

Understanding ESG data

Data for ESG investment – HK + Connect in focus

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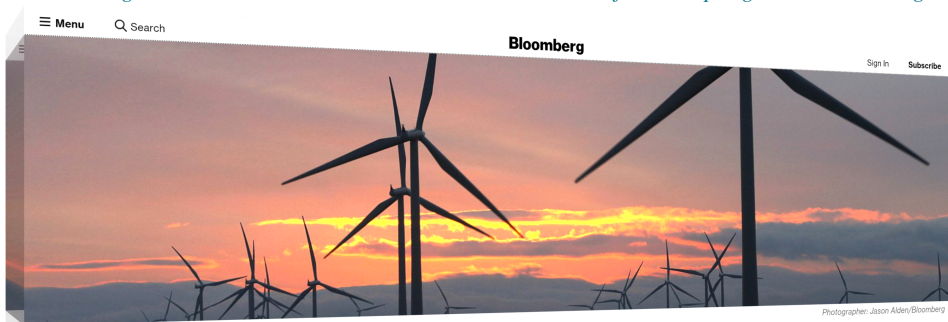
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We are often reminded of the importance of responsible investment

<https://www.bloomberg.com/news/articles/2019-09-09/the-massive-cost-of-not-adapting-to-climate-change>



Climate Changed

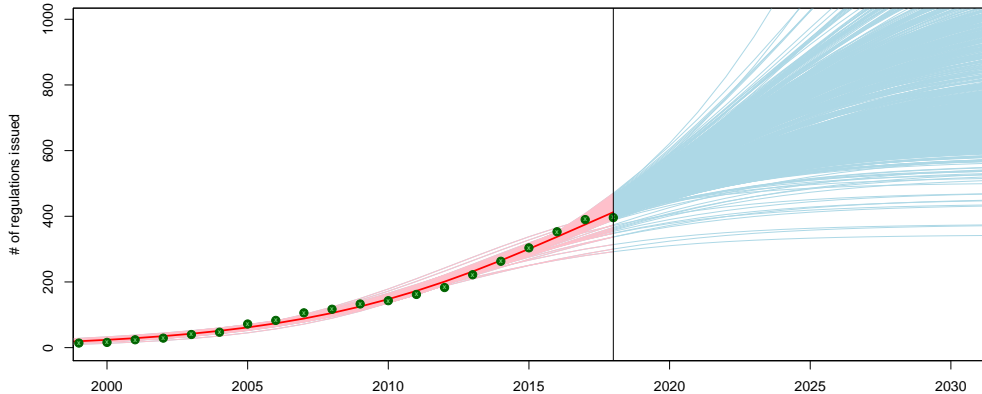
The Massive Cost of Not Adapting to Climate Change

The world must invest \$1.8 trillion by 2030 to prepare for the effects of global warming. A new report said the payoff could be four times that.

And considerable efforts are underway to strengthen regulation

UN Principles of Responsible investment 'policy map' - related to voluntary disclosure choices

Historic and projected diffusion of PRI regulations – Global



('100%' confidence bands obtained via bootstrap estimation, with b=999 replications)

Bridging the gap between ESG investors and ESG reporters/analysts

- ▶ There is a surge in demand for ESG investment but **implementing any ESG investment strategy is contingent on the availability of comprehensive, comparable and accurate data**
- ▶ Crucial to the process therefore is the role of the **ESG reporting agency**, and also of the individual **ESG analyst**



ESG scores versus E, S and G scores

There are many sources of data on ESG. Here we briefly consider three, but before that let us quickly recap on what E, S and G refer to:

- ▶ **E scores** refers to ‘environmental’ and is intended to reflect performance against environmental impact/management criteria.
- ▶ **S scores** refers to ‘social’ and is intended to gauge how well a firm supports and promotes diversity, social acceptance and social cohesion both within the firm and across its external stakeholders
- ▶ **G scores** refers to ‘governance’ and captures core information pertaining to the underlying governance structure of the firm
- ▶ **ESG scores** piece together the individual E, S and G scores into a unified single score, reflecting the multiple dimensions of governance.

Two major providers of data are:



A 'shallow dive' on Sustainalytics [*Morningstar]

Morningstar provides access to a range of data building on the Sustainalytics suite of ESG indicators. Their **portfolio/index measures are quite unique and available at monthly frequency**, building on *Sustainalytics data plus in-house machine learning*.

- ▶ Environmental Disclosure Score on 0-100 range [651 equities covered]
- ▶ Social Disclosure Score on 0-100 range [651 equities covered]
- ▶ Governance Disclosure Score on 0-100 range [631 equities covered]
- ▶ ESG Disclosure Score on 0-100 range [1,350 equities covered]
- ▶ Industry-normalized scores on all of the above*
- ▶ Richer information on (i) controversies and (ii) product involvement, but (i) cannot yet be taken from the system via API.

Around 10,000 - 15,000 equities covered*, starting from around 2009

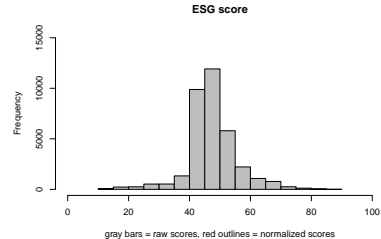
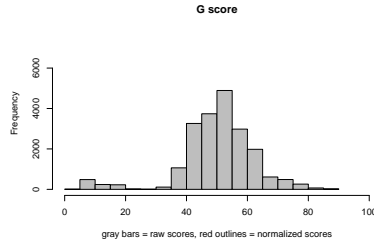
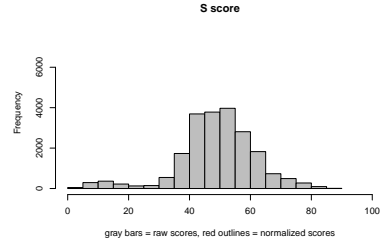
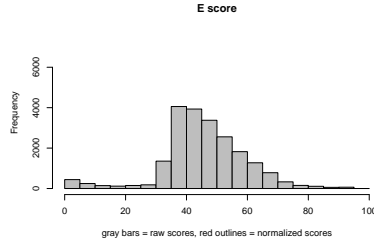


SUSTAINALYTICS

MORNINGSTAR®

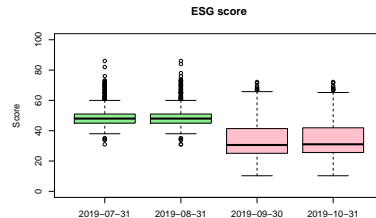
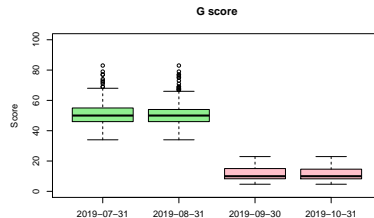
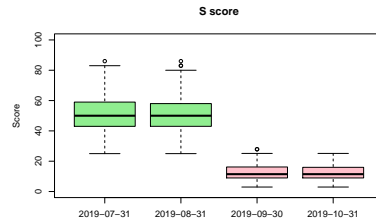
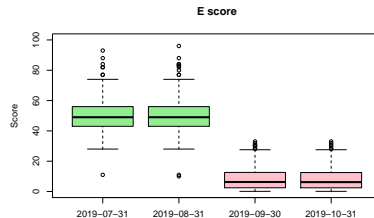
Distributions of Morningstar ESG scores for HK+Connect listed firms

- ▶ One of the dominant features of scores available through Morningstar is their tight clustering.
 - ▶ Do the scores illustrate enough variability to draw meaningful insights?
 - ▶ Moreover, do the combined scores look like they are drawn from the sub-scores?
- ▶ There is a clustering in the lower end of the spectrum (close to zero) - let us consider what this is all about...



A shift in focus from performance to risk

- ▶ **Sustainalytics** have modified at last part of their view on ESG data provision
 - ▶ Raw and normalized scores are now dispensed with
 - ▶ Albeit historic normalized scores remains available
- ▶ **Risk based measures** now replace the traditional *performance based scores*.
- ▶ This presents some questions as to the value in tapping into raw data feeds.
- ▶ It also presents problems for historical analysis (36-month or longer)



A 'shallow dive' on MSCI

MSCI provides access to a wider range of data. Their **proprietary data is available at monthly frequency**, and is possibly the most expansive with around 150* metrics to unpack or **complement** the ESG activity/performance of a firm

- ▶ Environmental Disclosure Score on 0-10 range [740 equities covered]
 - ▶ *BIODIV_LAND_USE_SCORE; BIODIV_LAND_USE_EXP_SCORE; BIODIV_LAND_USE_MGMT_SCORE; CARBON_EMISSIONS_SCORE; FINANCING_ENV_IMP_SCORE; E_WASTE_MGMT_SCORE; OPPTS_GREEN_BUILDING_SCORE; OPPTS_RENEW_ENERGY_SCORE*
- ▶ Social Disclosure Score on 0-10 range [740 equities covered]
 - ▶ *OPPTS_NUTRI_HLTH_SCORE; HLTH_SAFETY_SCORE; HUMAN_CAPITAL_DEV_SCORE; RESPONSIBLE_INVEST_SCORE**
- ▶ Governance Disclosure Score on 0-10 range [740 equities covered]
 - ▶ *ACCESS_TO_COMM_SCORE; ACCESS_TO_FIN_SCORE; BUS_ETHICS_FRAUD_SCORE*
- ▶ Weighted ESG Disclosure Score on 0-10 range [732 equities covered]

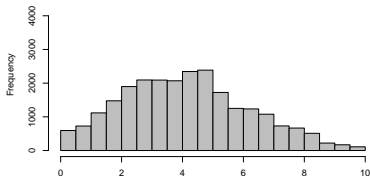
Around 7,500 issuers covered, starting from 2007



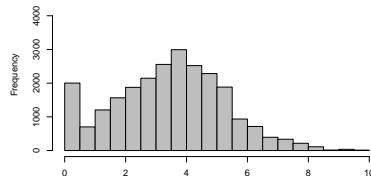
Distributions of MSCI ESG scores for HK+Connect listed firms

- ▶ **MSCI data** follow visibly more continuous distributions meaning a greater level of score variation to compare firms
 - ▶ Less industry normalization
 - ▶ While 'raw data' is provided as a matter of routine
- ▶ **Zero-valued scores** occur in all dimensions, and especially in the S-scores.
- ▶ While overall scores are generally capped at 80%
- ▶ The combined score distributions omit properties visible in the sub-scores, implying analyst interpretation.

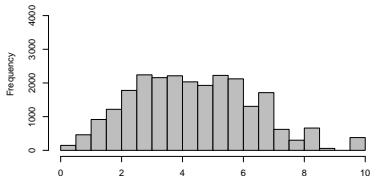
E score



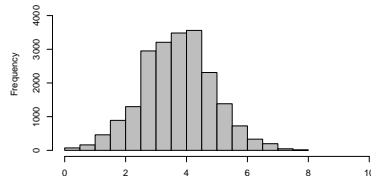
S score



G score



ESG score



A 'shallow dive' on Refinitiv

Refinitiv data promises some of the most extensive coverage. Data are provided at an annual frequency only, making their data somewhat different to Sustainalytics or MSCI, but somewhat consistent with Bloomberg, not covered in this presentation.

- ▶ Environmental Disclosure Score on 0-100 range [487 equities covered]
- ▶ Social Disclosure Score on 0-100 range [487 equities covered]
- ▶ Governance Disclosure Score on 0-100 range [487 equities covered]
- ▶ ESG Disclosure Score on 0-100 range [487 equities covered]
- ▶ What the data lacks in terms of breadth, it makes up for in depth, with more than 400 sub-components that can be tapped into.
- ▶ These include not only ESG indicators, but underlying emissions, waste and energy consumption data among other things.

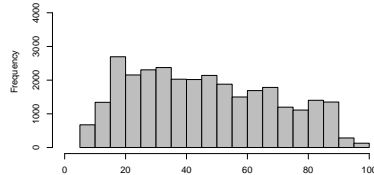
Around 7,000 equities covered, starting from around 2002.

REFINITIV 

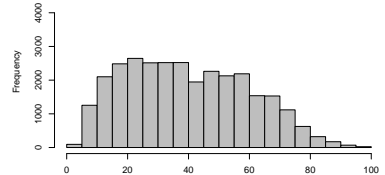
Distributions of Refinitiv ESG scores for HK+Connect listed firms

- ▶ Similar to MSCI, the data here are quite continuous in their nature.
 - ▶ The distributions are visible smoother, and offer better support towards the tails.
 - ▶ And a higher likelihood of score 100 than 0.
- ▶ **The combined ESG score** appears to be a 'sensible' reflection of the sub-scores.

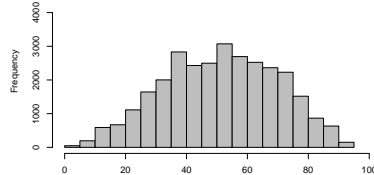
E score



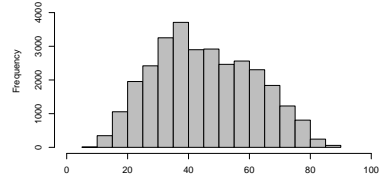
S score



G score



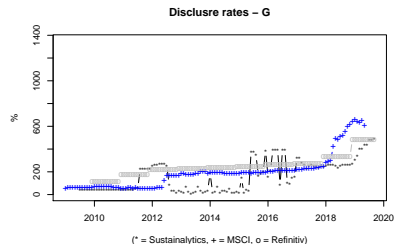
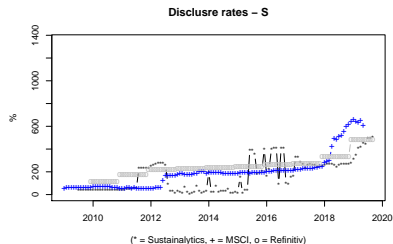
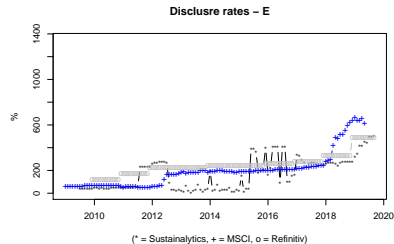
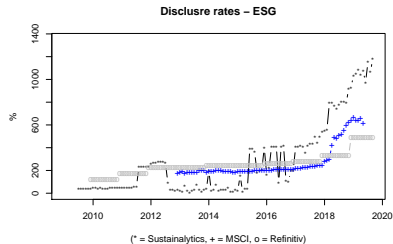
ESG score



Voluntary disclosure practices over time

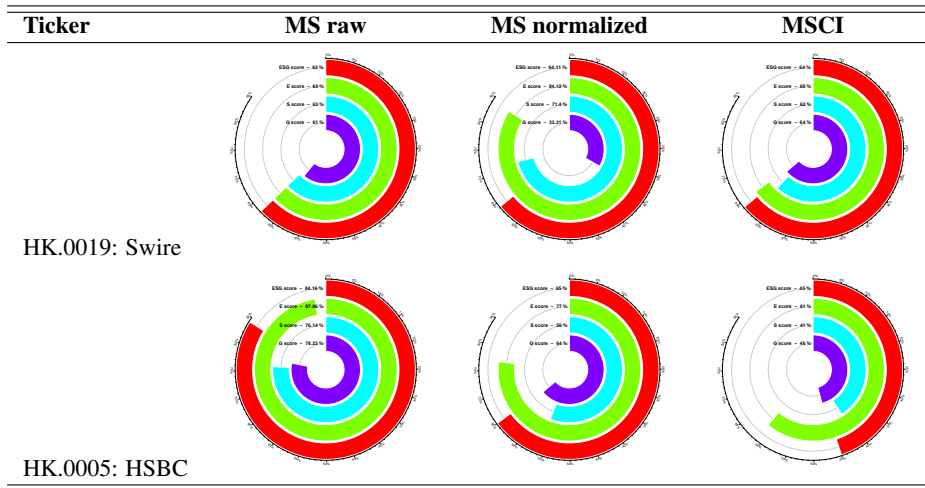
Morningstar versus MSCI

- ▶ **Morningstar** reporting shows interesting patterns including reduced-reporting in 2013-2015 period
- ▶ **MSCI** illustrates consistent reporting principles and steady growth in market capture
- ▶ **Refinitiv** data reflect reasonable coverage growth, but with fewer firms in recent years compared to other sources



A though on score comparability

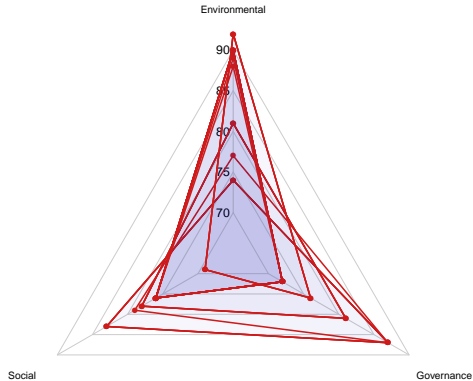
Morningstar versus MSCI, SWIRE versus HSBC, for the year 2019 (June)



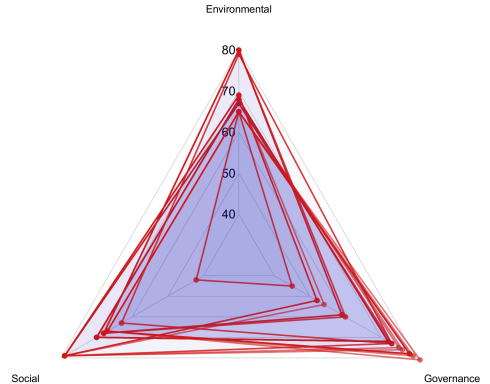
Some awareness ESG ‘score inconsistency’

Are different companies given more importance for certain E, S or G criteria?

Panel (A): E, S and G component scores for overall ESG score of 80



Panel (B): E, S and G component scores for overall ESG score of 70



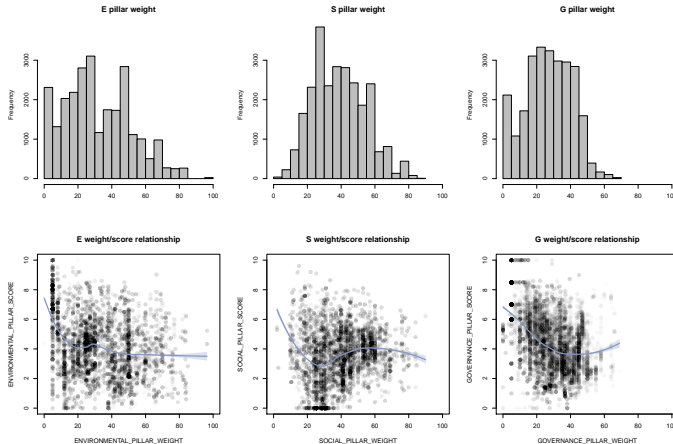
MSCI Are more transparent than others over E, S and G weights

But not consistent in their application

Taking a look across the weights used for each dimension, we see some variability

MSCI is quite transparent over weights used, while other data providers are less forthcoming on weights

There are hints of evidence that weight adjustments are not random noise and might embed some systematic judgement



A quick comparison of different weighting schemes

Evidence from HK+Connect, 2009:01-2019:08

	<i>Dependent variable: ESG</i>		
	Sustainalytics	MSCI	Refinitiv
E	0.354***	0.278***	0.341***
S	0.257***	0.353***	0.353***
G	0.121***	0.208***	0.304***
Constant	13.790***	4.569***	0.042***
Observations	39,176	27,362	33,858*
Adjusted R ²	0.798	0.803	0.998
E+S+G	0.732	0.839	0.999

Note:

*p<0.1; ** p<0.05; *** p<0.01

Some concluding thoughts

A core function of ESG data is to offer ‘proper transparency’ and disclosure of socially responsibility related metrics. Critical questions that remain open include:

- ▶ When deciding what to disclose - is there a unified/standardized set of metrics?
- ▶ Is there scope for analyst interpretation or processing of reported scores, and is it possible these might give rise to a value proposition?
- ▶ Is this a responsibility for the traditional accounting function/team in handling ESG reporting requirements (or expectations)? Reporting requirements might suggest yes, yet a capacity gap in knowledge and skills might go the other direction.

I will not try to speculate answers today but surmise that our PASS related research is dis-entangling our knowledge gaps and highlighting priorities - some of which will be the foundation for later discussion today.



Thanks for listening!

Any questions/comments are warmly welcomed.

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