Impact of sustainability reporting and ESG indicators on firm risk in the Australian mining industry

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The risks and opportunities facing the mining industry have shifted in recent times to focus on the social licence to operate and ethical investment, with a core component being corporate social responsibility. While there remains a large amount of literature and innovation surrounding the impact of environmental, social and governance (ESG) investment on financial performance and maximising shareholder value there is little research on the impact of ESG and sustainability reporting indicators on company risk at the market and operational level.

This research aims to investigate a relationship between sustainability indicators and a firm's total and systematic risk, and to assess the current state of ESG in the Australian mining industry compared to global mining companies, and against other Australian industries through a trend analysis. Additionally, we look at the influence that undertaking non-financial reporting has on firm risk and if additional financial benefits can be derived from sustainability reporting. Correlation testing was conducted to standardise and then benchmark the ESG and market risk metrics for Australian metals and mining companies against global companies.

The findings suggest historical correlation across a six-year period being 2015-2020 between total risk, systematic risk, ESG indicators, and sustainability reporting uptake and indicate that the Australian mining industry is conducting sustainability reporting at a higher rate than global counterparts and other Australian industries, and accordingly exhibit lower median total and systematic firm risk. The results of this study indicate that there is a business case for companies to conduct voluntary sustainability reporting and the literature review supports further investigation into the standardisation of ESG rating systems and the development of a national or industry-wide reporting framework with clear criteria and oversight to meet the social expectations of the mining industry and improve the perceptions of non-technical stakeholders and investors.

INTRODUCTION

The study objectives were set to assess the historical correlation between ESG performance, sustainability reporting and firm risk for companies across a global sample, with a focus on companies listed on the Australian Stock Exchange and classified under the metals and mining industry.

METHODOLOGY

The methodology involved correlation testing of key risk and ESG metrics from a reputable industry database assessing Australian mining companies. We then compared ESG and risk metric scores for Australian metals and mining companies against global competitors and Australian companies in other industries over a six-year period to provide insight into the rate of sustainability reporting and to benchmark the metals and mining industry against its global peers and other Australian industries.

RESULTS

The results of the study indicate a significant negative linear relationship between sustainability ratings and firm total and systematic risk utilising a dataset of 1206 observations focused on the Australian mining industry. A strong relationship between systematic risk (BETA) and ESG scores was seen in metals and mining companies but in Australian companies this is quite low with a much more significant relationship between total firm risk and ESG in Australian firms. This indicates that the mining industry is more sensitive to general market risks such as inflation, interest, and exchange rate while idiosyncratic risk may have a larger contribution towards total firm risk, and could be company dependent outside the mining industry. The social pillar is seen to be of most relevance to overall ESG performance with the governance pillar of ESG being seen to have the lowest contribution to overall ESG scores. Australian companies outperformed global mining and metals companies in ESG ratings and market metrics and could be attributed to the resource curse, where countries that tend to have higher occurrences of natural resources also face poorer economic and social well-being and political instability. Ionnnou and Serafeim[1] and Carnevale, Mazzuca and Ventruini[2] note that different societal pressures and regulations along with institutional differences mean that the performance and reporting of companies cannot be compared easily on a global scale due to variations in cultural, geopolitical and market environments. In the commodity analysis, gold and copper were shown to contradict the relationship for sustainability reporting, and market risk metrics previously indicated in the all companies and Australian sample sets. This suggests that the relationship between sustainability investment and firm risk is commodity dependent.

While the usage of publicly available data meets the objectives of this study by reflecting on the information available to the target of risk metrics being investors and analysts, further investigations could work with companies in the mining industry and utilise primary company data or a series of sustainability rating services; however, the literature review identified a low correlation between the various ESG rating systems and methodologies.

CONCLUSION

It has been seen that ESG has historically contributed to the largest risks posed to the mining industry and will continue to do so in a world more focused on social and environmental responsibility and transparency. A key issue identified in the literature review with the current reporting environment is little to no regulation or oversight from a governance standpoint, leading to no agreed-upon standardisation for sustainability reporting. Furthermore, inconsistencies in the rating systems used to assess ESG performance lead to an inability to accurately measure and represent ESG risks as opposed to known technical risks including engineering, operations, and finance. The heavy reliance on publicly available data and rating systems as well as lack of enforcement and authority for sustainability reporting mean that more scrutiny of the current non-financial reporting system in Australia is required; with a need for a standardised ESG reporting framework. The availability of strong guidelines and frameworks poses the question of whether there is a requirement to develop a new ESG reporting standard for Australia or to adopt current leading practices, and how we can transition these into a national policy/framework. Parguel *et al*[3] suggest that independent sustainability ratings could prevent forms of 'greenwashing' in non-financial reporting and further studies could incorporate multiple sustainability rating systems to determine the accuracy of such rating methodologies, and contribute towards the development of regulated and independent ESG rating and reporting standards.

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[1] Ioannou, I. & Serafeim, G., 2010. What drives Corporate Social Performance? International Evidence from Social, Environmental and Governance Scores, Cambridge, MA: Harvard Business School.

[2] Carnevale, C., Mazzuca, M. & Venturini, S., 2012. Corporate social reporting in European banks: The effects on a firm's market value. s.l., Corporate Social Responsibility and Environmental Management 19.3 159-177.

[3] Parguel, B., Benoît-Moreau, F. and Larceneux, F., 2011. How sustainability ratings might deter 'greenwashing': A closer look at ethical corporate communication. *Journal of business ethics*, *102*(1), pp.15-28.

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