GIB ASSET MANAGEMENT

ESG Data Indiscretions:

A Sanity Check on Practicality

Gulf International Bank (UK) Limited

September 2018

<page intentionally left blank>

Who We Are

GIB (UK) is a London-based international asset management firm. We have been managing institutional assets for over forty years for our clients from our offices in London and New York. We are active in global equities, investment grade and high yield fixed income (including emerging market debt and structured credit) and trade finance.

We strive to align our investment style with the priorities and goals of our clients. By investing with purpose we create the trust necessary to underpin long-term relationships; some of our clients have been doing business with us for over 30 years.

Our objectives:

- To provide a window on the world for our investors
- To challenge conventional thought and status quo
- To institutionalize a responsible investment culture
- To foster economic development through delivery of innovative investment products
- To provide leading analysis and insight to support client investment decisions
- To deliver superior investment performance

GIB (UK) is regulated in the UK by both the Financial Conduct Authority and the Prudential Regulation Authority and is registered as an Investment Advisor in the United States with the Securities and Exchange Commission.

Visit us on www.gibam.com/insights to access our latest publications.

GIB ASSET MANAGEMENT

Contributing Authors

Gregga J Baxter	General Manager
Alan Lehman, CFA	Senior Analyst
New York	+1 212 922 2341 330 Madison Avenue New York, NY 10017

Samira Laouer	Portfolio Manager
Venetia Bell	Head of Strategy

In addition, this research benefits from the considerable input of GIB (UK) investment teams in London.

London	+44 207 259 3321 One Knightsbridge London, SW1X 7XS

For more information, contact our sales and marketing team at +44 207 259 3149 or by email:

John Angell	John.Angell@gibam.com
Andrew Houghton	Andrew.Houghton@gibam.com

GIB ASSET MANAGEMENT

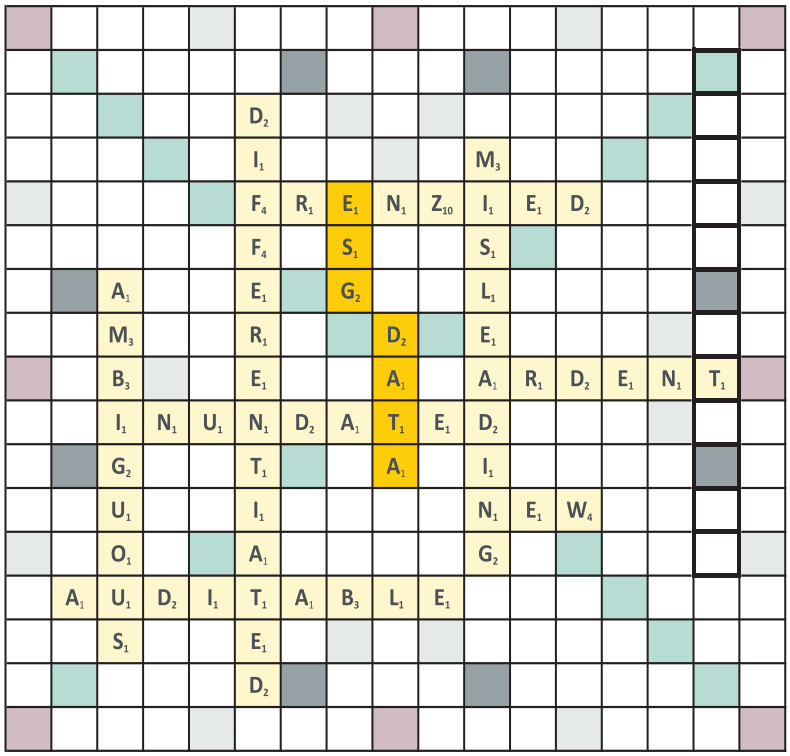
Contents

6 Introduction
7 The Times They Are A-Changin'
10 Two Distinct Data Types
11 Publicly Available Data
13 Non-Publicly Available Data
14 Time Considerations
15 Examining The E/S/G Data
15 Environmental Data
16 Governance Data
18 Social Data
19 Contrast To Credit Ratings
19 Timing
20 Business Models
20 Risk Assessment
22 Conclusion
23 GIB (UK) Observations
24 Annex
26 Disclaimer

GiB ASSET MANAGEMENT

Scrabble™

A$_1$ C$_3$ I$_1$ I$_1$ I$_1$ L$_1$ M$_3$ N$_1$ O$_1$ P$_3$ S$_1$



Well done if you unscrambled the word and found a place for it. Our board is filling up with words used to describe the current state of Environmental, Social and Governance (ESG).

"ESG data is vital to implement SRI investment goals"

Corporate social responsibility (CSR) has exploded in recent years[1], and the I$_1$ M$_3$ P$_3$ L$_1$ I$_1$ C$_3$ A$_1$ T$_1$ I$_1$ O$_1$ N$_1$ S$_1$ of the underlying ESG data are profound. Used as building blocks, this data is essential to measure corporate sustainability. Unfortunately, there is no single standard being applied, companies decide how they measure their reported metrics and research and data providers act as judge and jury who mediate this data. This publication looks to examine ESG data from a unique perspective and assess potential pitfalls while highlighting valuable use cases.

"Data is confusing"

We invite you to read our first publication[2]; our maiden voyage to better understand ESG and the implications to us as an investment manager as we look to incorporate these data sets into our own investment methodology.

1 UN PRI Signatories have grown ~30% (pa) since 2006 https://www.unpri.org/pri/about-the-pri
2 GIB (UK) – Sustainable and Responsible Investing (SRI) (December 2017) https://www.gib.com/en/our-thoughts

GIB ASSET MANAGEMENT

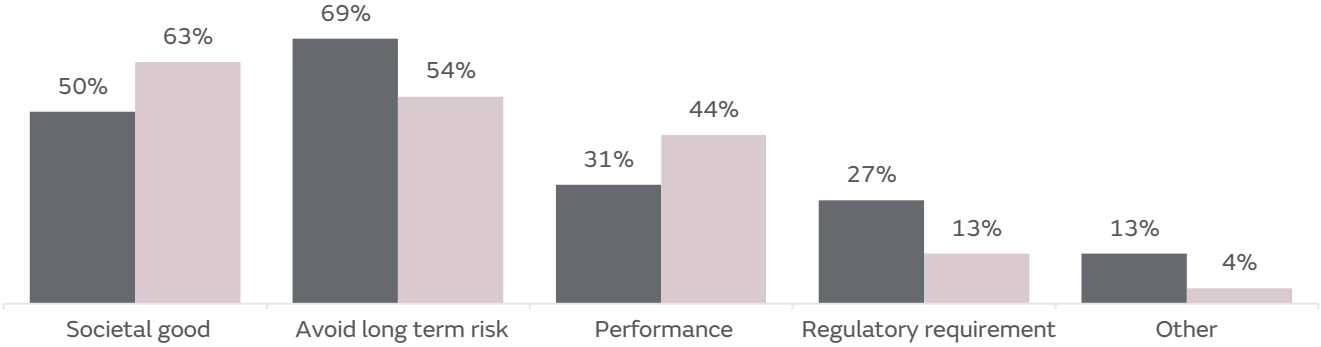
The Times They Are A-Changin'

Asset owners have always driven demand for products and services in the financial marketplace. Today they are A R D E N T L Y calling for the adoption of sustainability as a core investment objective. According to CFA Institute, 45% of asset managers take ESG issues into consideration primarily because of client demand.[3] This is forcing managers to incorporate ESG factors into their investment decisions.

Come mothers and fathers
Throughout the land and don't criticize
What you can't understand
Your sons and your daughters
Are beyond your command
Your old road is rapidly agin'.
Please get out of the new one
If you can't lend your hand
For the times they are a-changin'.

Bob Dylan – The Times They Are A-Changin' (1964)

What is your motivation for applying ESG considerations?



Source: FTSE Russell: Smart Beta: 2018 Global Survey Findings from Asset Owners

"Investment activity can no longer support economic activity that is unsustainable"

GIB (UK) – Sustainable and Responsible Investing (December 2017)

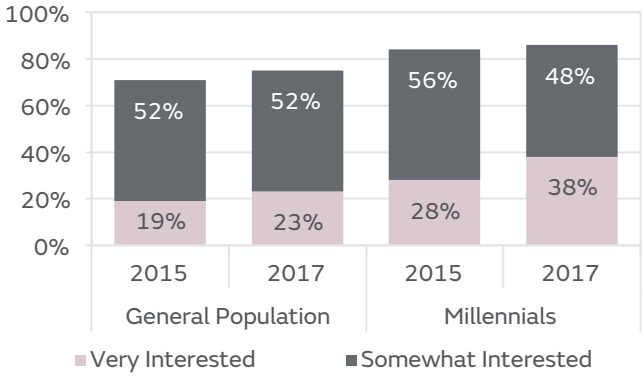
3 CFA Institute Environmental, Social and Governance (ESG) Survey (2017)

According to the US Census Bureau, Millennials have surpassed the Baby Boomer generation.[4] "It is estimated that by 2025, [Millennials] will make up as much as 75 percent of the workforce."[5] Furthermore, Millennials place more emphasis on sustainability and this has led to a growth in demand for ESG.

Data is becoming increasingly abundant. International Data Corporation projects a 10 fold increase in the global data sphere, from 16.1 trillion gigabytes (zettabytes) per year in 2016 to 163 zettabytes per year in 2025.[6] In this FRENZIED ESG marketplace, companies are more forthcoming with their sustainability practices and financial practitioners are increasingly using application-programming interfaces (API) as a method to compile and integrate this rapidly growing dataset into their processes. This begs the question – **What form does ESG data take, what does it convey and how is it disseminated?**

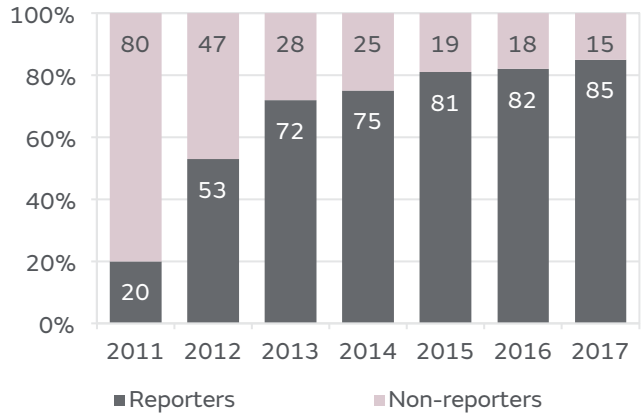
Underlying ESG data is nothing new. What has changed is the increased attention and relabelling of this data. Originally published in 1949, Benjamin Graham's The Intelligent Investor highlights several themes ESG has brought back into the limelight. This refocused attention has caused AMBIGUITY. Several research and data providers have feverishly expanded as they look to capitalize on the attention ESG has recently garnered. Much like credit rating agencies (CRA)[7], we believe a few prominent ESG research and data providers will step forward and provide generally accepted evaluation techniques. As the marketplace evolves, we see the incorporation of ESG data improving and further complementing traditional financial analysis.

Millennials Driving Demand for ESG



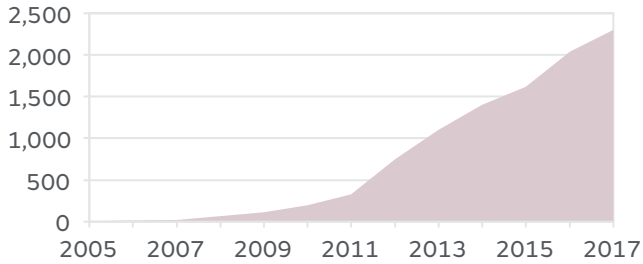
Question: How interested are you in sustainable investing?
Notes: n=800 for general population;
n=200 for Millennials (aged 18 to 35)
Source: Morgan Stanley – Sustainable Signals (2017)

S&P 500 Companies Sustainability Reporting



Source: Governance & Accountability Institute Inc. 2017 Research – www.ga-institute.com

Growth in Financial Related APIs



Source: Programmable Web – Financial API's Have Seen Two Growth Spikes (August 2017)

4 Definitions of exact date ranges vary. US Census Bureau (2016)
5 Brookings – How Millennials Could Upend Wall Street and Corporate America (May 2014)
6 IDC – Data Age 2025: The Evolution of Data to Life-Critical (April 2017)
7 CRAs are already incorporating ESG risk factors into their ratings

Recent Consolidation of ESG Research and Data Providers

March 2018	ISS acquires oekom[8]
July 2017	Morningstar purchases 40% stake in Sustainalytics
October 2016	S&P Dow Jones Indices purchased controlling interest in Trucost
September 2016	ISS acquired South Pole Group
December 2015	Vigeo and Eiris merge to form VigeoEIRIS
September 2015	Sustainalytics acquires ESG Analytics
August 2014	MSCI buys GMI Ratings

8 Founded in 1993, oekom "is one of the world's leading ESG research and rating agencies for sustainable investments." ISS acquired oekom in March 2018 – www.oekom-research.com

Two Distinct Data Types

To better understand the ESG landscape we set out to categorize the data being sourced. Available data can be broken down into two exclusive groups:

- **Publicly Available Data** – such as news, CSR reports and 10-K's
- **Non-Publicly Available Data** – which generally take the form of survey responses

Investment managers, regulators and industry practitioners use a combination of these data points to gain insight into the health and well-being of companies, industries and countries. Data points range from quantitative statistics such as greenhouse gas (GHG) emissions, which are very fungible[9], to qualitative metrics like a company's board independence. The latter is often a binary metric but shows no insight into the independence of its "independent" directors (whether they act in the best interest of shareholders or use their position of power to promote self-interest).

Irrespective of the data types collected, research and data providers fall into two distinct groups depending on their function; those who focus on the collection, categorization and provision of the data (source data) and those who provide additional value by assessing the information and forming opinions on subject companies (analyze data). The latter may alleviate some of the legwork necessary for end users to integrate ESG data into their financial decision-making process.

9 Once properly standardized

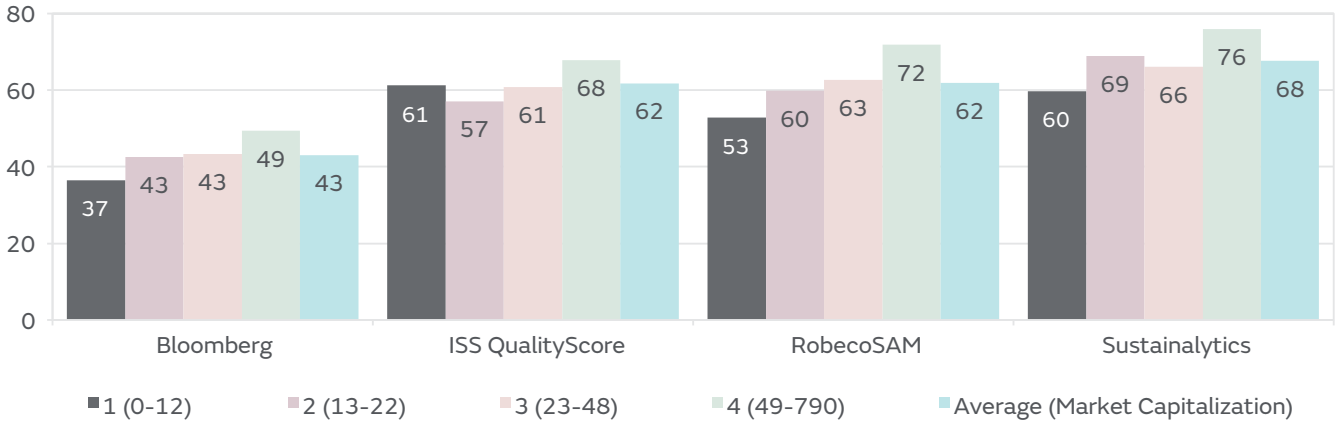
Publicly Available Data

Anyone is able to access and manipulate this free[10] publicly available data and do with it as they see fit. This has become a challenge in the ESG data market place as competing research and data providers look to differentiate themselves. There is little standardization with how these firms amalgamate, categorize and score this vast swath of information in a useful manner. **Subscribers are not paying for the data**, instead they are paying for the wherewithal research and data providers have in sourcing this free public data in a useful manner.

Technological advancement has led to a surge in artificial intelligence and machine-based learning on which research and data providers are increasingly reliant. However, implementation comes with ambiguity. The industry standard for accurate linguistic sentiment labelling is traditionally ~80% and depending on context and polarity, inappropriate categorization can be as high as ~30%.[11] It is in this contexture that research and data providers use this technology to categorize information and feed into their methodologies to assess company ESG performance.

Public information is much more prevalent for larger companies. This can be an issue when comparing ESG scores. As a generalization, larger companies attract greater publicity, much of which can be influenced (favourably) through press releases, advertising and media PR events. This influence has the potential to lead to higher scores. Contrary, smaller capitalized companies do not always have the coverage or wherewithal to publish such information and because missing data is typically viewed as a risk, their scores have the potential to be lower than they might be otherwise. In addition, there is a lack of standardization for the treatment of missing data. While research and data providers are improving their objective measurement and reporting of ESG metrics we caution investors to be mindful of this potential data skew.

Average Score per Market Capitalization Quartile

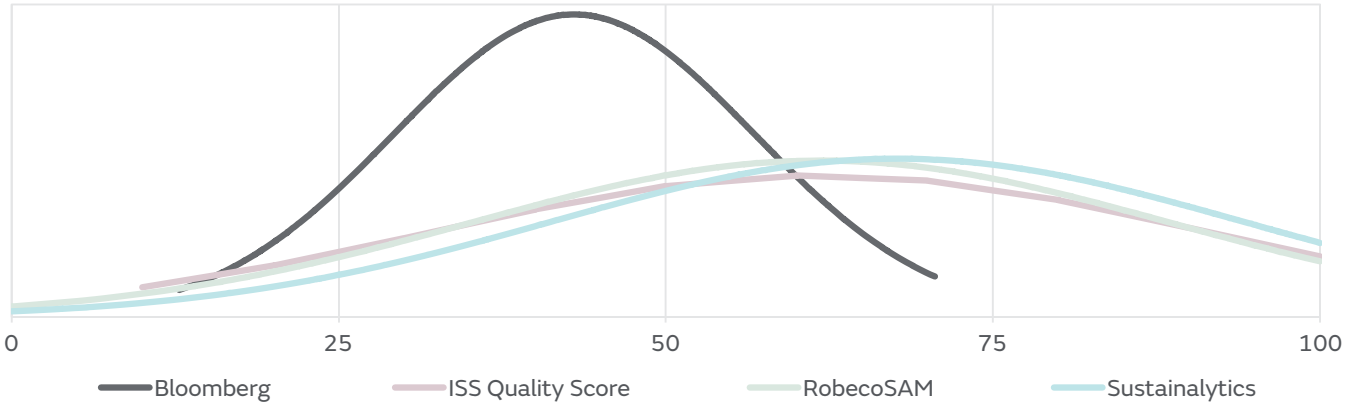


Source: Bloomberg, ISS, RobecoSAM, Sustainalytics
Market capitalization as of December 31, 2017, $ Billions, n=430

10 Considerations should be given to data sources which require a trivial subscription fee (example Wall Street Journal) as compared to the fees research or data providers charge.
11 University of Pittsburg: Recognizing Contextual Polarity in Phrase-Level Sentiment and Indiana University and Columbia University: Subjectivity and Sentiment Analysis of Modern Standard Arabic

Independent of market capitalization, Bloomberg scores exhibit a high degree of kurtosis and have a range well below a normal distribution. ISS QualityScore, RobecoSAM and Sustainalytics all exhibited a degree of negative skew and had a median score well above a normal distribution[12]. Therefore, we believe that well curated data is only a contextual starting point for ESG-factored portfolio construction.

Normalised Distribution of Scores



	x	x̃	σ	Min	Max
Bloomberg	43.0	45.5	13.7	12.8	70.6
ISS QualityScore	61.8	60.0	29.3	10.0	100.0
RobecoSAM	61.8	63.5	26.6	0.0	100.0
Sustainalytics	67.7	74.5	26.2	0.0	100.0

n=430

Source: Bloomberg, ISS, RobecoSAM, Sustainalytics

12 RobecoSAM aggregates information from annual surveys (non-public data sources) whereas the other three research and data providers aggregate information from public data sources.

Non-Publicly Available Data

Non-publicly available data is typically manufactured, meaning the data points are generated from a survey response. This data is then translated using set methodologies to produce a readable, standardized output. Non-publicly available data offers vast insight and analysis into the assessed company and does not typically afford itself to automation since it is often qualitative. Unlike public data, this data is not accessible outside the offering research and data firms provide and instead require a subscription to the administering body.

Survey engagement is becoming increasingly onerous for the respondents. The resultant survey fatigue is diluting the intimacy of information provided while widening the gap between large and small cap companies. Companies are INUNDATED with solicitations to provide ESG data; Oxford University found that the number of these requests grew three fold compared to when asked by oekom in 2013. Furthermore, companies reported spending 1,000 hours and 20-30 people to complete these surveys with an average response taking 18 days to complete a single request for information.[13] This also raises the question, how genuine is the data being provided? Are companies systematically box checking or are they providing meaningful information to investors?

These requests require considerable effort and companies need to weigh the cost/benefit before they decide to engage with administrators. Much like the divergence exhibited prior, larger capitalized companies are better positioned to assign resources when compared to their smaller capitalized peers. This may partially explain the nearly 20-point score differential of high versus low market capitalized companies as exhibited by RobecoSAM.

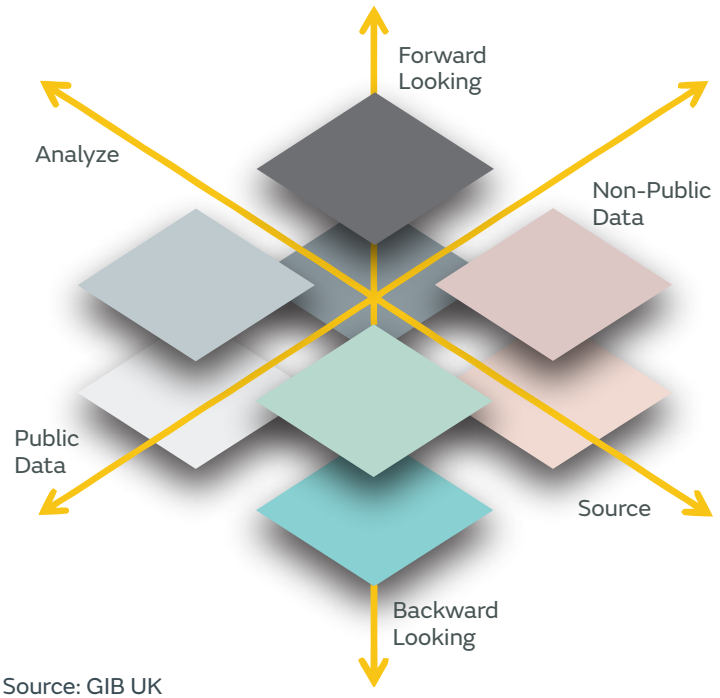
13 Oxford University – The ESG Rating and Ranking Industry; Vice or Virtue in the Adoption of Responsible Investment? (April 2017)

Time Consideration

Time is an important consideration when assessing the usefulness of ESG data. Reported data points might have aspects of historical performance (quarterly change of women on the board), future guidance (targets for water use and recycling) or both.

Research and data providers largely lean on annually reported CSR or survey data as the basis for their scores. As a result, scores are largely unchanged until these reports are updated. To address this shortcoming, research and data providers create a "controversies" aspect to incorporate timely updates into their analysis. They are an all-encompassing dimension used to monitor respective data points and are often reactionary and scores are not adjusted until information is publicly reported and processed by research and data providers – a process that can take several weeks to complete. While we appreciate research and data providers' proactive approach to integrating recent happenings, ESG data is still backward looking. Anyone, even Biff Tannen[14], can invest from right to left. Without a Grays Sports Almanac we cannot actually predict the future. ESG data should not be considered any differently.

Matrix of ESG Data



Source: GIB UK

14 Back to the Future II: Biff gives Grays Sports Almanac to younger self https://www.youtube.com/watch?v=zorz3SXqjv0

Examining E/S/G Data

Turning to specific data points analysed, we generally found research and data providers parse data into three pillars: Environmental, Social and Governance. Below we discuss valuable use cases while examining discrete data challenges.

Environmental Data

It quickly becomes evident that the environmental pillar components are very similar to traditional financial analysis. Data points are measurable, AUDITABLE and transparent. Metrics such as water use, GHG emissions and recycling are all things we can identify with conviction. The challenge becomes understanding which measuring stick is being applied and making the necessary changes to impart comparability. Research and data providers have little ability to alter company reported figures. A firm's water use is an auditable metric in which investors can hold firms accountable. Investors (and research and data providers) must then adjust the metrics, much like LIFO/FIFO inventory accounting, to produce a homogenous, comparable metric.

In its recent paper, Trucost identifies the complexities involved for a country (or company) to measure and report environmental metrics.[15] At the surface, emission data is commutable, but only to the extent accounting treatment is homogenous. Independent advocacy groups have attempted to instill standardization and reporting methodologies but currently there is no singular body governing reported metrics and it is ultimately up to the company to choose a methodology.[16] Furthermore, research and data providers often do not explicitly state (or make obvious) the intricacies of the data being sourced. While this is just one example, similar issues arise for nearly every other data point being examined.

Environmental Data Value Proposition

Paramount to assessing achievement of global climate change goals.

Three Options for Emissions Accounting

ASPECT	PRODUCTION-BASED ACCOUNTING	CONSUMPTION-BASED ACCOUNTING	THIRD WAY: TERRITORIAL EMISSIONS + IMPORTED EMISSIONS
Scope	Emissions generated by an economy within its national territory	Emissions associated with the consumption of a country's population of final demand	Emissions associated with any aspect of an economy's activity, i.e., the intensiveness of an economy
Calculation	Territorial emissions = Domestic emissions + Exported emissions	Domestic emissions + Imported emissions	Domestic emissions + Exported emissions + Imported emissions
Bias	Toward exporters or GHG producers	Toward importers or GHG consumers	No bias
Complexity	Low	High	High

Source: Trucost

15 Trucost – Accounting for Carbon (June 2018)

16 Simply put, companies can choose to incorporate variations of Scope 1, Scope 2 and Scope 3 emissions. Furthermore, accounting practices can be based on production, consumption or geographic origin. Standardization can use many denominators such as revenue, market capitalization, total employees or income.

Governance Data

Strong corporate governance is paramount to running a successful organization but the challenge here is exactly opposite of the environmental data. Although there are many governance metrics, many are not as explicit or auditable when compared to environmental factors and require an enormous amount of subjective judgement to decipher the actions corporations undertake. In addition, many data points are binary and have little insight into controversial activity. For example, AMP a financial services company based in Australia has long had a favourable governance score. There was little in the ESG data to suggest misconduct pre-emptively. Yet there were clearly governance issues at AMP – since 2009 the firm had been charging clients without providing advice.

> "What we seem to be seeing is a conscious decision is made to protect the profitability of AMP at the expense of complying with AMP's licence," the counsel assisting the commission Michael Hodge said.
>
> "Yes, I believe that's what that shows. It's clear that we [prefer] the interests of shareholders in that exchange at the expense of clients and so that is a concern," Mr Regan responded.[17]

AMP Head of Financial Advice Anthony Regan testifying to ASIC

It was not until AMP testified to the Australian Securities and Investment Commission (ASIC) and the firm's behaviour and scandal became public knowledge that research and data providers adjusted their score. Furthermore, the firm had the "necessary controls"[18] in place to fend off the exact type of behaviour corporate governance checks and balances are supposed to identify. Reporting the number of independent directors with no regard to their management character is not enough. Research and data providers need to expand and refine the data points collected in order to provide meaningful insight.

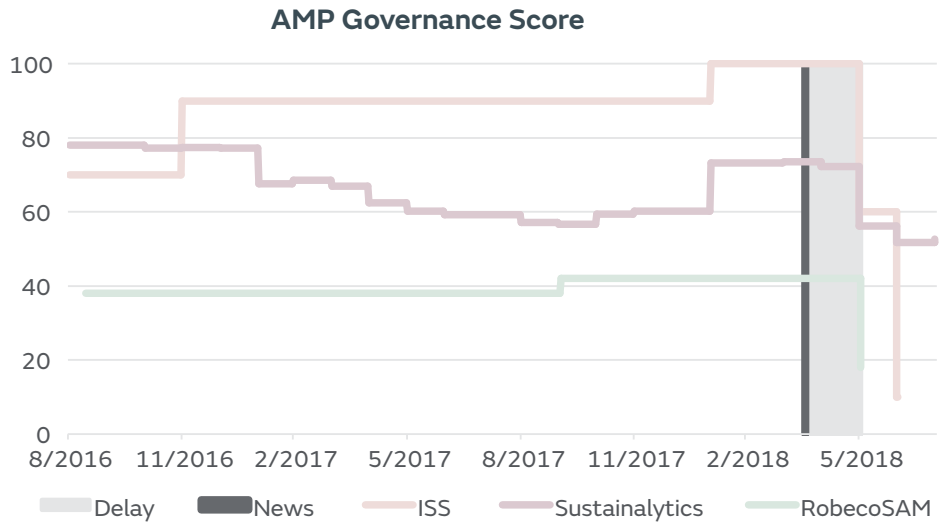
Governance Data Value Proposition
Valuable in measuring and assessing long term governance trends.

We are cognisant that many of the revelations here were in-house and not public. However, having CEO Craig Meller resign mere days before the explosive testimony, which unearthed the deceitful actions AMP undertook, should have raised some red flags since he had long been with AMP (CEO since 2014 and with AMP since 2001). Investors should not expect more from research and data providers. Until all information is made public[19], we cannot hold these research and data providers to a higher standard. Governance data is very useful in creating a barometer to measure long term qualitative risk and is something that we will look to incorporate into our own analysis. We hope this data set will become more robust as reporting and analysis methodologies develop.

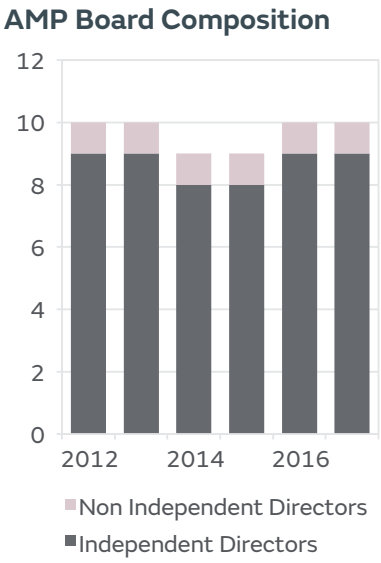
17 SBS News – AMP Executive Admits He's 'Lost Count' of the Times Company Misled Regulator (April 17 2018)

18 The company has four different committees; audit, nomination and governance, people and remuneration and risk. All committee members were independent. The responsibilities range from "approving material risk management and compliance policies" to "monitoring the performance, adequacy and independence of the internal and external audit functions." – AMP Corporate Governance Statement (2017)

19 We are nowhere close to knowing everything, nor should we be. Public disclosure has a time and place as does privately held information. The challenge becomes walking the tight rope between adequate disclosure and personal privacy.



Source: ISS, RobecoSAM, Sustainalytics



Source: AMP via Bloomberg

Case study: AMP

2009	AMP charging clients without providing advice. Admits this was a mistake and will take corrective actions.
After 2009	Management reviewed practice and approved with no change.
May 19 2015	Lawyer expresses concern regarding AMP practice of charging fees without providing service. States "has no legal basis" and will "probably need to be revised."
June 12 2015	Junior staffer shared similar concern: "the fees need to be dialled down 'so that we do not breach sic Australian Securities and Investment Commission (ASIC) requirements.'"
Summer 2015	Senior staff continue to approve illicit practices.
June 2017	Chairman Catherine Brenner requests a member of AMP's external legal counsel, Clayton Utz, to "undertake an external and independent investigation."[1]
September 25 2017	Chairman Brenner receives first version of Clayton Utz report.
October 11 2017	Chief legal counsel Brian Salter contacts Clayton Utz to address "a number of comments sic Chairman Brenner would like incorporated into the copy of the report to be handed to ASIC." Salter added that the report should "include a statement to the effect that CEO Craig Meller was unaware of the practices of their illegality."
Fall 2017	Clayton Utz report redrafted 25 times with contributions from AMP before being submitted to ASIC.
March 26 2018	CEO Craig Meller resigns.
April 17 2018	AMP testifies to ASIC. Admits to deliberately charging "fees for no service" and repeatedly misleading regulators[1] at least 20 times. Head of Financial Advice Anthony Regan admitted "he had lost count of the number of times the business misled the corporate regulator."
April 29 2018	Chairman Brenner and Chief Legal Counsel Salter resign.
Summer 2018	Served with five class action lawsuits since April 2018.

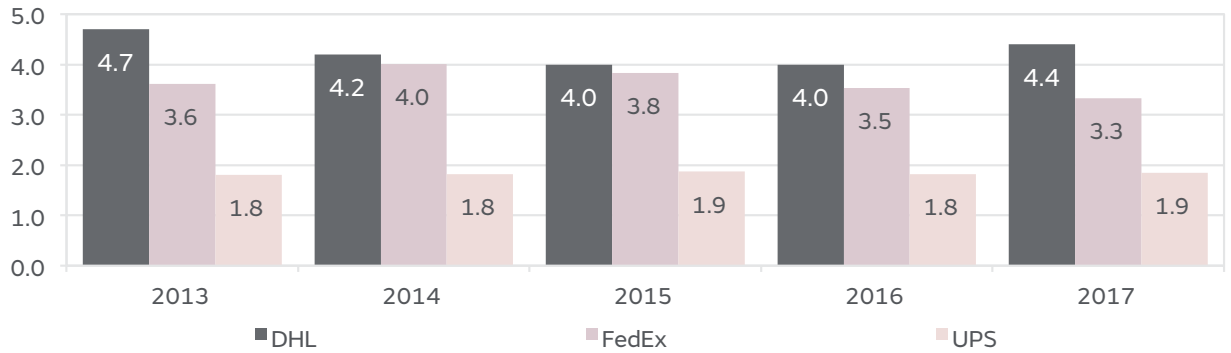
1 ASIC was aware of the relationship between Clayton Utz and AMP.

Source: The Australian Financial Review

Social Data

Lastly, we believe the social pillar is a mix of the tangible metrics the environmental pillar possesses (measurable, auditable and transparent) but has elements of binary ambiguity seen in the governance pillar (qualitative and subjective). For example, a company's lost time incident rate is an easily understood and standardized metric companies produce in their annual CSR reports. However, there is no insight into company practices. We present two examples, which paint very DIFFERENT pictures when examining ESG data. In our first example, UPS has meticulously outlined a framework to improve worker safety, including two new safety-training programs.[20] As a result of their efforts[21], UPS has performed much better than their peers – DHL and FedEx.[22]

Lost Time Incident Rates



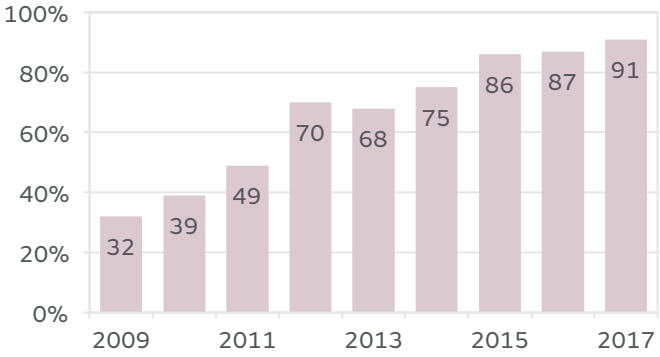
Source: UPS – Corporate Sustainability Progress Report (2017), DHL – Corporate Responsibility Report (2017) and FedEx – Global Citizenship Report (2018)

Social Data Value Proposition

Used to effectuate change and ensure just corporate practices while holding firms accountable.

For our second example, we look at Nike and their documented history of child labour. In the 1990s, Nike was synonymous with child labour. But starting in 1998, Nike started to take (publicly disclosed) steps to remediate their practices.[23] They enforced strict regulations on labour practices for their factories and are currently 91% compliant.[24] Tremendous success has been achieved since the 1990s but it was not until 2015 that Bloomberg reported that Nike had a policy against child labour. This is striking given the publicity Nike's turnaround story generated. As we noted previously, missing data is typically viewed negatively. As CSR reporting standards mature, we expect to see more prominent disclosure of these factors which will aid in streamlined integration of socially responsible investment objectives.

Factories In Compliance With Internal Standards



Source: Nike – Learning From Our Past (2018)
Note: Nike imposed strict standards for their production facilities, including child labour and sweatshop regulation

20 UPS – Corporate Sustainability Progress Report (2017)
21 "In 2017, Alexi Carli, Vice President of Global Health and Safety received the Distinguished Service Award from the American Society of Safety Engineers Foundation for her contributions and for supporting the development of future safety professionals." UPS – CSR 2017
22 DHL – Corporate Responsibility Report (2017) and FedEx – Global Citizenship Report (2018)
23 The New York Times – Nike Pledges to End Child Labor And Apply U.S. Rules Abroad (May 13, 1998)
24 https://sustainability.nike.com/learning-from-our-past

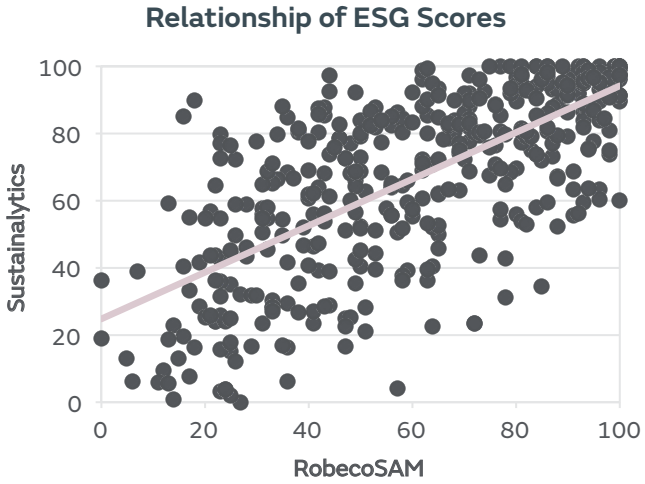
Contrast to Credit Ratings

CRAs and research and data providers alike curate underlying data to produce an aggregate indicator of various risk factors. While credit ratings and ESG scores share several common themes, their characteristics are quite different.

Credit ratings have existed since the early 1900's[25] and as a result, their methodology has had considerable time to develop. Dodd Frank has meticulously laid out strict regulation for CRAs.[26] Accordingly, credit ratings exhibit a high degree of homogeneity. Northern Illinois University found a strong relationship between Moody's and S&P credit ratings (~0.90).[27] Contrarily, ESG scores exhibit a much weaker relationship (0.49). This should come as no surprise given the different methodologies used as well as the varying degree of emphasis placed on underlying data points. As time passes we expect ESG scores to align with the traits credit ratings currently possess.

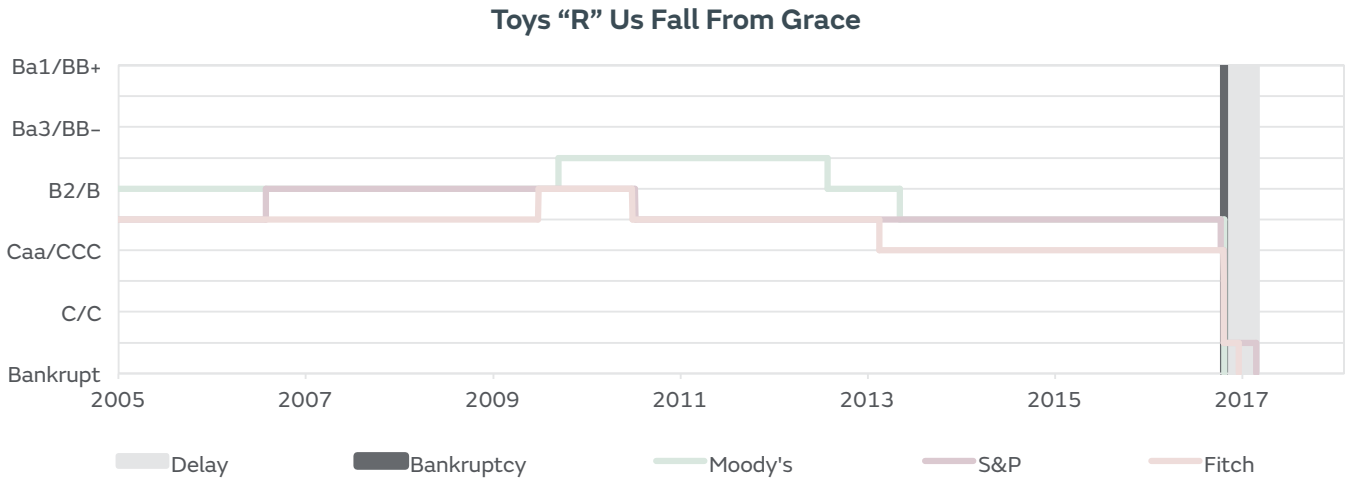
Timing

Both CRAs and research and data providers exhibit a lag when incorporating new information into their scores/ratings. Neither of which presume to predict future events. In the case of AMP, research and data providers did not penalize the firm's governance score for controversial activity (see page 16-17). The same is seen in credit ratings. Recently bankrupt (and subsequently liquidated) retail firm Toys "R" Us' ratings remained unchanged since 2014. There was nothing to suggest further deterioration in their "capacity to meet its financial commitments" (S&P).[28]



Source: RobecoSAM, Sustainalytics

25 Credit rating agencies founded in 1900, 1906 and 1913 (Moody's, S&P and Fitch respectively) https://www.investopedia.com/articles/bonds/09/history-credit-rating-agencies.asp
26 SEC – Credit Rating Standardization Study (September 2012)
27 https://www.reuters.com/article/us-climate-ratings-analysis/investing-with-green-ratings-its-a-gray-area-idUSKBN19H0DM
28 S&P defines their long-term B rating to be an obligor that "is more vulnerable than the obligors rated BB, but the obligor currently has the capacity to meet its financial commitments. Adverse business, financial or economic conditions will likely impair the obligor's capacity or willingness to meet its financial commitments."



Source: Moody's, S&P[29], Fitch

Business Models

Since the 1980's CRAs altered the way in which they operate. Instead of earning revenues from end users (like the current ESG data business model), CRAs charge issuers who want an assessment of their firm (or product).[30,31] This has the potential to create a conflict of interest – a factor that was largely considered to influence the Great Recession. Contrary, ESG data charges end users and thus eliminates the potential for conflict of interest and supports the integrity of the data.

"We've known for years that conflicts of interest at credit-rating firms were a significant factor in causing the 2008 financial crisis."

Senator Al Franken, Democrat [Minnesota]

Risk Assessment

Since the Great Recession, regulators have moved away from assessing risk exclusively via credit ratings. For example, in Europe Basel regulation has favoured alternative metrics, such as internal risk assessment models to evaluate asset risk.[32] Despite all this, credit ratings have long been considered a useful tool and we expect this to continue.[33] For instance, many investment funds impose strict limitations on their investments which are explicitly tied to credit ratings. Regardless of their shortfalls, credit ratings are still used to impart comparability across all companies, industries and countries – something not currently in ESG data but which we expect to see in the future. The use of CDS as an

The Fund may invest in Issuers where the country of risk is rated above B- subject to a maximum of 20% of its total assets having a country of risk rated between B+ to B- and 50% between BB+ and BB-.

GIB (UK) Trade Finance Opportunities Fund

29 Please refer to an important disclaimer at the end of this publication
30 Sabatino – The Business Model of Rating Agencies between Asymmetric Information and Financial Crises (2014)
31 We are focusing exclusively on the revenues CRAs generate by producing for-hire credit ratings for an interested party
32 https://www.pwc.com/gx/en/services/advisory/basel-iv/capital-requirements.html#1
33 Ivana Weissova, Boris Kollarb, Anna Siekelova – Rating as a Useful Tool for Credit Risk Management (2015)

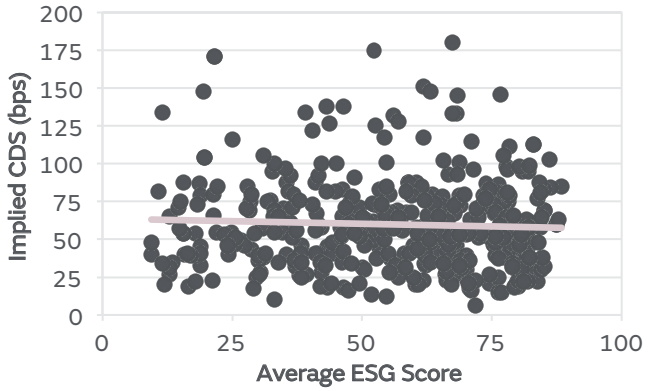
alternative to credit ratings has been well-documented and is a reliable vehicle to assess firm risk.[34] Using CDS in this light, we examined Bloomberg's implied 5-year CDS model[35] versus average ESG scores. We found that despite having a higher ESG score, there was no indication to the riskiness (using implied CDS) a firm supposedly possesses. This is surprising given 54% of market participants are using ESG data as a tool to avoid long term risk.[36] We will look to further examine this topic of ESG data as a tool for risk assessment and portfolio construction in a future publication.

Count of Firms ESG Score and Implied CDS Matrix

Implied CDS (bps)	Average ESG Score: 0-41.7	41.8-60.7	60.8-74.6	74.7-100
76+	29	26	28	25
56-75	23	36	20	25
39-55	33	22	29	23
0-38	23	23	30	35

Note: The light grey boxes highlight where ESG scores should cluster if they are indeed a complement to established financial metrics by incorporating non-financial considerations (under the presumption that ESG considerations [ex. strong corporate governance] measure firm risk).

Implied CDS versus average ESG Score R^2=0.0021



Data as of December 31, 2017
Source: Bloomberg, RobecoSAM, Sustainalytics

Comparison of Providers

	Credit Rating Agencies	ESG Research and Data Providers
Regulated	Yes	No
Standardized	Yes	No
Timeliness	Reactionary	Reactionary
Business Model	Issuer pays	Data user pays
Potential Conflict of Interest	Yes	No
Measure of Risk	Yes	Unclear

Source: GIB UK

34 Kiesel and Spohnholtz – CDS Spreads as an Independent Measure of Credit Risk (January 3, 2017)
35 The majority of firms we examined did not have transparent CDS markets; hence our basis for using the implied CDS model. Bloomberg's implied 5-year CDS model exhibited a 63.4% correlation to market spreads.
36 FTSE Russell – Smart Beta: 2018 Global Survey Findings from Asset Owners (see page 7)

Conclusion

We are still very early in understanding the relationship ESG data plays in financial decision making. In an environment where fee compression[37] is forcing managers to be creative in ways they market themselves, it is important to understand if ESG-themed investment hypotheses are creating spurious correlations. ESG data and research do provide insight into company practices and complement traditional risk assessment. We see an obvious benefit to integrating ESG data into investment portfolios to monitor and assess asset risk, but it would be MISLEADING to suggest that it is yet a quantitative tool for ESG factor investing.

37 https://www.cnbc.com/2018/08/01/fidelity-one-ups-vanguard-first-company-to-offer-no-fee-index-fund.html

38 PRI identified over 300 policy initiatives covering the relationship between finance and ESG issues. Over half were created between 2013 and 2016. Source: PRI – Global Guide to Responsible Investment Regulation (2016)

GIB (UK) Observations

For asset owners:

- Remain cautious of greenwashing by asset managers. Understand how asset managers integrate and use ESG data. Unlike traditional financial analysis, the use of ESG data is not strictly comparable, potentially leading to portfolios with unwanted exposures.
- Voice your demands. As asset owners you are paying for the management of your assets. Asset managers should not drive product solutions. Furthermore, be vigilant of expenses – as we discussed earlier, asset managers are looking for ways to justify fees all while investment processes are increasingly automated.
- Ensure your portfolios are aligned with your SRI objectives by selecting managers who have incorporated sustainability into their operating DNA. Retain managers who 'walk the walk', not just 'talk the talk'.
- Challenge your consultants to embed your specific, not generic, ESG objectives into their manager selection guidelines and to measure portfolio performance against precise ESG benchmarks.

For asset managers:

- Understand the data and overarching methodologies. There is no standardization of reporting or methodology used. As a result, we are seeing asset managers use multiple research and data providers to produce a mosaic of ESG metrics in addition to using raw (unmodified) data to form their own opinions.
- Be vocal in expressing what you would like out of a research and data provider. We are already seeing research and data providers cater to their clients and over time, standards will crystalize.
- Be patient and do not expect more from ESG data. While it may be tempting to market ESG implications, the truth is it is difficult to quantify the contribution of ESG as a factor in financial performance.
- Integrate SRI standards across all levels of your firm and provide appropriate training such that there is a common understanding of what ESG means.

For research and data providers:

- Keep on refining your questionnaires and data metrics. A key step to manage ESG risks is to be able to measure them.
- Simplify methodologies. There is far too much subjective interpretation and subsequent adjustments being applied to curate data (and resultant scores). Data users need to deconstruct scores in order to impart comparability. As standards form, so should methodologies.
- Cooperate with industry peers. Rather than build individual roads, work together to create highways.

For regulators:

- Collaborate and unite. There are far too many "authoritative" ESG regulatory bodies.[38] This is causing confusion across the globe and has significant downstream implications.
- Remain objective and set precise measurable standards. The same measuring stick should be applied globally with definitive objectives to simplify the downstream processes. We look to our leaders to enact change and sound regulatory policy is the first step.

Annex

Methodology

Bloomberg partners with ISS, RobecoSAM and Sustainalytics to publish ESG scores. The availability of information was the basis for using these research and data providers (in addition to Bloomberg's own ESG scores). Please refer to Figure 1 in the Annex for a summary of the research and data providers examined.

Starting with the MSCI World Index (MXWO) we excluded constituents where we were unable to procure ESG scores from Bloomberg, ISS, RobecoSAM and Sustainalytics. This allowed us to use the same baseline for all of our analysis without having to account for missing data. The index had 1,633 constituents in May 2018; our modified constituent base was 430 (40%).

For our publication we used ISS Governance QualityScore. ISS rates companies on a scale of 1-10 with 10 being the worst. We adjusted the score to share the same ratings scale used by Bloomberg, RobecoSAM and Sustainalytics, which rate companies on a scale of 0-100 with 100 being best.

Figure 1

Provider	Function[39]	Coverage	Indicators	Score
Bloomberg[40]	▪ Source Publicly Available Data	▪ 9,000+ covered companies across 60 countries	▪ Uses ~200 raw data points and weighted to emphasize most important factors	▪ Normalized score from 0-100 with 100 indicating every possible data point disclosed
ISS QualityScore[41] ▪ **Environmental and Social**	▪ Analyze Publicly Available Data	▪ 4,700 listed companies across 24 industries	▪ More than 380 factors analysed ▪ Peer comparable	▪ Uses a numeric, decile based score with the 10th decile being the highest risk
ISS QualityScore[41,42] ▪ **Governance**	▪ Analyze Publicly Available Data	▪ 30 markets with over 5,600 companies covered	▪ Over 200 factors assessed ▪ Unique weighting of specific factors per company	
RobecoSAM[43]	▪ Analyze Non-Publicly Available Data	▪ Over 3,400 public companies asked to participate in annual questionnaire	▪ 80-120 industry specific survey questions results in over 600 data points per company	▪ Uses a weighted scoring system; 0-100 with 100 being the best
Sustainalytics[44]	▪ Analyze Publicly Available Data	▪ ~11,000 companies	▪ ~120 indicators using over 60,000 data sources	▪ Uses a weighted scoring system; 0-100 with 100 being the best

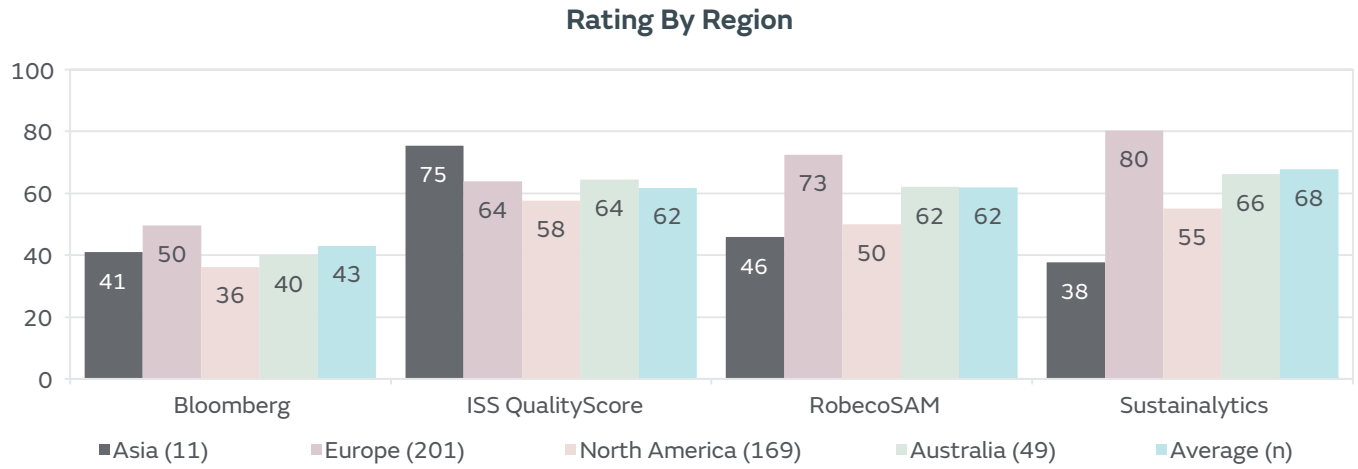
39 As defined by GIB (UK)
40 Bloomberg Terminal <BESG GO>
41 https://www.issgovernance.com/solutions/qualityscore/
42 For our analysis, we use the ISS Governance QualityScore
43 http://www.robecosam.com/en/sustainability-insights/about-sustainability/corporate-sustainability-assessment/index.jsp
44 https://www.sustainalytics.com/

Figure 2

GICS	n	Average	Bloomberg	ISS Quality Score	RobecoSAM	Sustainalytics
Consumer Discretionary	62	54.22	38.39	51.29	61.77	65.43
Consumer Staples	35	59.67	45.85	63.43	62.80	66.61
Energy	18	61.50	45.01	71.11	63.83	66.06
Financials	73	58.23	41.09	67.67	59.68	64.47
Health Care	36	60.13	40.14	56.67	68.61	75.08
Industrials	66	56.45	42.77	54.70	60.38	67.96
Information Technology	35	57.91	38.05	66.00	57.29	70.30
Materials	42	62.55	51.30	70.00	64.60	64.31
Real Estate	21	60.65	43.13	60.48	62.19	76.79
Telecommunication	13	59.43	47.19	60.00	53.46	77.05
Utilities	29	61.62	48.86	68.62	64.79	64.20
Average	**430**	**58.57**	**42.99**	**61.77**	**61.83**	**67.70**

Source: Bloomberg, ISS, RobecoSAM, Sustainalytics via Bloomberg

Figure 3



Source: Bloomberg, ISS, RobecoSAM, Sustainalytics via Bloomberg

GIB ASSET MANAGEMENT

GIB (UK) Disclaimer

This discussion document has been prepared by Gulf International Bank (UK) Limited [GIB (UK)] for the exclusive use of GIB (UK) clients.

Past performance figures contained in this document should not, under any circumstances, be considered as being a guide or indication to future performance. Investing involves risk and the investments discussed may be subject to sudden and large falls in value. The prices and value of the investments and the income arising from such investments may fluctuate and you may not get back what you invested. Changes in the rates of foreign exchange against the base currency of the investor may also have an adverse effect on the value, price or income of the investments.

Although forward-looking statements contained in this document are based upon what GIB (UK) believes are reasonable assumptions, there can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements.

The investments discussed may not be suitable for all recipients of this document and if you have any doubts, you should seek advice from your investment adviser, stockbroker, lawyer, bank manager or other professional adviser.

This discussion document is not an offer to purchase any product or service rendered by GIB (UK). Such services may only be offered subject to a discretionary investment management agreement a standard draft copy of which includes a full risk disclosure and is available from GIB (UK).

This discussion document may not be distributed in all jurisdictions and is confidential and may therefore not be reproduced or disclosed (in whole or in part) to any other person without GIB (UK)'s prior permission.

GIB (UK) is authorized by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. GIB (UK) is registered as an Investment Advisor with the Securities and Exchange Commission in the United States.

This document has been prepared by GIB (UK). The views expressed in this publication are those of the author(s) alone and are subject to change without notice. GIB (UK) has no obligation to update this publication. This information is intended for informational purposes only. The information contained in this publication has been obtained from sources that GIB (UK) believes to be reliable, but GIB (UK) makes no representations that the information contained herein is accurate, reliable, complete, or appropriate for use by all investors in all locations. Further, GIB (UK) does not guarantee the accuracy or completeness of information which is obtained from, or is based upon, trade and statistical services or other third party sources. Because of the possibility of human and mechanical errors as well as other factors, GIB (UK) is not responsible for any errors or omissions in the information contained herein. GIB (UK) is not responsible for, and makes no warranties whatsoever as to, the content of any third-party web site accessed via a hyperlink contained herein and such information is not incorporated by reference

S&P Disclaimer

Standard & Poor's Financial Services LLC (S&P) does not guarantee the accuracy, completeness, timeliness or availability of any information, including ratings, and is not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, or for the results obtained from the use of ratings. S&P GIVES NO EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE. S&P SHALL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, EXEMPLARY, COMPENSATORY, PUNITIVE, SPECIAL OR CONSEQUENTIAL DAMAGES, COSTS, EXPENSES, LEGAL FEES, or LOSSES (INCLUDING LOST INCOME OR PROFITS AND OPPORTUNITY COSTS) IN CONNECTION WITH ANY USE OF RATINGS. S&P's ratings are statements of opinions and are not statements of fact or recommendations to purchase, hold or sell securities. They do not address the market value of securities or the suitability of securities for investment purposes, and should not be relied on as investment advice.

Invest with us

What we invest in matters.

Long-term relationships to shape your investment imprint are at the heart of what we do.

Get in touch to see how we can help you invest for your unique imprint.

W: gibam.com
T: +44 (0) 20 7259 3149
E: solutions@gibam.com

Signatory of:

PRI Principles for Responsible Investment

Gulf International Bank (UK) Limited is a signatory of the United Nations Principles of Responsible Investment (UN PRI). The UN PRI is a voluntary initiative that encourages investors to embed environmental, social and governance (ESG) factors into their investment decision-making.

GIB ASSET MANAGEMENT