

ESG Investing: Use and Misuse

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Agenda

1- What is ESG Investing

2- Market use of ESG Investing

3- Potential ESG Misuse

4- Climate Risk

What is ESG Investing?

The Risk of Intangibles



- BP paid \$18.7bn after the justice department and four states sued (2015).



- VW ordered to pay \$2.8bn criminal fine for manipulating emission tests (2017).

Source: Bloomberg

What are these intangible risk?

Environment (E)	Social (S)	Governance (G)
<ul style="list-style-type: none">• Environment policy• Environment management• Greenhouse gas emission• Carbon emission• Water usage• Waste management, etc.	<ul style="list-style-type: none">• Consumer rights• Supply chain management• Health and Safety• Product safety• Labor relationships, etc.	<ul style="list-style-type: none">• Fund governance• Board structure• Shareholders rights• Business ethics• No independent directors,• No meeting attended,• Woman on board, etc.

Source: UBS Sustainable Investing 2013. Adapted by E. BENZ

KPI = key performance indicator

ESG is a comprehensive risk analysisacross the horizon



Short-term

- Firm-specific risks

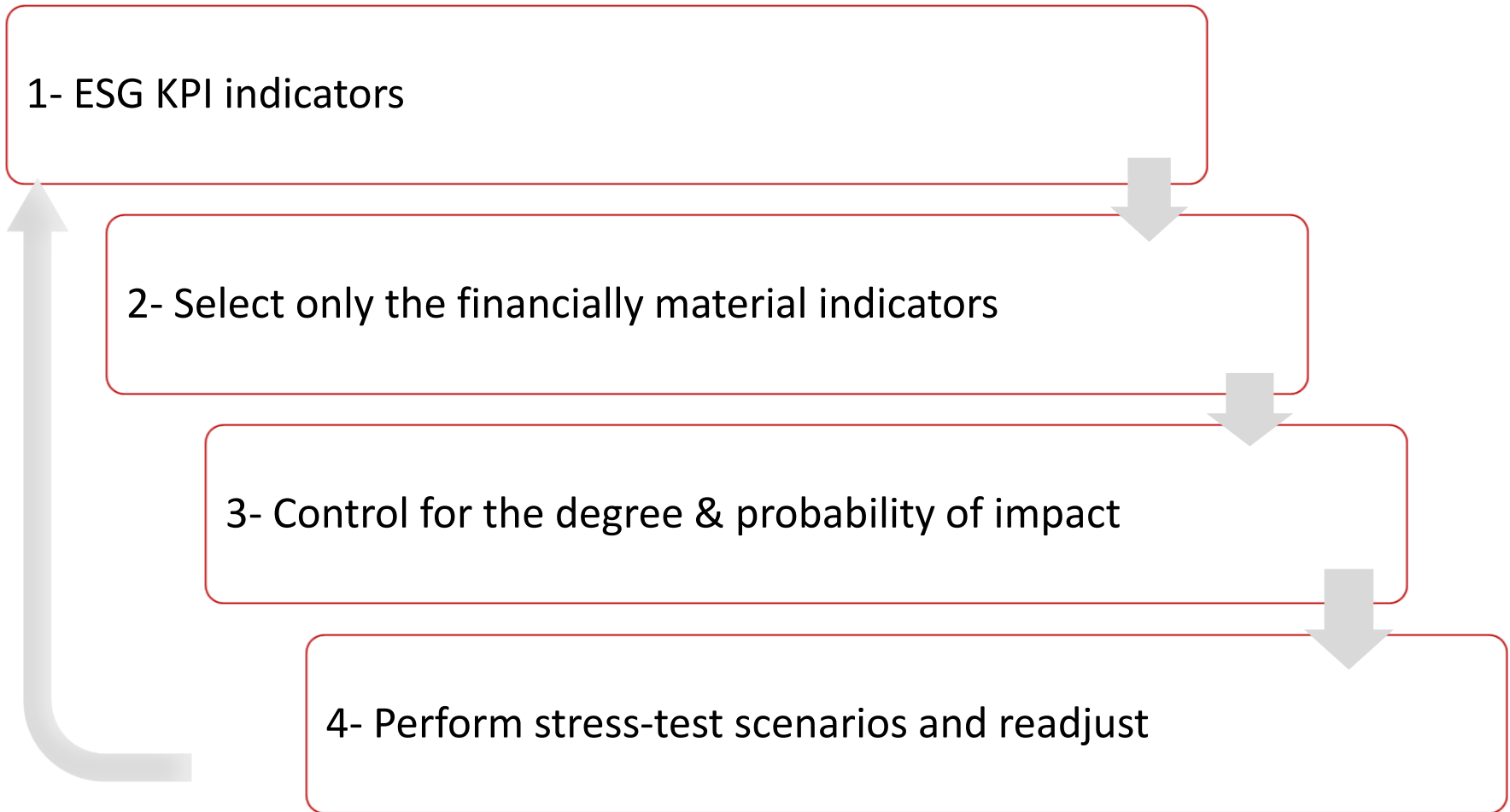
Medium-term

- Regulatory risks
- Technology risks
- Sector risks

Long-term

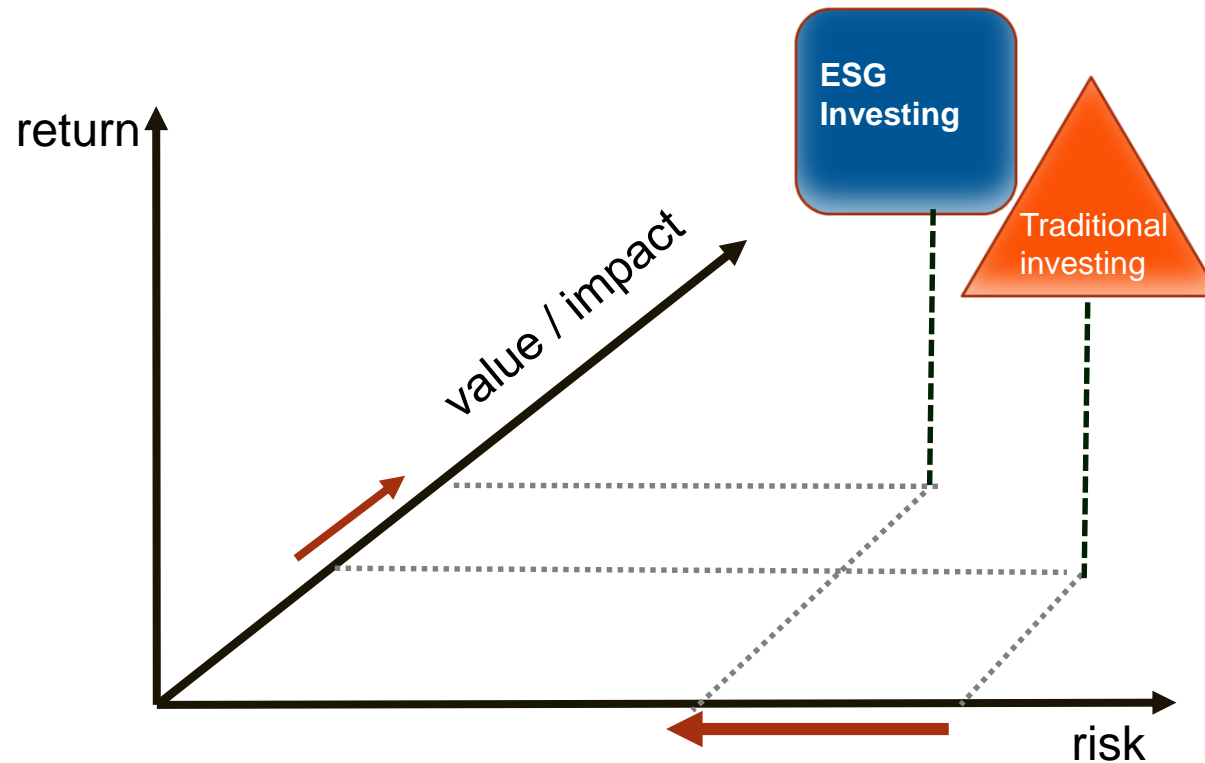
- Macro risks
- Society risks

ESG should be a structured and systematic analysis



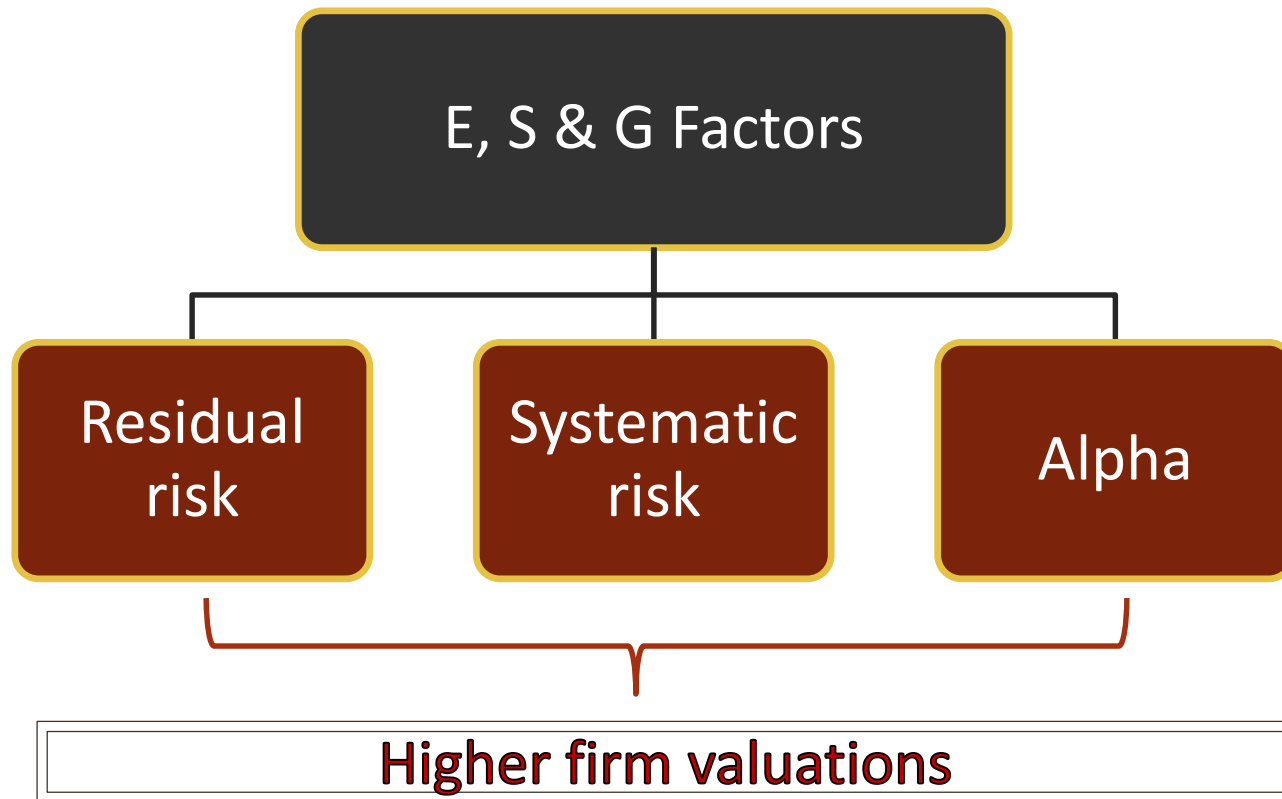
The Market Use of ESG Investing

ESG Investing versus Traditional Investing



Better performance and higher impact

ESG Factors affect Stock and Bond Valuations



ESG Strategies for Portfolio Allocation

1- Negative screening portfolio

2- Best in class portfolio

3- Leaders/laggards portfolio

4- ESG tilting portfolio

5- Momentum strategies

6- ESG factor portfolio

7- Smart ESG portfolio, etc.

Growth potential

Systematic risk

ESG Investing has grown fast

Global sustainable investment assets have expanded dramatically from **\$13.3 trillion** in 2012 to **\$22.9 trillion** at the start of 2016.

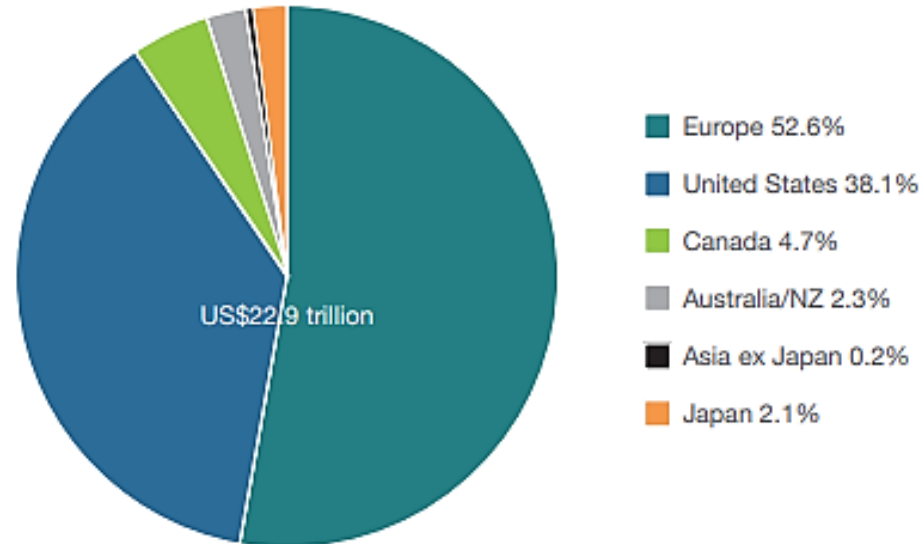


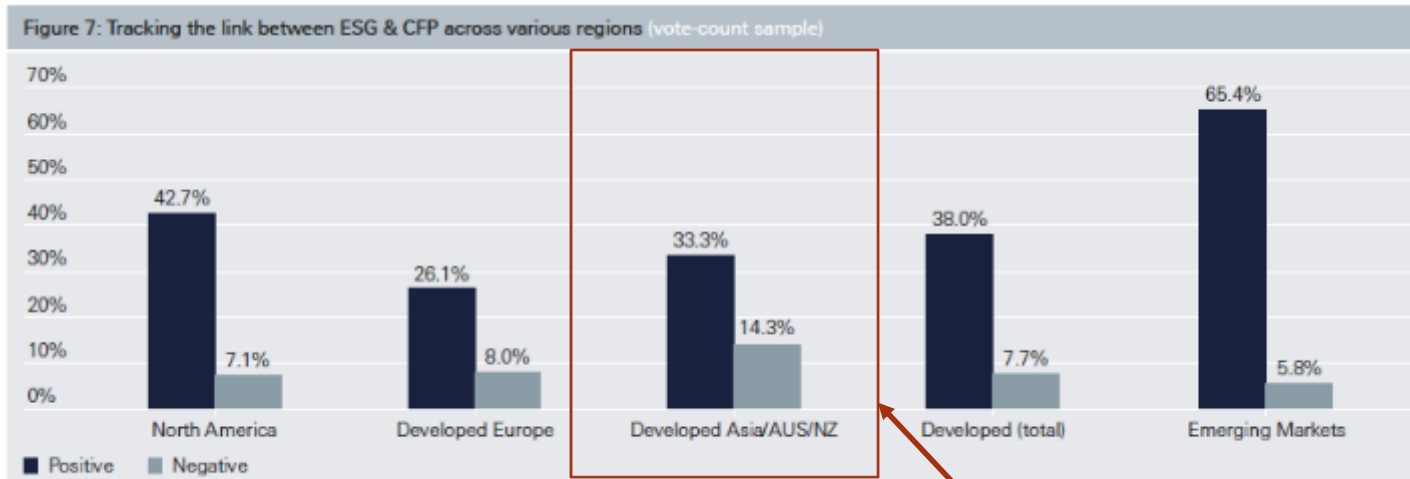
Table 2: Proportion of SRI Relative to Total Managed Assets

Region	2014	2016
Europe	58.8%	52.6%
United States	17.9%	21.6%
Canada	31.3%	37.8%
Australia/New Zealand	16.6%	50.6%
Asia	0.8%	0.8%
Japan		3.4%
Global	30.2%	26.3%

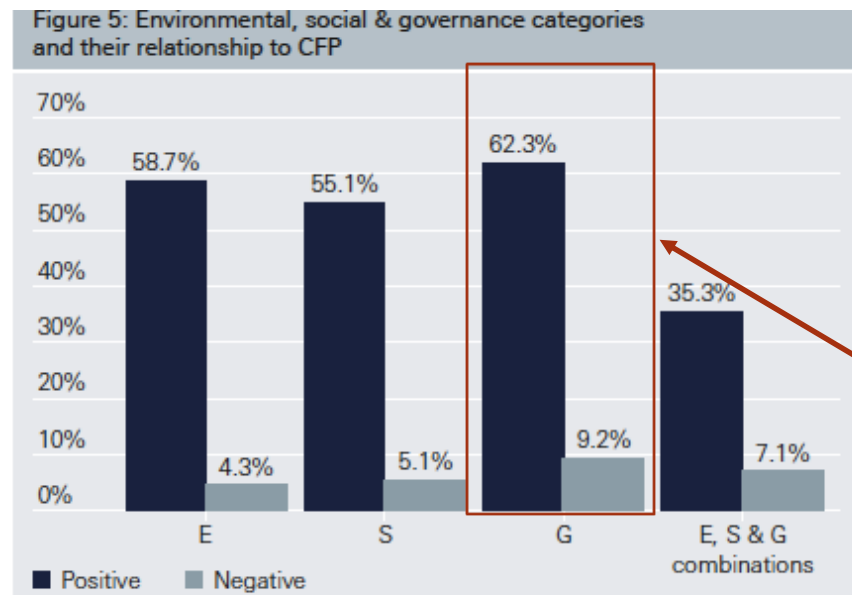
Asia has only 50bn ESG AUM.

Note: Asia figure includes Japan in 2014, but excludes Japan in 2016. Eurosif used a narrower definition of SRI in 2016 than in 2014. See Appendix I: Methodology and Data, for details.

E,S and G factors have real value



Source: Friede, Busch, Bassen (December 2015)



Source: Friede, Busch, Bassen (December 2015)

ESG factors are important for the company's financial performance in Asia (33%).

Governance is the most important one (62%).

Governance is the most important factor in Asia

Asia: Improvement in Governance score has strong implications on firm performance.

World	APAC
Increase stock price return (in 2 years)	Same with 70% larger effect on return
Increase future P/E ratio (in 1 year)	Same with 60% larger effect on P/E
Increase future ROE (in 2 years)	Not applicable to APAC
Not in other regions	Reduce volatility (in 2 years)
Not in other regions	Lower beta (in 2 years)

Source: Robeco and HKUST: The Role of Governance Relative to Environment and Social Factor in Equity Returns, 2015

The Potential ESG Misuse

Most strategies are applied on ESG score level based on a series on indicators such as below

Environment (E)	Social (S)	Governance (G)
<ul style="list-style-type: none">• Environment policy• Environment management• Greenhouse gas emission• Carbon emission• Water usage• Waste management, etc.	<ul style="list-style-type: none">• Consumer rights• Supply chain management• Health and Safety• Product safety• Labor relationships, etc.	<ul style="list-style-type: none">• Fund governance• Board structure• Shareholders rights• Business ethics• No independent directors,• No meeting attended,• Woman on board, etc.

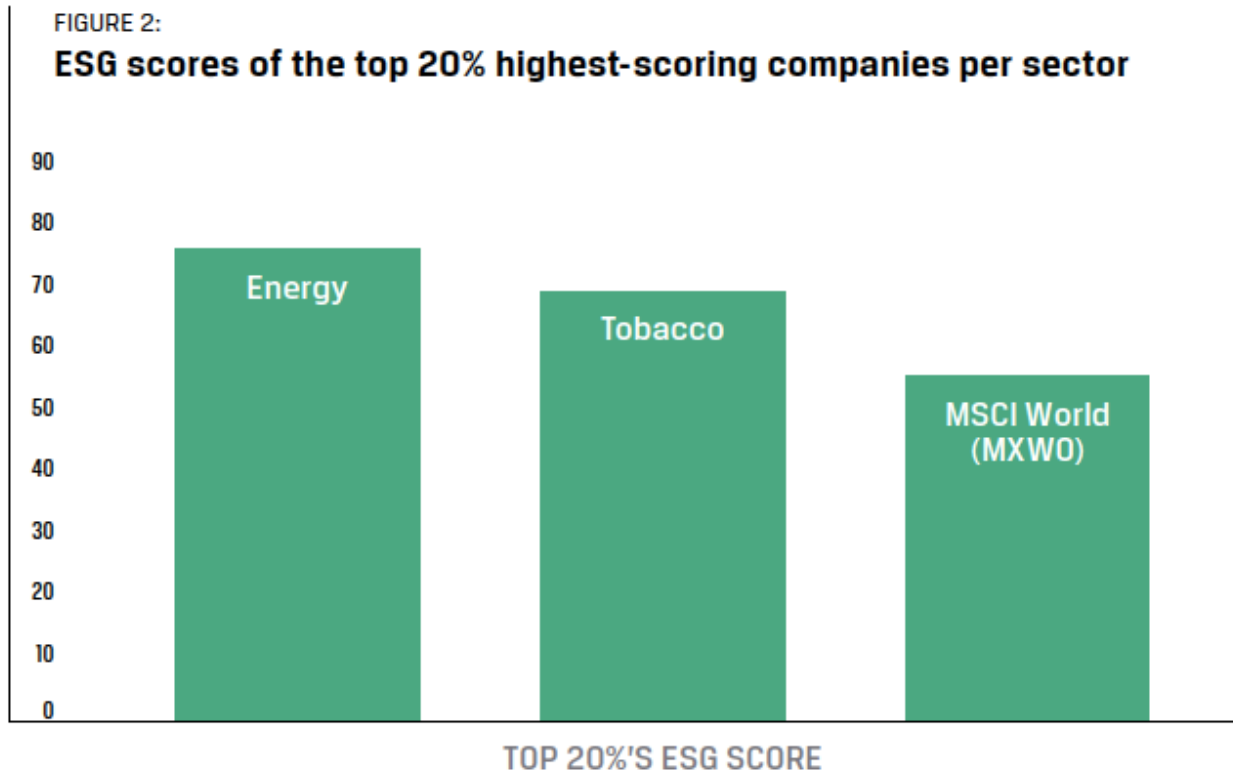
Source: UBS Sustainable Investing 2013. Adapted by E. BENZ

KPI = key performance indicator

ESG score does not mean sustainability

FIGURE 2:

ESG scores of the top 20% highest-scoring companies per sector

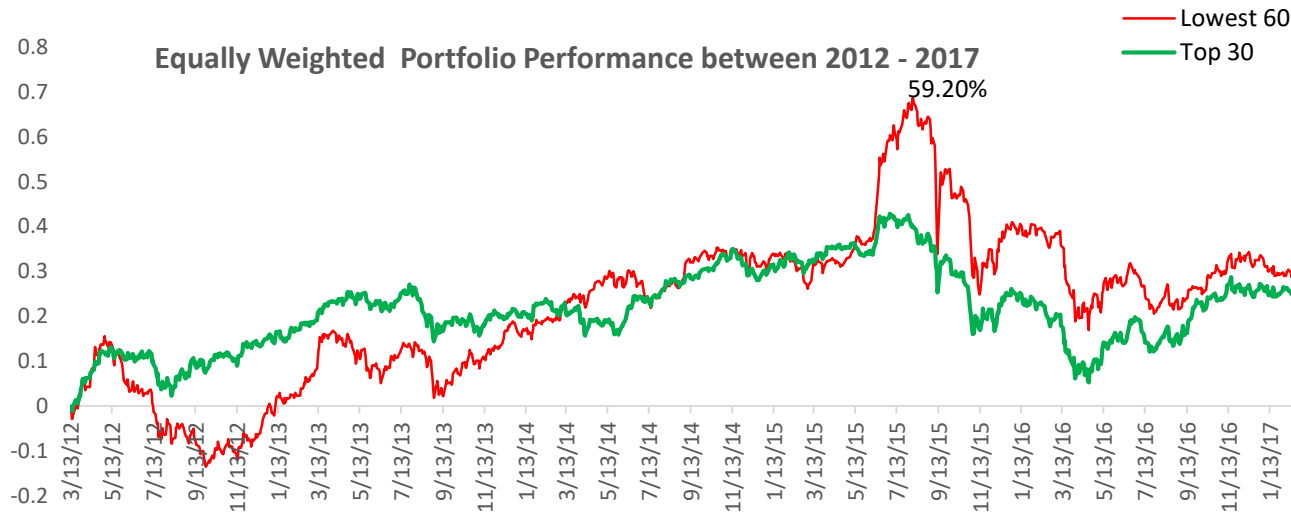


ESG scores are not easy to interpret across sectors

Sources: NN Investment Partners and Sustainalytics

ESG leaders have higher risk-adjusted returns than laggards

Top 30 ESG companies versus bottom 60 ESG companies.



Portfolio 1:
Equally weighted top 30 companies on ESG

Portfolio 2:
Equally weighted bottom 60 companies on ESG

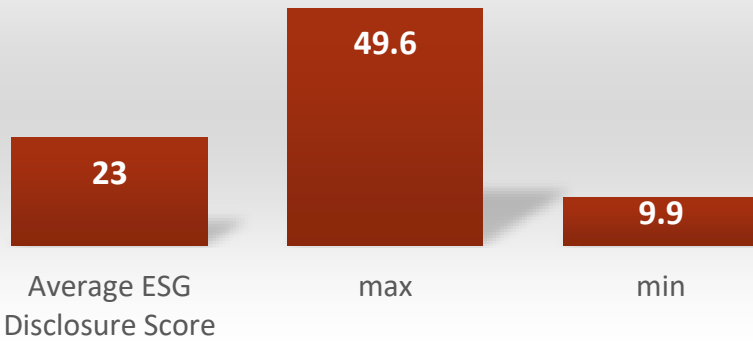
(2012-2017)	Top 30 ESG	Bottom 60 ESG
An. AVERAGE	4.49%	5.03%
An. ST DEV	12.78%	18.64%
Sharpe Ratio	0.35	0.27
Average ESG	47.56	11.02
Average Market Cap	161,379	26,679

Source: Bloomberg, author calculations

Note: Results hold for a market cap weighted portfolio as well.

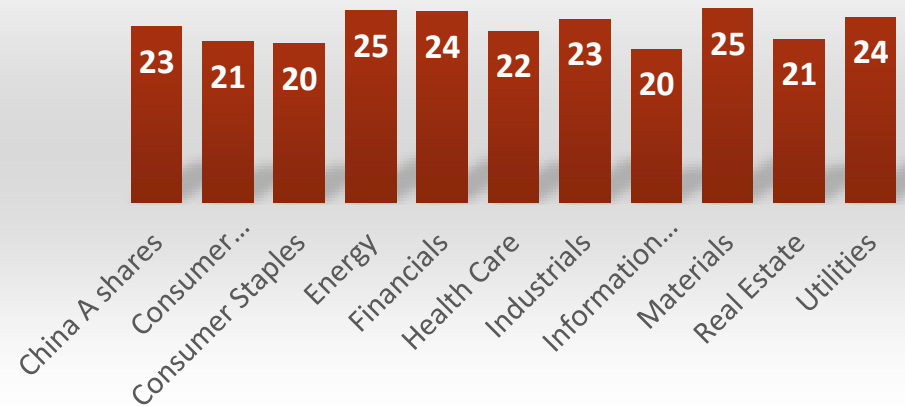
ESG scores for China A shares are very low...room for improvement

China A shares ESG score statistics



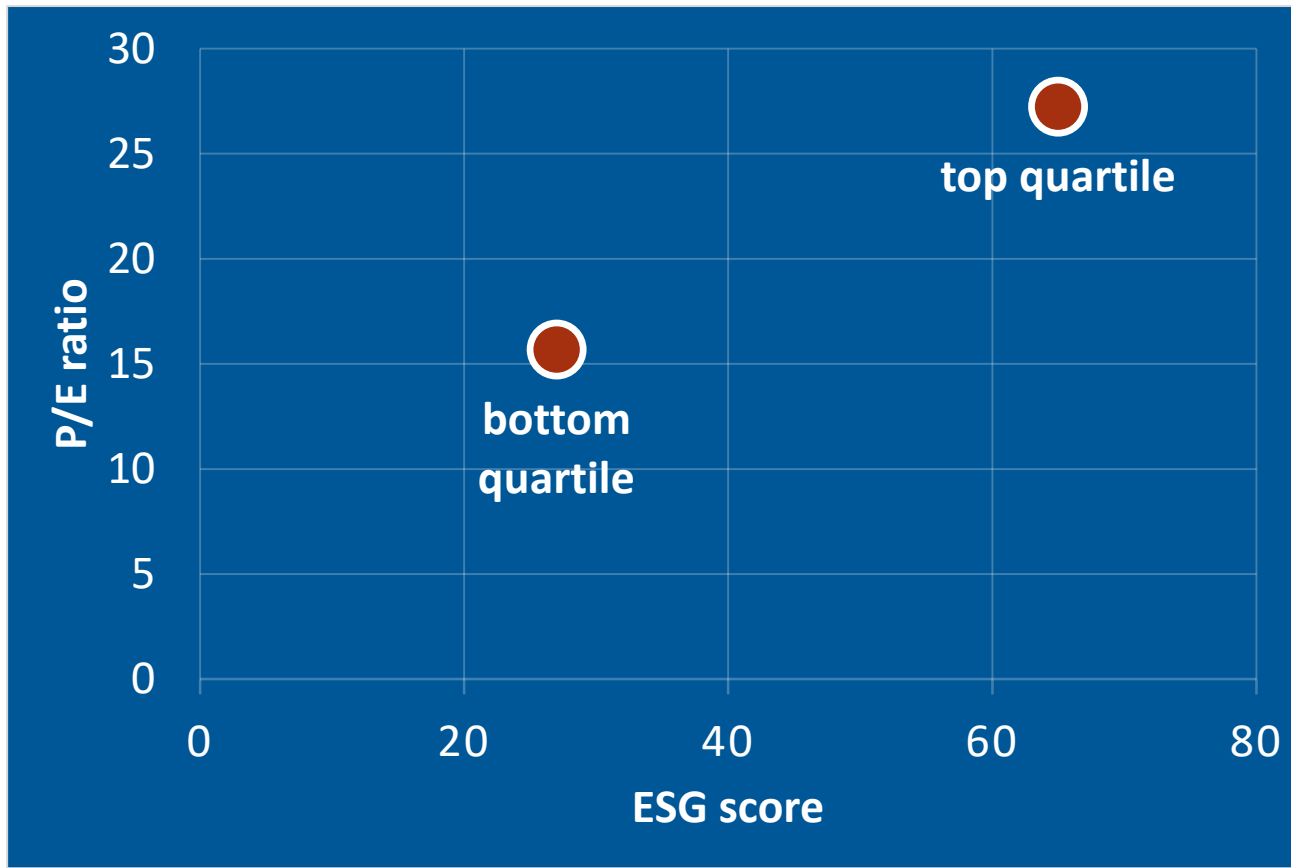
Source: Bloomberg, author calculations

ESG score average per sector



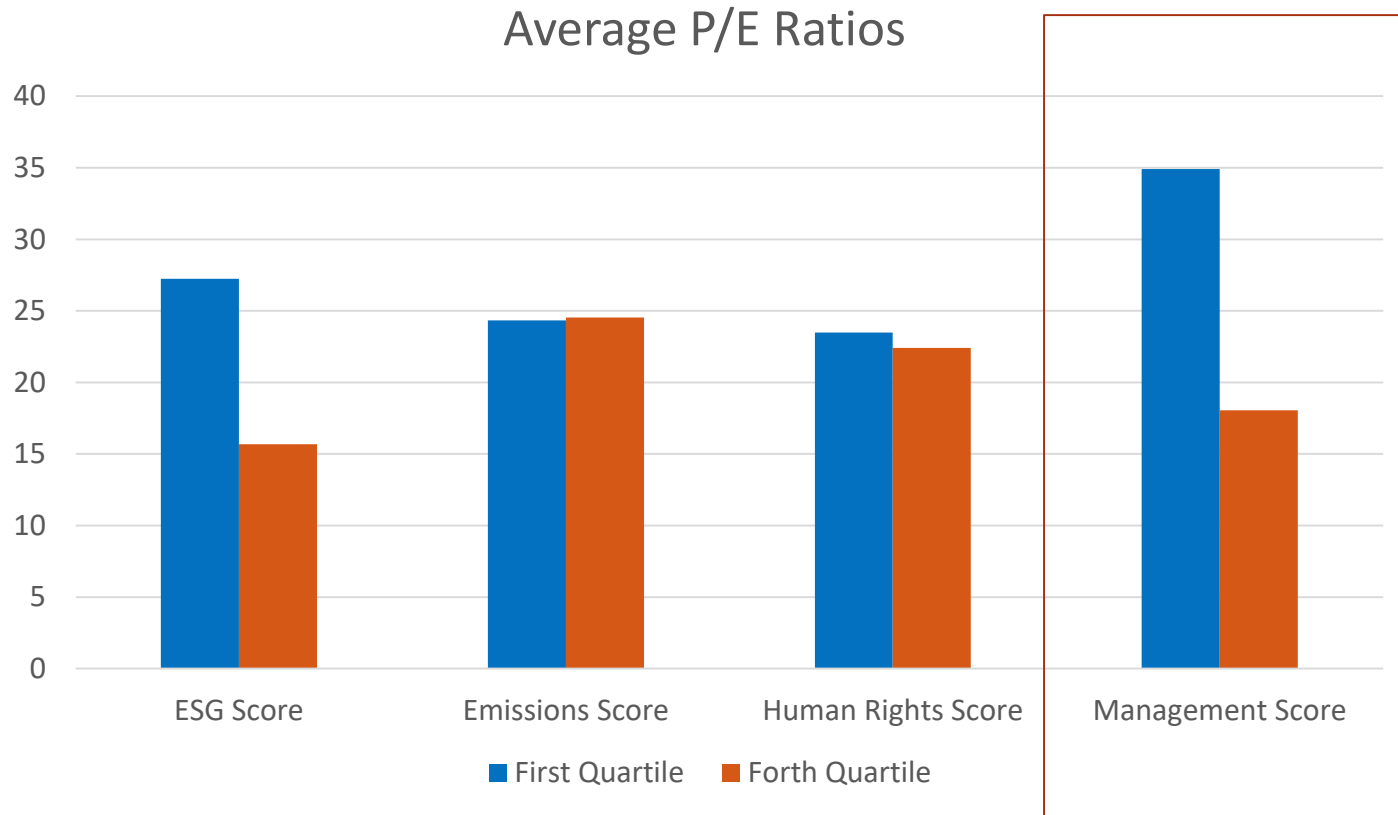
Source: Bloomberg, author calculations

ESG is an good indicator of performance on China A-Shares, but



Source: Reuters, author calculations

however it is driven mainly by one indicator...



Source: Thomson Reuters, author calculations

Climate Risk

WEF: The Global Risk Landscape 2019

Top 10 risks in terms of Likelihood

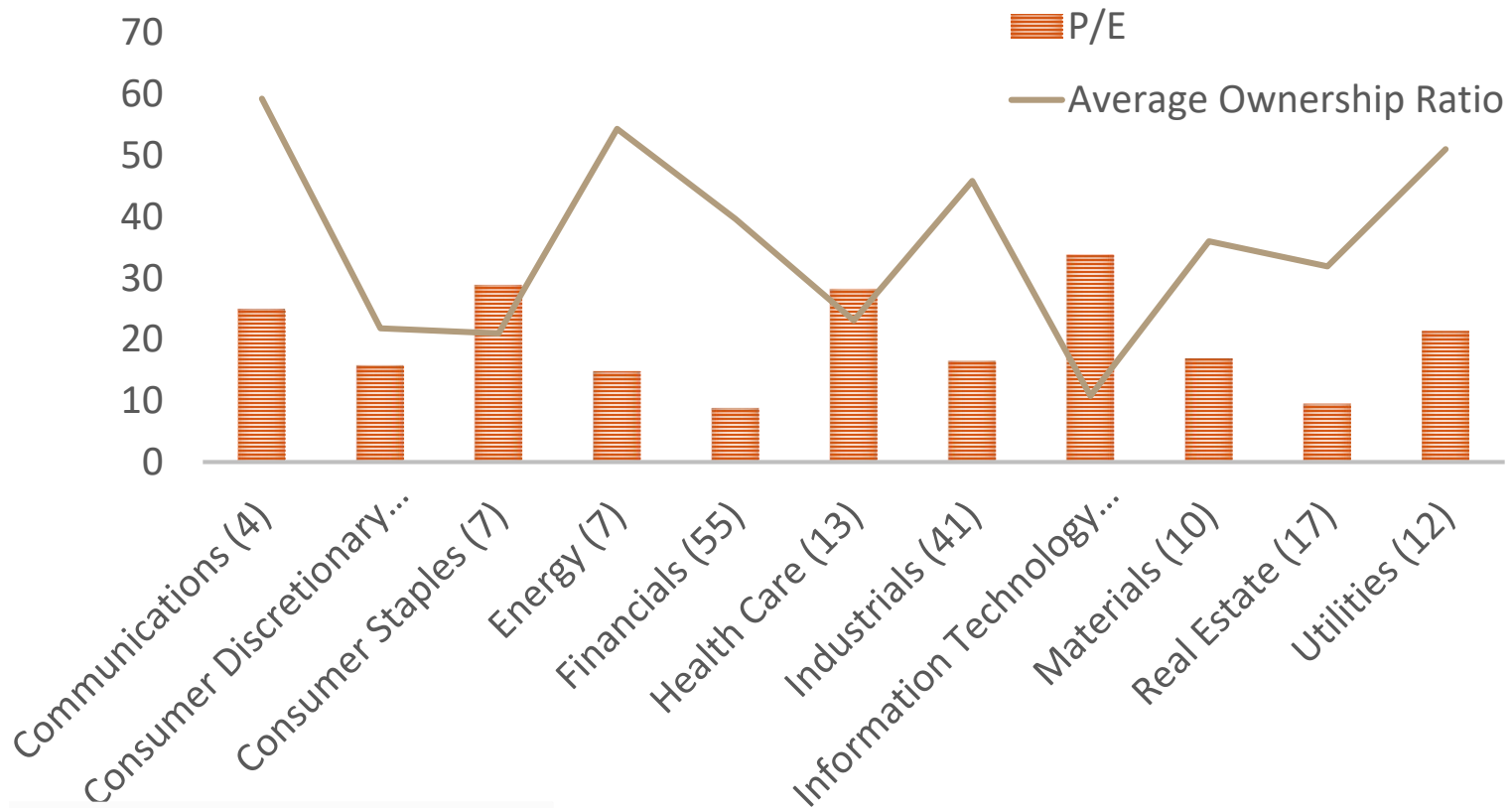
- 1 Extreme weather events
- 2 Failure of climate-change mitigation and adaptation
- 3 Natural disasters
- 4 Data fraud or theft
- 5 Cyber-attacks
- 6 Man-made environmental disasters
- 7 Large-scale involuntary migration
- 8 Biodiversity loss and ecosystem collapse
- 9 Water crises
- 10 Asset bubbles in a major economy

Top 10 risks in terms of Impact

- 1 Weapons of mass destruction
- 2 Failure of climate-change mitigation and adaptation
- 3 Extreme weather events
- 4 Water crises
- 5 Natural disasters
- 6 Biodiversity loss and ecosystem collapse
- 7 Cyber-attacks
- 8 Critical information infrastructure breakdown
- 9 Man-made environmental disasters
- 10 Spread of infectious diseases

Source: World Economic Forum 2019
<https://www.weforum.org/reports/the-global-risks-report-2019>

China A-Shares and SOEs



Source: Bloomberg, author's calculations

China A-Shares and SOEs

Company (top 25% polluting, i.e. most polluting)	Ownership	Normalized PE	Normalized PB	CO2	Normalized CO2
cosco ship dev a (hk-c)	91.47	0.84	0.52	259.01	2.81
china citic bk a (hk-c)	92.45	0.80	0.74	0.71	2.18
air china a (hk-c)	73.16	1.39	1.23	194.45	2.11
china east air a (hk-c)	85.67	1.13	1.32	190.33	2.06
gf securities a (hk-c)	24.11	1.66	1.34	0.67	2.06
china southern airlines co ltd	82.25	1.26	1.10	197.80	1.82
china gezhouba a (hk-c)	84.82	0.49	0.89	156.66	1.70
Mean	76.28	1.08	1.02	142.80	2.11
Standard Dev.	22.10	0.37	0.29	94.14	0.33

Company (bottom 25% polluting, i.e. least polluting)	Ownership	Normalized PE	Normalized PB	CO2	Normalized CO2
china commu con a (hk-c)	5.6	0.71	0.68	13.32	0.14
china intl mar a (hk-c)	16.37	1.71	1.33	12.93	0.14
haitong sec a (hk-c)	36	1.93	1.12	0.04	0.11
crrc corp a (hk-c)	85.15	1.93	1.61	9.38	0.10
china life ins a (hk-c)	3.67	3.04	2.39	0.03	0.08
huatai securities co ltd	13.33	1.50	1.26	0.02	0.06
cssc offshore and marine engineering group co ltd	90.7	32.06	2.15	5.37	0.06
Mean	35.83	6.13	1.51	5.87	0.10
Standard Dev.	34.38	10.61	0.55	5.61	0.03

Difference	Ownership**	PE	PB**	CO2***	CO2 (Normalized)***
	2.62	-1.26	-2.05	3.84	16.10

Conclusions

- i. ESG investing is a comprehensive investment approach
- ii. ESG is an additional tool for making informed asset allocation and valuation decision
- iii. ESG analysis and integration should not be done in isolation, otherwise it leads to underperformance.

Thank you

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