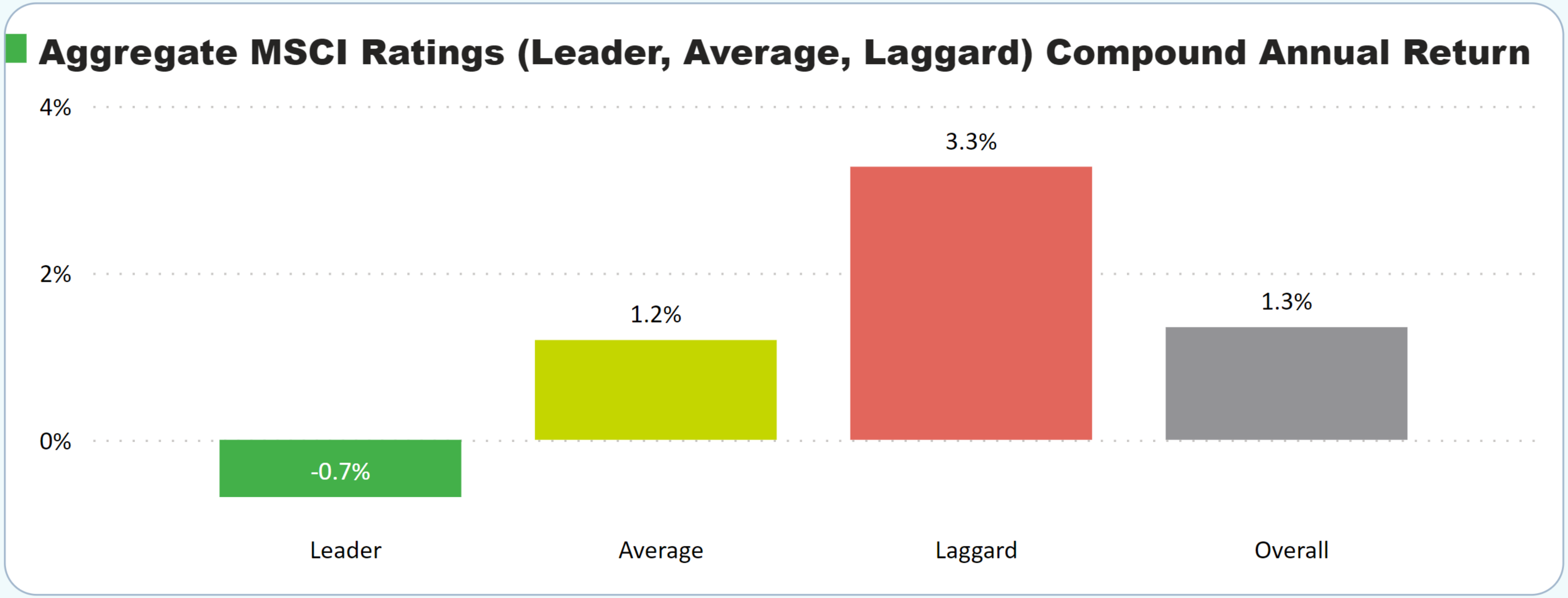


Source: Kroll ESG and Global Investment Returns Study

Filtered by **Rating** (is Leader, Average, Laggard, or Overall), **Industry** (is Financials), **Region** (is United States)

Kroll Study

High Level Results – U.S. Industry Example: Energy



Source: Kroll ESG and Global Investment Returns Study

Filtered by **Rating** (is Leader, Average, Laggard, or Overall), **Industry** (is Energy), **Region** (is United States)

Kroll ESG and Global Investment Returns Study

Main Takeaways

- The idea behind ESG investing is that if significant capital is flowing to companies that are considered “good” ESG citizens, they should be able to raise capital at a lower cost (when compared to “bad” ESG citizens).
- From an investor perspective, a lower cost of capital means that investors should expect lower returns from companies with better ESG credentials. However, the Kroll study reveals that companies with better ESG ratings generally outperformed those with lower ratings over the 2013-2021 period, the opposite that theory would predict.
- This relationship holds generally for all the major geographic regions and for most countries in the study. While we have not shared the graphs in this presentation, there are two notable exceptions: Brazil and Germany.
- Focusing on U.S. industries, the best ESG rated companies do not always come out on top. ESG Leaders outperformed Average and Laggard-rated companies in only five out of the 11 industries examined. Leaders still outperformed Laggards in all but three industries: Energy, Healthcare and Communications Services. Outperformance is not limited to the Tech sector, contrary to popular perception.
- **Bottom line:** making an adjustment to Cost of Capital (discount rates) for ESG is not a straightforward exercise – it could vary by industry and country as well as over time.

Kroll ESG and Global Investment Returns Study

Caveats

- As more scrutiny is placed on what constitutes an ESG-focused investment, capital allocations may change the relationship observed in our study.
- Because there are fewer companies with an ESG rating in some countries/industries, the results may not be as meaningful as for broader geographic regions. This is also the case with the more granular results for the seven individual ESG rating categories (i.e., AAA, AA, A, BBB, BB, B, and CCC).
- The study only covers companies that had an ESG rating assigned by MSCI and therefore does not cover the entire universe of publicly traded companies around the world.

Where Could We see the Impact of ESG in Business Valuations?

Now: in Projected Cash Flows?

- Revenue initiatives
- Brand reputation
- Employee attrition / hiring costs /productivity
- Property losses / Insurance protection
- Stranded assets
- CapEx
- Long-term growth
- Other

Where Could We see the Impact of ESG in Business Valuations?

In the Future?

- Discount rates?
- Trading multiples?
- Acquisition/Transaction multiples?