



FitchRatings

ESG

Mirosław Dudzinski

25th October 2019



Fitch's "ESG Relevance Score"

What is the ESG Relevance Score

- Unique scoring system for the **relevance and materiality of ESG to credit profile and ratings**
- Fitch is **not measuring ESG merit (e.g., we are not measuring the level of good or bad behavior)**
- Rather Fitch shows **where each factor has impact** in current qualitative and quantitative analysis
- ESG Relevance Scores will be incorporated in ratings reports and Ratings Navigators

What does 1-5 mean on the scoring system

1. Irrelevant to the entity rating and irrelevant to the sector
2. Irrelevant to the entity rating, but relevant to the sector
3. Minimally relevant to rating, either very low impact or actively managed in a way that results in no impact on the entity rating. Equivalent to 'Lower' Relative Importance within Navigator
4. Relevant to rating, but not a key rating driver, but has an impact on the entity rating in combination with other factors. Equivalent to 'Moderate' importance within a credit Navigator
5. Highly relevant, a key rating driver that has a significant impact on the entity rating on an individual basis. Equivalent to 'Higher' relative importance on a credit Navigator

Environmental Factor Examples

- Greenhouse Gas Emissions & Air Quality
- Energy & Fuel Management
- Waste & Wastewater Treatment
- Waste & Hazardous Materials
- Exposure to Environmental Impacts

Social Factor Examples

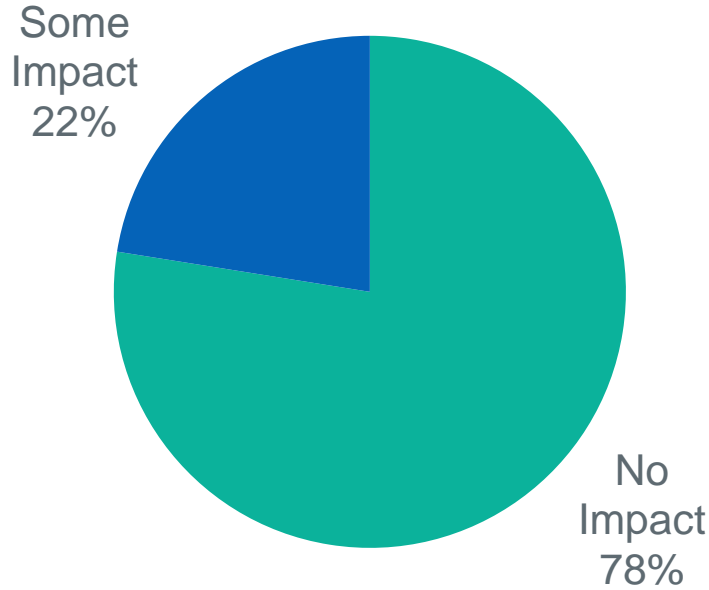
- Community Relations & Social Access
- Customer Welfare, Product Safety & Data Security
- Labor Relations & Practices
- Employee Wellbeing
- Exposure to Social Impacts

Governance Factor Examples

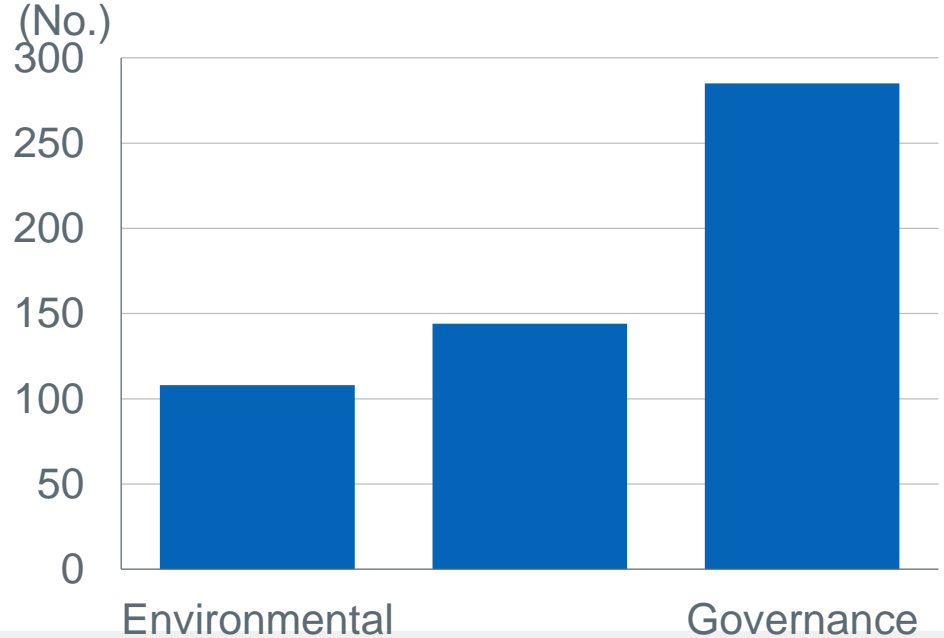
- Operational Execution
- Governance Structure
- Group Structure
- Financial Transparency

ESG Relevance Summary for 1,534 Corporate Issuers Currently Published

Relevance to Issuer Portfolio



ESG Elements Driving Issuer Credit Impact (ESG Score of 4 or 5)



Introducing the ESG Relevance Navigator

FitchRatings

Volkswagen AG

Corporates Ratings Navigator
Automotive Manufacturers

Credit-Relevant ESG Derivation

Volkswagen AG has 2 ESG key rating drivers and 7 ESG potential rating drivers

- ➔ Volkswagen AG has exposure to emissions regulatory risk which, on an individual basis, has a significant impact on the rating
- ➔ Volkswagen AG has exposure to board independence risk which, on an individual basis, has a significant impact on the rating
- ➔ Volkswagen AG has exposure to waste & impact management risk but this has very low impact on the rating
- ➔ Volkswagen AG has exposure to customer accountability risk and product quality & safety risk but this has very low impact on the rating
- ➔ Volkswagen AG has exposure to labor relations & practices risk but this has very low impact on the rating
- ➔ Volkswagen AG has exposure to shifting consumer preferences but this has very low impact on the rating

Showing top 6 issues

Environmental (E)

General Issues	E Score	Sector-Specific Issues	Reference
GHG Emissions & Air Quality	5	Emissions and pollutants from vehicles sold	Brand Positioning, Profitability, Financial Structure
Energy Management	2	Fuel economy requirements of the product	Brand Positioning, Profitability, Financial Structure
Water & Wastewater Management	2	Water usage in manufacturing	Competitive Position, Cost Structure, Profitability, Financial Structure
Waste & Hazardous Materials Management, Ecological Impacts	3	Waste and recycling in manufacturing operations, use of environmentally friendly materials	Brand Positioning, Profitability, Financial Structure
Exposure to Environmental Impacts	1	n.a.	n.a.



How to Read This Page

ESG scores range from 1 to 5 based on a 15-level color gradation. Red (5) is most relevant and green (1) is least relevant.

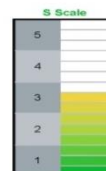
The **Environmental (E), Social (S) and Governance (G)** tables break out the individual components of the scale. The left-hand box shows the aggregate E, S, or G score. General Issues are relevant across all markets with Sector-Specific Issues unique to a particular industry group. Scores are assigned to each sector-specific issue. These scores signify the credit-relevance of the sector-specific issues to the issuing entity's overall credit rating. The Reference box highlights the factor(s) within which the corresponding ESG issues are captured in Fitch's credit analysis.

The **Credit-Relevant ESG Derivation table** shows the overall ESG score. This score signifies the credit relevance of combined E, S and G issues to the entity's credit rating. The three columns to the left of the overall ESG score summarize the issuing entity's sub-component ESG scores. The box on the far left identifies the (number of) general ESG issues that are drivers or potential drivers of the issuing entity's credit rating (corresponding with scores of 3, 4 or 5) and provides a brief explanation for the score.

Classification of ESG issues has been developed from Fitch's sector and sub-sector ratings criteria and the General Issues and the Sector-Specific Issues have been informed with SASB's Materiality Map.

Social (S)

General Issues	S Score	Sector-Specific Issues	Reference
Human Rights, Community Relations, Access & Affordability	1	n.a.	n.a.
Customer Welfare - Fair Messaging, Privacy & Data Security	3	Data security, vehicle safety	Brand Positioning, Profitability
Labor Relations & Practices	3	Impact of labor negotiations and employee (dis)satisfaction	Cost Structure, Profitability
Employee Wellbeing	1	n.a.	n.a.
Exposure to Social Impacts	3	Cities' focus on promoting less vehicle ownership, shift in consumer preferences toward cleaner energy	Profitability



Governance (G)

General Issues	G Score	Sector-Specific Issues	Reference
Management Strategy	3	Strategy development and implementation	Management and Corporate Governance
Governance Structure	5	Board independence and effectiveness, ownership concentration	Management and Corporate Governance
Group Structure	3	Complexity, transparency and related-party transactions	Management and Corporate Governance
Financial Transparency	3	Quality and timing of financial disclosure	Management and Corporate Governance



			Overall ESG Score
key driver	2	issues	5
driver	0	issues	4
potential driver	7	issues	3
not a rating driver	2	issues	2
	3	issues	1

CREDIT-RELEVANT ESG SCALE	
How relevant are E, S and G issues to the overall credit rating?	
5	Highly relevant, a key rating driver that has a significant impact on the rating on an individual basis. Equivalent to "higher" relative importance within Navigator.
4	Relevant to rating, not a key rating driver but has an impact on the rating in combination with other factors. Equivalent to "moderate" relative importance within Navigator.
3	Minimally relevant to rating, either very low impact or actively managed in a way that results in no impact on the entity rating. Equivalent to "lower" relative importance within Navigator.
2	Irrelevant to the entity rating but relevant to the sector.
1	Irrelevant to the entity rating and irrelevant to the sector.



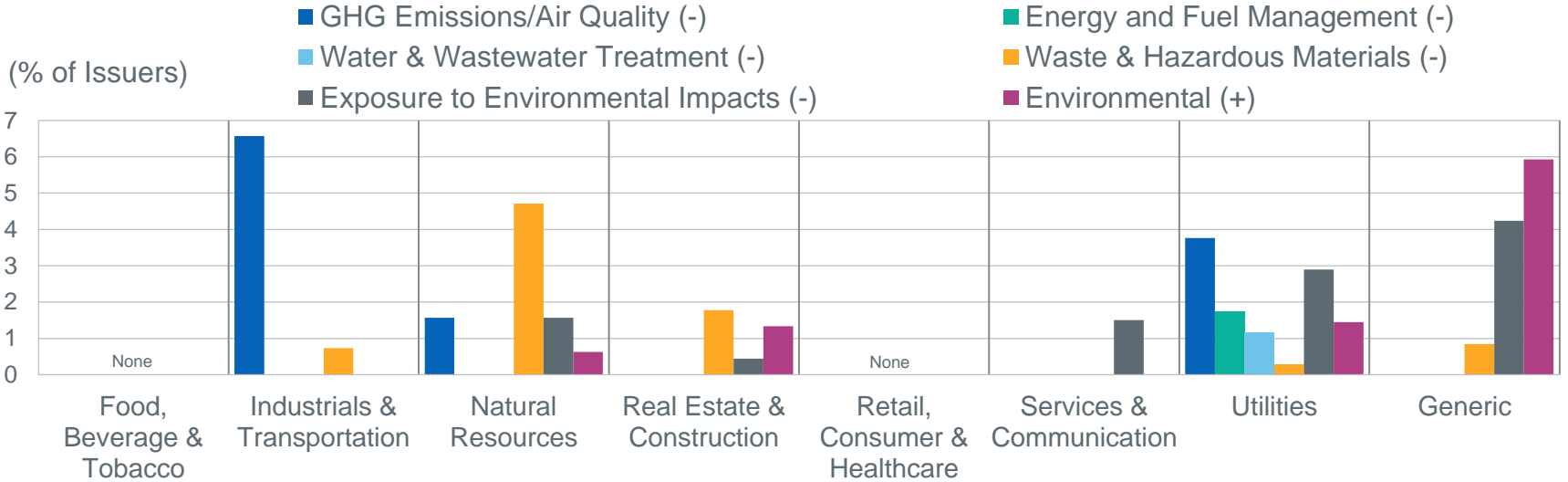
1

Connecting ESG with Credit

Emissions Regulations Main Driver of Environmental Risks...

Environmental Elements Driving Issuer Impact, By Sector

ESG Score of '4' or '5' - Data as of January 4, 2019



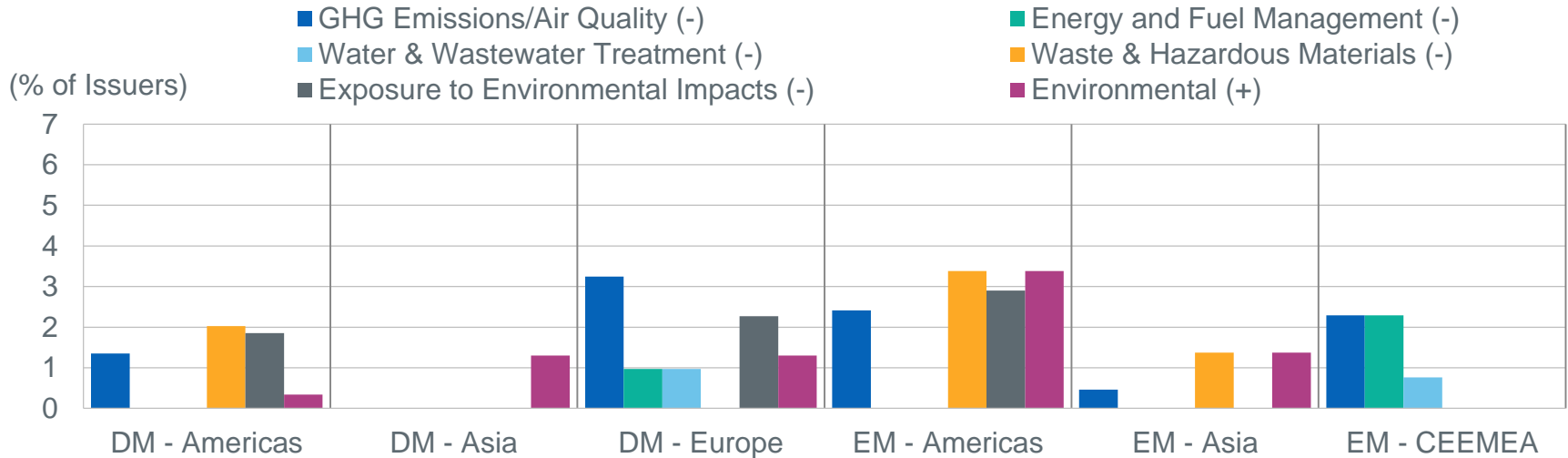
Source: Fitch Ratings

(-) Signifies negative influence on credit risk. (+) Signifies positive influence on credit risk

... With Regional Variations Reflecting Policy Differences

Environmental Elements Driving Issuer Impact, By Region

ESG Score of '4' or '5' - Data as of January 4, 2019



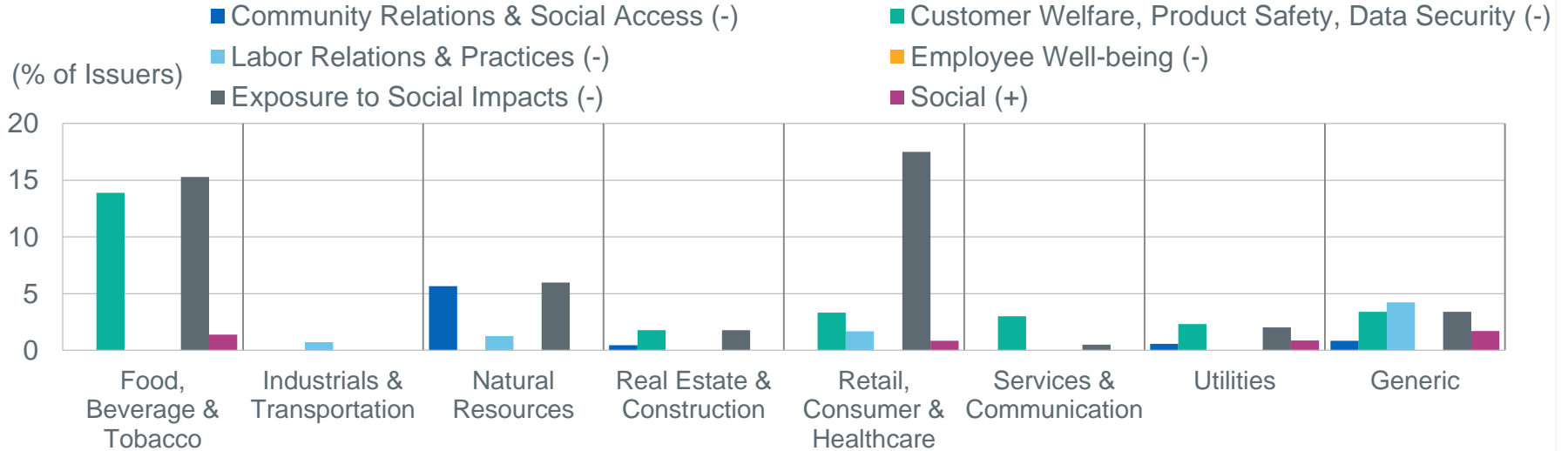
Source: Fitch Ratings

(-) Signifies negative influence on credit risk. (+) Signifies positive influence on credit risk

Broad Consumer Trends Drive Social Risks...

Social Elements Driving Issuer Impact, By Sector

ESG Score of '4' or '5' - Data as of January 4, 2019



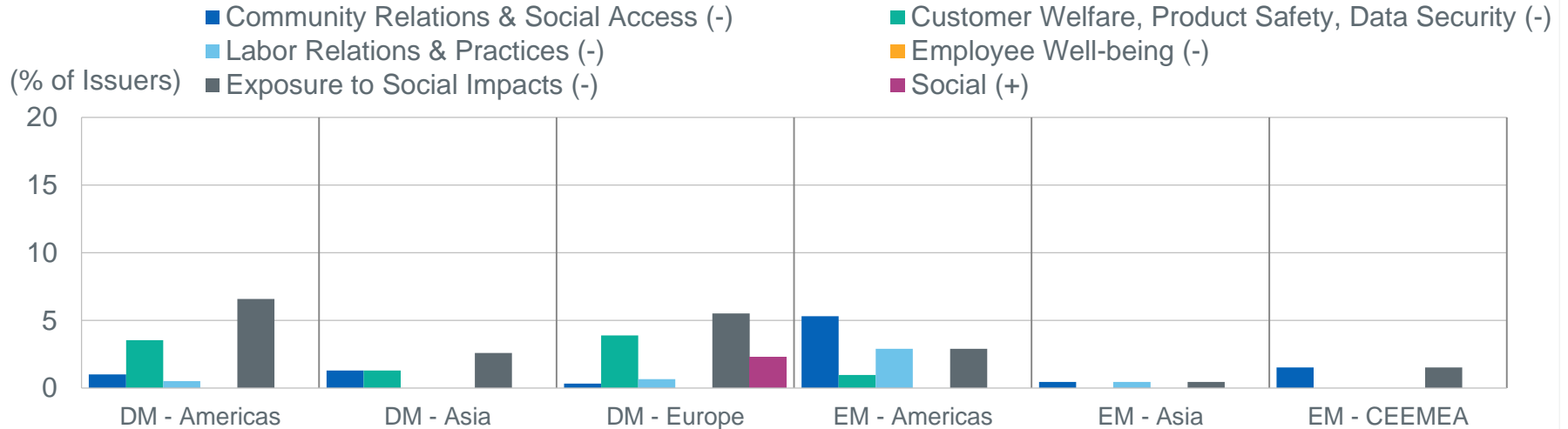
Source: Fitch Ratings

(-) Signifies negative influence on credit risk. (+) Signifies positive influence on credit risk

...Particularly in Developed Markets

Social Elements Driving Issuer Impact, By Region

ESG Score of '4' or '5' - Data as of January 4, 2019



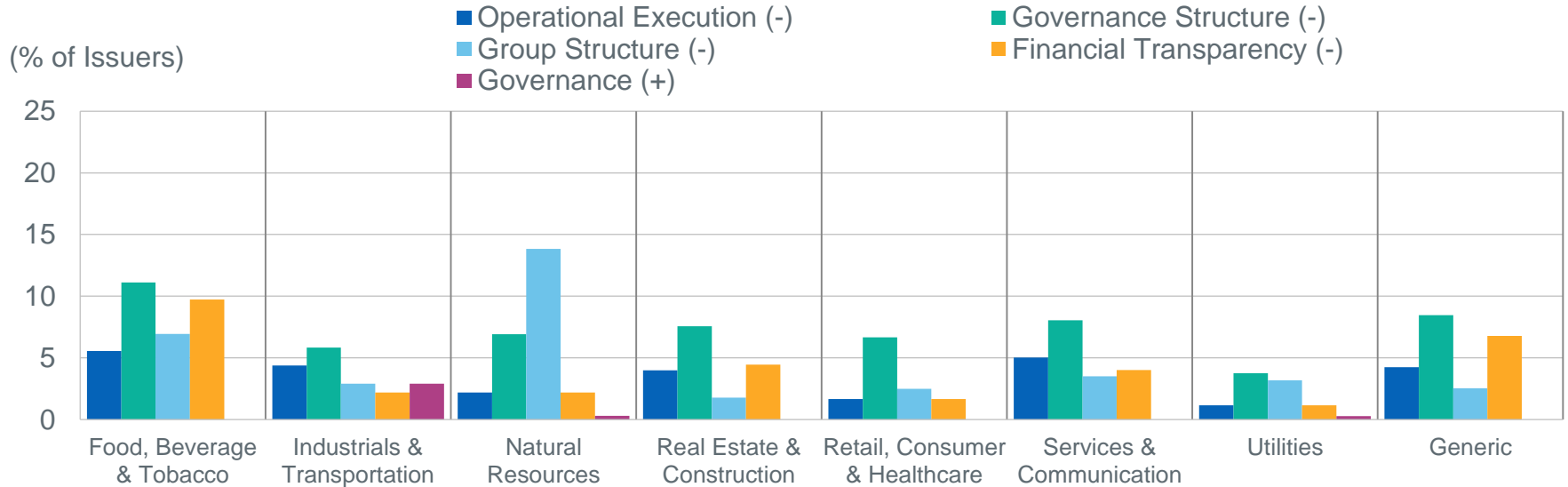
Source: Fitch Ratings

(-) Signifies negative influence on credit risk. (+) Signifies positive influence on credit risk

Governance Issues Generally Common Across Sectors...

Governance Elements Driving Issuer Impact, By Sector

ESG Score of '4' or '5' - Data as of January 4, 2019



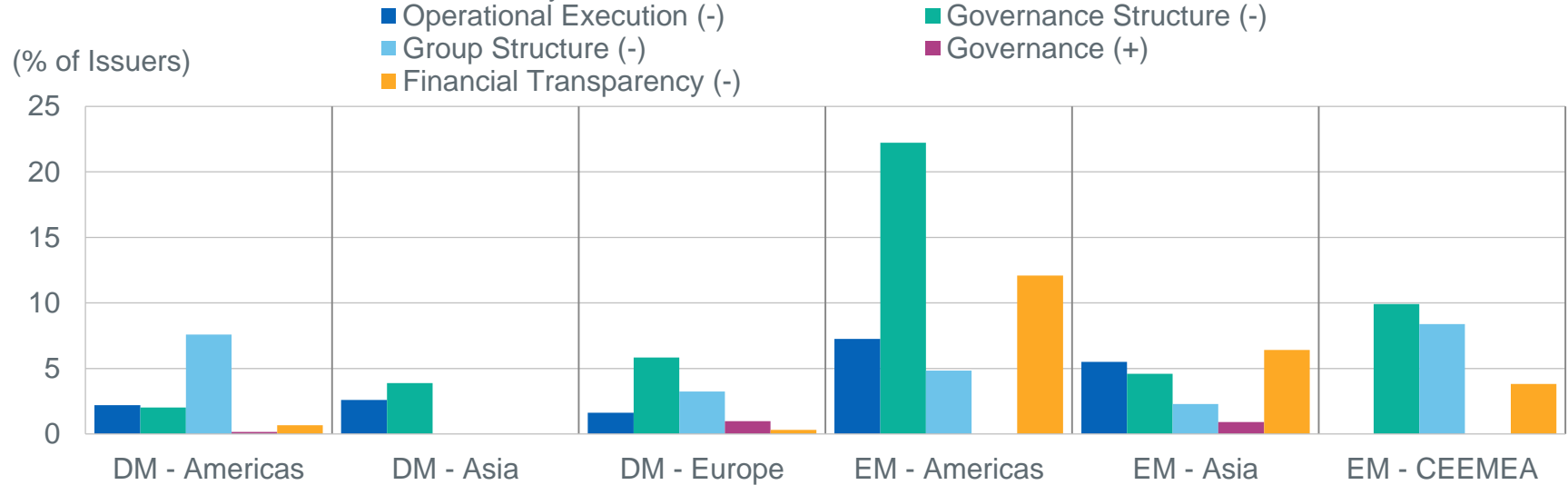
Source: Fitch Ratings

(-) Signifies negative influence on credit risk. (+) Signifies positive influence on credit risk

...But Show Considerable Regional Variation

Governance Elements Driving Issuer Impact, By Region

ESG Score of '4' or '5' - Data as of January 4, 2019



Source: Fitch Ratings

(-) Signifies negative influence on credit risk. (+) Signifies positive influence on credit risk

Governance Elements More Likely to Be Jointly Relevant

Joint Occurrences Of ESG Elements Driving Issuer Credit Impact

	ENVIRONMENTAL					SOCIAL					GOVERNANCE			
	EAQ	EFM	EWT	EHZ	EIM	SCR	SCW	SLB	SEW	SIM	GEX	GGV	GST	GTR
EAQ		17%	0%	2%	0%	4%	0%	0%	0%	3%	1%	3%	2%	0%
EFM	6		0%	0%	9%	0%	0%	0%	0%	0%	0%	1%	0%	2%
EWT	0	0		0%	19%	0%	4%	0%	0%	0%	0%	0%	6%	0%
EHZ	1	0	0		0%	20%	2%	6%	0%	9%	1%	3%	4%	7%
EIM	0	3	5	0		0%	6%	0%	0%	7%	0%	2%	6%	0%
SCR	2	0	0	8	0		0%	10%	0%	12%	3%	4%	4%	4%
SCW	0	0	2	1	4	0		2%	0%	11%	6%	2%	6%	2%
SLB	0	0	0	2	0	3	1		0%	4%	0%	1%	1%	3%
SEW	0	0	0	0	0	0	0	0		0%	0%	0%	0%	0%
SIM	3	0	0	8	6	10	11	3	0		3%	2%	4%	3%
GEX	1	0	0	1	0	2	5	0	0	3		12%	5%	17%
GGV	4	1	0	4	2	5	3	1	0	3	16		13%	22%
GST	2	0	5	4	6	4	7	1	0	6	6	21		11%
GTR	0	1	0	5	0	3	2	2	0	3	14	28	13	

Legend

Number of Issuers with both elements scoring '4' or '5'

Number of Issuers with both elements scoring '4' or '5', as a percentage of Issuers with either elements scoring '4' or '5'

EAQ - Greenhouse Gas Emissions/Air Quality; EFM – Energy & Fuel Management; EWT – Water & Wastewater Treatment;

EHZ – Waste & Hazardous Materials; EIM – Exposure to Environmental Impacts

SCR – Community Relations & Social Access; SCW – Customer Welfare, Product Safety, Data Security;

SLB – Labour Relations & Practices; SEW – Employee Well-being; SIM – Exposure to Social Impacts

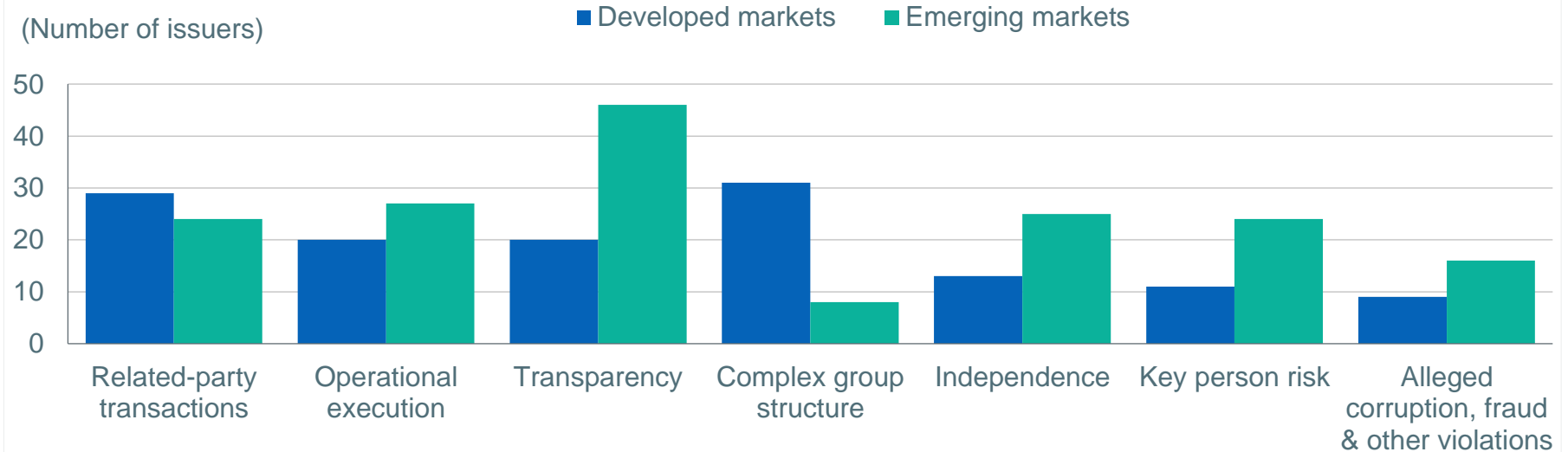
GEX – Operational Execution; GGV – Governance Structure; GST – Group Structure; GTR – Financial Transparency

Source: Fitch Ratings

Governance elements most often jointly relevant

Types of Governance Issues Often Linked

Most Common Governance Issues

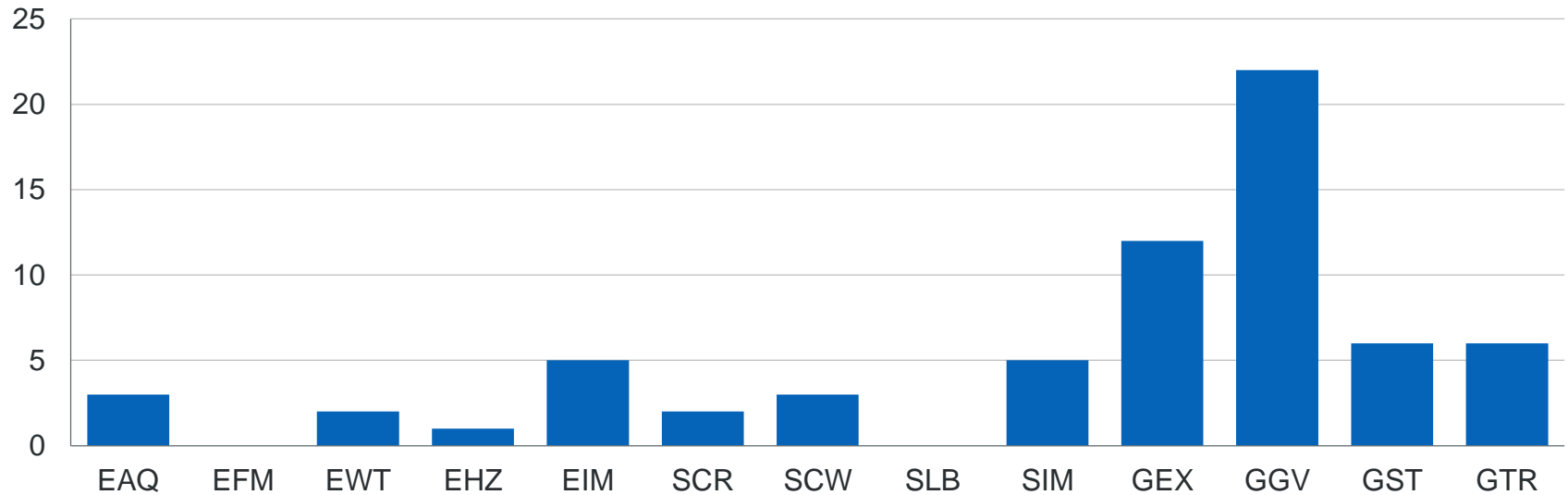


Source: Fitch Ratings

Highest Relevance When Financial Links Strong

ESG Elements With Relevance Score of '5'

(Number of elements)



Source: Fitch Ratings



2

Heat Maps – ESG Impact Across 51 Corporate Sectors

ALL FITCH CREDIT RATINGS ARE SUBJECT TO CERTAIN LIMITATIONS AND DISCLAIMERS. PLEASE READ THESE LIMITATIONS AND DISCLAIMERS BY FOLLOWING THIS LINK: [HTTPS://FITCHRATINGS.COM/UNDERSTANDINGCREDITRATINGS](https://fitchratings.com/understandingcreditratings). IN ADDITION, RATING DEFINITIONS AND THE TERMS OF USE OF SUCH RATINGS ARE AVAILABLE ON THE AGENCY'S PUBLIC WEB SITE AT WWW.FITCHRATINGS.COM. PUBLISHED RATINGS, CRITERIA, AND METHODOLOGIES ARE AVAILABLE FROM THIS SITE AT ALL TIMES. FITCH'S CODE OF CONDUCT, CONFIDENTIALITY, CONFLICTS OF INTEREST, AFFILIATE FIREWALL, COMPLIANCE, AND OTHER RELEVANT POLICIES AND PROCEDURES ARE ALSO AVAILABLE FROM THE CODE OF CONDUCT SECTION OF THIS SITE. FITCH MAY HAVE PROVIDED ANOTHER PERMISSIBLE SERVICE TO THE RATED ENTITY OR ITS RELATED THIRD PARTIES. DETAILS OF THIS SERVICE FOR RATINGS FOR WHICH THE LEAD ANALYST IS BASED IN AN EU-REGISTERED ENTITY CAN BE FOUND ON THE ENTITY SUMMARY PAGE FOR THIS ISSUER ON THE FITCH WEBSITE.

Copyright © 2019 by Fitch Ratings, Inc., Fitch Ratings Ltd. and its subsidiaries. 33 Whitehall Street, NY, NY 10004.

Telephone: 1-800-753-4824, (212) 908-0500. Fax: (212) 480-4435. Reproduction or retransmission in whole or in part is prohibited except by permission. All rights reserved. In issuing and maintaining its ratings and in making other reports (including forecast information), Fitch relies on factual information it receives from issuers and underwriters and from other sources Fitch believes to be credible. Fitch conducts a reasonable investigation of the factual information relied upon by it in accordance with its ratings methodology, and obtains reasonable verification of that information from independent sources, to the extent such sources are available for a given security or in a given jurisdiction. The manner of Fitch's factual investigation and the scope of the third-party verification it obtains will vary depending on the nature of the rated security and its issuer, the requirements and practices in the jurisdiction in which the rated security is offered and sold and/or the issuer is located, the availability and nature of relevant public information, access to the management of the issuer and its advisers, the availability of pre-existing third-party verifications such as audit reports, agreed-upon procedures letters, appraisals, actuarial reports, engineering reports, legal opinions and other reports provided by third parties, the availability of independent and competent third-party verification sources with respect to the particular security or in the particular jurisdiction of the issuer, and a variety of other factors. Users of Fitch's ratings and reports should understand that neither an enhanced factual investigation nor any third-party verification can ensure that all of the information Fitch relies on in connection with a rating or a report will be accurate and complete. Ultimately, the issuer and its advisers are responsible for the accuracy of the information they provide to Fitch and to the market in offering documents and other reports. In issuing its ratings and its reports, Fitch must rely on the work of experts, including independent auditors with respect to financial statements and attorneys with respect to legal and tax matters. Further, ratings and forecasts of financial and other information are inherently forward-looking and embody assumptions and predictions about future events that by their nature cannot be verified as facts.

As a result, despite any verification of current facts, ratings and forecasts can be affected by future events or conditions that were not anticipated at the time a rating or forecast was issued or affirmed.

The information in this report is provided "as is" without any representation or warranty of any kind, and Fitch does not represent or warrant that the report or any of its contents will meet any of the requirements of a recipient of the report. A Fitch rating is an opinion as to the creditworthiness of a security. This opinion and reports made by Fitch are based on established criteria and methodologies that Fitch is continuously evaluating and updating. Therefore, ratings and reports are the collective work product of Fitch and no individual, or group of individuals, is solely responsible for a rating or a report. The rating does not address the risk of loss due to risks other than credit risk, unless such risk is specifically mentioned. Fitch is not engaged in the offer or sale of any security. All Fitch reports have shared authorship. Individuals identified in a Fitch report were involved in, but are not solely responsible for, the opinions stated therein. The individuals are named for contact purposes only. A report providing a Fitch rating is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securities. Ratings may be changed or withdrawn at any time for any reason in the sole discretion of Fitch. Fitch does not provide investment advice of any sort. Ratings are not a recommendation to buy, sell, or hold any security. Ratings do not comment on the adequacy of market price, the suitability of any security for a particular investor, or the tax-exempt nature or taxability of payments made in respect to any security. Fitch receives fees from issuers, insurers, guarantors, other obligors, and underwriters for rating securities. Such fees generally vary from US\$1,000 to US\$750,000 (or the applicable currency equivalent) per issue. In certain cases, Fitch will rate all or a number of issues issued by a particular issuer, or insured or guaranteed by a particular insurer or guarantor, for a single annual fee. Such fees are expected to vary from US\$10,000 to US\$1,500,000 (or the applicable currency equivalent). The assignment, publication, or dissemination of a rating by Fitch shall not constitute a consent by Fitch to use its name as an expert in connection with any registration statement filed under the United States securities laws, the Financial Services and Markets Act of 2000 of the United Kingdom, or the securities laws of any particular jurisdiction. Due to the relative efficiency of electronic publishing and distribution, Fitch research may be available to electronic subscribers up to three days earlier than to print subscribers.

For Australia, New Zealand, Taiwan and South Korea only: Fitch Australia Pty Ltd holds an Australian financial services license (AFS license no. 337123) which authorizes it to provide credit ratings to wholesale clients only. Credit ratings information published by Fitch is not intended to be used by persons who are retail clients within the meaning of the Corporations Act 2001.