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ESG and company valuations

An Australian perspective

April 2022

Executive summary

Context

Environmental, social and governance (ESG) matters are gaining an ever-increasing level of prominence and focus from owners and managers of capital, company management, consumers, suppliers, regulators and governments. More than half of Australian corporate dealmakers are already incorporating ESG impacts into their regular M&A decision making. Regardless of where you may sit on the spectrum – from evangelist to sceptic – it is well-nigh impossible to ignore ESG when considering the value and prospects of a company today.

Yet there remains a level of opacity as to how to measure and monitor ESG performance and what elements of ESG are the most critical. Perhaps most importantly, while there is an intuitive linkage between ESG and value creation that is gaining widespread acceptance, it remains murky as to what the quantitative implications of specific ESG factors are when it comes to the value of a company.

This paper is not intended to advocate for, or critique, the adoption of particular ESG metrics by companies. We are merely interested in testing the linkage, if any, between a firm's ESG performance and its value.

ESG measurement and ratings

In this paper, we consider the challenges associated with measuring ESG performance, identify common ESG ratings providers and highlight the lack of consistency in ESG ratings across providers.

ESG and company value

We consider published academic literature and other studies as to whether "better" ESG performing companies also outperform in financial terms, and consider how well these studies address the implications for the value of these companies. We separately conduct our own quantitative analysis to identify market evidence from Australian publicly listed companies as to ESG performance and value.

Key takeaways

Generally, academic and other literature provides evidence of correlations between ESG and financial performance, although the measures of ESG and financial performance are not consistent across studies, and are not always aligned to drivers of value or valuation outcomes. Performance on material ESG issues was found to be more influential on share returns, whereas outperformance on immaterial ESG issues tended to drag down returns. ESG indices tend to outperform benchmarks, albeit in many instances, marginally.

As these studies tend to focus on the US and European markets, we undertook analysis of performance of companies in the ASX200 (as a proxy for the Australian listed market) over a three year period from 2019 through 2021. Our analysis suggests there is a 'size effect' whereby larger companies have better ESG ratings, despite similar reporting scope coverage. Most interestingly, there seems to be a reasonable positive correlation between excess total shareholder returns (TSR) and improvements in ESG scores over a three-year horizon. Improvements in ESG scores also correlate positively with improvements in valuations multiples (EV/EBITDA, EV/Revenue and P/E) over this horizon. Of the three ESG pillars, the environment or 'E' score seems to be the most persuasive when it comes to excess TSR whereas the social or 'S' score is most closely matched with earnings multiple improvements. However, despite survey evidence suggesting a decrease in the cost of capital for companies that improve their ESG metrics, with anecdotal evidence of a greater weight of capital seeking 'ESG friendly' investments, our analysis of the Australian listed market does not show such a relationship.

Event studies, which seek to address the 'causality v/s correlation' criticism of other ESG studies, also suggest there is an asymmetric effect, whereby "bad ESG news" results in value reduction, but "good ESG news" does not result in a corresponding increase in value, particularly over a short-term horizon (up to 10 days). However, one of these studies also found evidence of this reduction in value being an overreaction, with mean reversion observed over a three-month horizon. Other event studies have found evidence of an improvement in the cost of capital and P/E multiples 36 months after ESG rating upgrades.

The jury is still out as to whether ESG linked outperformance represents a market inefficiency that will eventually disappear over a much longer horizon. For now, when it comes to preserving and enhancing company value, ESG considerations are no longer a "nice to have", rather rapidly becoming a "must-have". Companies should prioritise the following:

- Have an informed understanding of ESG issues relevant to their business, value chain and key stakeholders;
- Disclose performance data relating to material ESG issues in a transparent and consistent manner; and
- Prioritise investment in ESG initiatives that align with these material issues.

How do you measure “Corporate Virtue”?

If you can’t measure it, you can’t manage it… or can you?

Despite the rise and prevalence of ESG, finding the ‘right’ measures of ESG performance of companies is not straightforward. Data to assess ESG performance is systematically less structured, less complete, and less standardised than, say, traditionally reported audited financial data.[1] Despite recent efforts for convergence, there does not appear to be a universally agreed framework as to what should be measured across the admittedly broad spectrum of ESG, let alone standardised measures that would be easily comparable across companies/sectors. Metrics that may be critical for some stakeholders, companies, or industries may not be a concern for others.

While there are a range of activities underway to address these challenges, including the development of a consistent set of global ESG reporting standards under the International Sustainability Standards Board, the realisation of these benefits will take some time.

In the absence of simplified, universally applicable quantitative metrics, we turn to ESG ratings. Unlike say, credit risk measurements, ESG ratings cannot rely on a clear-cut universal outcome, such as the default rate, to review and refine the methodology of ascribing ESG ratings. As a result, there are now more than 100 ESG rating methodologies in the market from providers such as MSCI, Bloomberg, or Refinitiv, which differ in coverage, data source, measurement, scope, and weighting.[2] The social and legal origins of the rating agencies and the need to differentiate themselves in the competitive market also tend to cause disagreement and stifle convergence.[3]

Because of such theoretical and methodological differences, the average correlation of ESG scores by seven of the largest ESG rating providers is only 0.45.[4] When compared to an average of 0.99 for credit ratings by major agencies, this is an astonishingly weak result. ESG rating providers also regularly announce changes in their methodology which retroactively impact past scores. Berg et al. (2020) identified that the top decile can vary by more than 30% when such modification occurs.[5] They also found that the purported positive linkages between ESG scores from one provider and share returns was not present before a retroactive methodology adjustment.

Despite the abundance of data available, measuring ESG performance remains challenging, and the answer to how well a company is performing from an ESG perspective can vary dramatically depending on which data source you choose.

Nonetheless, despite their shortcomings, ESG ratings have been widely adopted by industry practitioners and academic researchers in their assessment of the ESG performance of companies. Reputable providers of ESG ratings provide visibility over their construction of their ratings, which allows interested stakeholders to trace through the overall ratings to the underlying influencing factors.

Correlation across 7 major ESG rating providers

	Refinitiv	Sustainalytics	Inrate	Bloomberg	FTSE	MSCI KLD	MSCI IVA
Refinitiv	1.00						
Sustainalytics	0.75	1.00					
Inrate	0.23	0.30	1.00				
Bloomberg	0.75	0.69	0.12	1.00			
FTSE	0.57	0.61	0.27	0.59	1.00		
MSCI KLD	0.52	0.56	0.29	0.48	0.49	1.00	
MSCI IVA	0.40	0.43	0.32	0.30	0.27	0.44	1.00

Source: Gibson, Krueger, & Schmidt (2021), Deloitte analysis

Do "better" ESG companies attract a premium?

Yes … although it depends on who you ask; and not all ESG issues matter

The short-termism of financial markets may, at first glance, seem like a poor fit with the longer-term nature of an ESG focus. Scepticism of ESG revolves around the notion that such an overlay constrains the investable universe for investors and companies, which reduces diversification opportunities and potentially expected returns, and ESG is therefore arguably more about 'doing good' rather than 'doing well'.[6] For companies, ESG related upfront costs may not necessarily be offset (at least in the short-term) by tangible financial benefits.

Nevertheless, the rise and prevalence of ESG has been marked, and there is a large body of research that attempts to answer the question as to whether a greater focus on ESG has any impact on financial performance or value.

Several meta-analyses combining the findings from thousands of studies, show that an overwhelmingly high number of research papers found a positive relationship between corporate social responsibility and financial performance. Friede et al. (2015) discovered 47.9% of studies found favourable results while Whelan et al. (2021) identified positive outcomes in 58% of all assessed corporate studies.[7] However, these meta studies generally define corporate social responsibility broadly and allow diverse metrics and proxies for both ESG and financial performance, which limits their comparability and usefulness.

Analysis of recent, widely cited, individual studies however, provides further insight and more nuanced findings than those suggested by the meta-analyses.

From an investment perspective, ESG performance exhibits positive relationship with share returns. However, not all ESG issues are financially relevant. Khan, Serafeim, and Yoon (2016), found that improvement in material ESG issues generated outperformance, while addressing immaterial issues produced an adverse impact.[8] Their determination of what was considered material was based on guidance from the Sustainability Accounting Standards Board and a proprietary dataset.

The implication is that companies must proactively identify and work on key, rather than all, ESG issues to enhance shareholder value.

Share returns given performance on ESG issues

Annualised alpha		Performance on immaterial ESG issues	
		High	Low
Performance on material ESG issues	High	1.50%	4.83%
	Low	-0.38%	-2.20%

Source: Khan, Serafeim, and Yoon (2016), Deloitte analysis

From a corporate perspective, high ESG ratings were found to correlate with a lower cost of capital, particularly the cost of debt.[9] On the other hand, studies on profitability discovered mixed evidence suggesting most sustainability strategies may not provide an immediate positive impact to accounting or financial measures of performance.[10]

The creation of ESG indices, such as the S&P 500 ESG index, provide an opportunity for researchers to assess the real-world application of ESG ratings. They found that the majority of these indices outperformed the benchmarks since their inception.[11] We note that the outperformance was generally marginal. Interestingly, the largest outperformance was observed in emerging markets,[12] as ESG ratings were seen as a credible piece of information to identify better companies in regions where information asymmetry is more prevalent.

In Australia, 30% of corporate heads of M&A surveyed in 2021 were willing to pay a premium if the target had positive ESG attributes, and conversely, 43% of respondents would apply a discount if a target had negative ESG attributes.[13] However, CFOs are having difficulty in measuring the return on investment of ESG action, with 65% seeing this as the top barrier to their business doing more on ESG.[14]

Despite the favourable evidence supporting ESG, researchers have also suggested some criticisms:

- **Proxy for quality:** a high ESG rating is merely a proxy to identify well-run and better-performing companies, which have greater resources and more time to commit to ESG issues.
- **Industry concentration:** portfolios constructed based on ESG ratings in academic studies tend to be concentrated in certain industries, such as technology, or investment styles, such as value or momentum, which may explain their above-average returns.[15]
- **Long-term performance:** the existence of above average returns is due to the attention ESG has been garnering, and may represent a market inefficiency, which could disappear over time.[16]

Summary of recent studies on ESG and financial performance

Study	Authors	Year of Study	Corporate				Investment
			Profitability	Cost of Capital	Valuation Multiple	Share Volatility	Alpha
Honey, I Shrunk the ESG Alpha	Bruno et al.	2021					Neutral
Responsible investing: The ESG-efficient frontier	Pedersen et al.	2020	Mixed		Mixed		Neutral
Foundations of ESG Investing	Giese et al.	2019	Positive	Positive	Positive	Positive	
Public Sentiment and the Price of Corporate Sustainability	Serafeim	2018					Positive
Corporate social performance and cost of debt: The relationship	Magnanelli and Izzo	2017		Negative			
Corporate Sustainability: First Evidence on Materiality	Khan et al.	2016					Positive
Corporate social performance and the cost of debt	Cooper and Uzun	2015		Positive			

Source: Deloitte analysis

What does the Australian market say?

ESG matters, but in the long term

Most of the research discussed above concentrated on the US and European markets, with limited coverage of Australian companies. We consider if those findings are applicable in an Australian context.

Approach

We assessed companies in the ASX200, as a proxy for the listed Australian market, by obtaining the ESG scores which inform Refinitiv ESG ratings for the period covering 2018 to 2021. We included the ESG and ESGC (ESG with controversy score overlay) scores, as well as the individual scores for each environmental, social, and governance pillars, to examine their relative importance. We adopted an annual frequency with observations at the end of each year, to allow sufficient intervals for the possibility of meaningful change.

We considered ESG ratings and changes in those ratings against three broad financial measures relevant to valuation:

- **Total shareholder return (TSR)**, determined as the sum of capital gains and dividend yield. We have calculated this based on adjusted share price data from S&P Capital IQ, which accounts for dividends (assuming re-investment) as well as corporate events (such as stock splits, buybacks etc.). We have also considered the excess or 'industry-adjusted' TSR, which measures over- or under-performance of each firm compared to the performance of its S&P GICS sector index.
- **Valuation multiples** assessed include enterprise value ratios – EV/EBITDA and EV/Revenue – and price earnings ratios (P/E), sourced from Refinitiv.
- Three measures of the **cost of capital**:
  - Deloitte proprietary estimates of the cost of equity of each firm, based on a forward-looking implied return approach
  - Refinitiv estimates of each firm's cost of equity, based on a CAPM approach using country measures of risk-free rate and equity risk premium, as well as the company's historical beta against the country's primary share index
  - Refinitiv estimates of each firm's cost of debt, based on an extrapolated yield curve of each company's short- and long-term debt

We removed datapoints where data was unavailable and to account for extreme values affecting the results, we also excluded observations below the 10th and over the 90th percentile rank within the sample dataset for each set of variables tested. Our analysis assigns equal weighting to all observations and does not control for firm-specific characteristics.

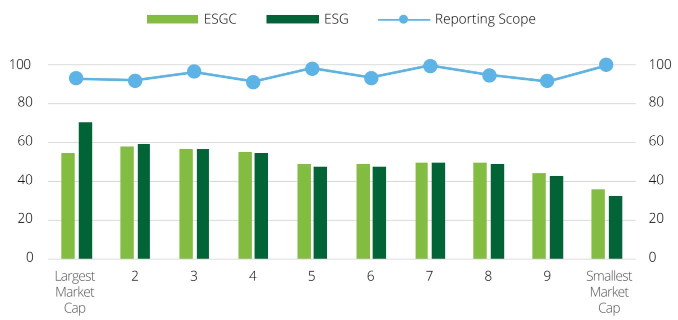
We also considered whether ESG can act as a signal for future financial performance by examining the correlation between ESG scores and the financial measures over the next twelve months (or a one year 'lag' in the ESG score).

Findings

Our analysis found the following:

- **Size effect:** Larger companies, based on market capitalisation, tend to receive better ESG scores, even though there is no significant difference in the scope of coverage of items they disclose. This is consistent with other studies, suggesting that large firms may have greater resources to implement more comprehensive ESG practices. This size effect is less pronounced but still present in observed ESGC scores (i.e. after an overlay for ESG controversies).

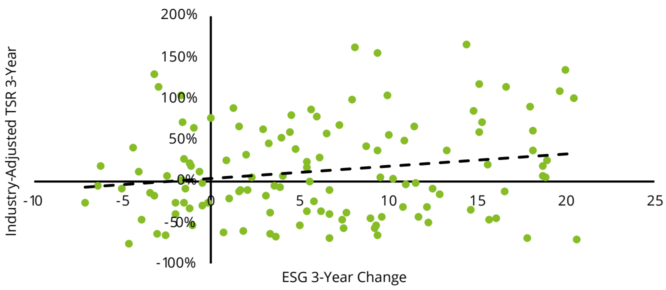
ESG Scores: Evidence of size effect



Source: Deloitte analysis

- **Cumulative TSR correlated with ESG improvement, downgrades have greater impact than upgrades**
  - We found that a three-year improvement in both ESGC and ESG scores from 2019 through and 2021 correlated with better cumulative TSR, both in absolute terms and in terms of an excess v/s sector returns. Considering that many investment managers now incorporate ESG as an element in their screening of potential investments, it could be that better ESG performance attracts more capital, thus providing above-average returns.

Excess returns vs change in ESG scores over three years



Source: Deloitte analysis

- Of the individual pillars that make up the ESG rating, environmental scores seem to be the most influential. This could be evidence of the relative importance investors ascribe to environmental factors such as climate change, which has been gaining attention in recent years and is now selected by Australians as one of the top national issues.[17]
- Interestingly, this overall relationship between excess returns and changes in ESG ratings does not appear to exist when considering the underlying single year intervals.
- Movement in ESG scores over twelve months did not show any significant correlation with the actual returns over the following twelve months, suggesting low ability to predict future returns, at least in the short-term.

- **Cost of Capital — no significant relationship**
  - Contrary to our hypothesis and other published research that shows that better ESG ratings (or improvements thereof) would correspond with a lower (or reduction in the) cost of capital, the Australian data analysed did not exhibit such a relationship after controlling for movements in risk-free rates. In other words, the implied equity risk premia and credit spreads for individual firms did not correlate with change in ESG scores.
  - Similar to TSR, we also did not find any meaningful results that improvements in ESG scores correlate with favourable changes in the cost of capital over the following twelve months.
  - This lack of meaningful findings extends to an analysis of the cost of equity for an individual company relative to a sector weighted average cost of capital.
- **Valuation multiples — positive correlation:**
  - Over a three-year horizon, improvements in ESG scores correlate positively with improvements in the changes of all multiples, albeit the relationship is strongest for EV/EBITDA multiples.
  - Of the three pillars, improvements in the social score exhibited the strongest correlation with increases in earnings multiples.
  - Despite the preceding observation the data did not establish any positive relationship between the one-year changes in ESG scores and any of the three valuation multiples. This could imply that the market has challenges in estimating the value of ESG performance in the short term.

These results as to the impact of ESG on measures of company value in the context of Australian listed companies are slightly different to other studies on the US and European markets, and are somewhat mixed. However, our findings tend to bear out the long-term relationship between ESG performance and company value. The predictive power of ESG ratings, which would be the most practically useful, is still limited, although this could be a result of the relatively short time horizon of our data set.

Summary of correlation analysis between ESG scores and financial performance

	Independent Variable									
	3-Year Change					1-Year Change				
Dependent Variable	ESG Score	ESGC Score	E Score	S Score	G Score	ESG Score	ESGC Score	E Score	S Score	G Score
TSR										
Absolute TSR	Positive	Positive	Positive	Positive	Negative	Negative	Neutral	Neutral	Negative	Neutral
Industry-adjusted TSR	Positive	Positive	Positive	Neutral	Neutral	Neutral	Neutral	Neutral	Negative	Neutral
Valuation Multiples										
Change in EV/EBITDA	Positive	Positive	Positive	Positive	Positive	Neutral	Negative	Negative	Neutral	Neutral
Change in EV/Sales	Positive	Neutral	Neutral	Positive	Neutral	Negative	Negative	Negative	Negative	Neutral
Change in P/E	Positive	Neutral	Neutral	Neutral	Neutral	Negative	Negative	Negative	Negative	Negative
Cost of Capital (Risk-Free Adjusted)										
Change in Deloitte Cost of Equity	Neutral	Neutral	Neutral	Negative	Neutral	Neutral	Negative	Negative	Negative	Neutral
Change in Refinitive Cost of Equity	Neutral	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Neutral	Negative
Change in Refinitive Cost of Debt	Negative	Negative	Negative	Negative	Neutral	Negative	Negative	Negative	Negative	Negative
Cost of Capital (Sector-Adjusted)										
Change in Deloitte Cost of Equity	Negative	Negative	Neutral	Negative	Negative	Negative	Negative	Neutral	Negative	Neutral
Change in Refinitive Cost of Equity	Neutral	Neutral	Negative	Neutral	Neutral	Negative	Negative	Negative	Neutral	Neutral
Change in Refinitive Cost of Debt	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative

Legend: Positive results · Neutral results · Negative results

Source: Deloitte analysis

But does ESG really matter?

Yes! In the short and long-term

Critics often point out that most studies and findings supporting ESG only addressed correlation, instead of causality. Whilst some studies attempt to control for firm-specific factors including other financial measures, these studies tend to not be able to directly address the question as to whether managing ESG issues creates high-performing firms, or if well-run firms simply tackle ESG concerns more effectively.

Researchers have attempted to address these concerns by conducting event studies, focusing on the impact to the company pre- and post- ESG-relevant events. Two common types of events examined are the publication of sustainability-related company news and revisions of a company's ESG ratings.

Serafeim and Yoon (2021)[18] and Cui and Docherty (2020)[19] found that positive news coverage produces above-average share returns over short horizon, up to 10 days after the news were published. They also discovered that the effect is asymmetric, as negative news coverage is "punished" more than positive news is rewarded. However, similar to our findings from the Australian listed market, the impact on share returns is not persistent, with mean-reversion observed over the following 80 days, suggesting evidence of short-term overreactions, as described by salience theory.

Giese et al. (2019) analysed the long-term impact of rating upgrades or downgrades and found positive impact to the cost of capital and price earnings multiples after 36 months.[20]

Overall, from the studies reviewed, ESG events are found to influence share price performance in the short-term (10 days), but not over the medium term (3 months). Over a longer horizon (3 years), ESG events are found to influence value.

The asymmetry between "bad news" and "good news" is not something that is evident in our analysis of the Australian listed market, as the event studies are able to hone in on much shorter timeframes.

Critically however, the long-term linkage between ESG performance and company value is consistent with our findings from the Australian listed market.

Summary of recent studies on ESG and financial performance

Study	Authors	Year of Study	Corporate				Investment
			Profitability	Cost of Capital	Valuation Multiple	Share Volatility	Alpha
Which Corporate ESG News does the Market React to?	Serafeim and Yoon	2021					Positive
ESG Events and Global Stock Prices	Cui and Docherty	2020					Mixed
Foundations of ESG Investing: How ESG Affects Equity Valuation, Risk, and Performance	Giese et al.	2019		Positive	Positive	Positive	
Every Little Helps? ESG News and Stock Market Reaction	Capelle-Blancard and Petit	2017					Mixed

Source: Deloitte analysis

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Endnotes

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