

The Effect of ESG Practices on Profitability with Liquidity and Financial Constraints as Moderating Variables

Entis Sutisna¹, Kautsar Riza Salman^{2*}

¹ Universitas Yapis Papua, Jayapura, Papua, Indonesia

² Universitas Hayam Wuruk Perbanas, Surabaya, Jawa Timur, Indonesia

ARTICLE INFO

Article history:

Received August 3, 2024

Revised September 5, 2024

Accepted September 11, 2024

JEL Classification:

M41

Key words:

Profitability, ESG practices, Liquidity, Financial Constraint

DOI:

10.14414/tiar.v15i1.4677



ABSTRACT

This study aims to examine the effect of corporate involvement in environmental, social, and governance (ESG) practices on corporate profitability. In addition, this study also examines the moderating effect of liquidity and financial constraints on the relationship between ESG practices and corporate profitability. The objects of this study are 43 companies listed on the Jakarta Islamic Index 70 (JII70) and the SRI KEHATI index in the period from 2021-2023. The number of data observations is 129 data analyzed using EvIEWS software version 13. The results of this study show that corporate involvement in ESG practices has an effect on decreasing profitability performance. This confirms the role of agency theory. The results of this study also show that financial constraints strengthen the relationship between ESG practices and profitability performance. Conversely, liquidity does not moderate the relationship between ESG practices and profitability performance. The theoretical implication from the perspective of agency theory is that agency theory can explain the effect of ESG on profitability in the short term. Practical implication from the perspective of companies is that, in the short term, the involvement of companies in ESG practices reduces corporate profitability, but in the long term this will foster a positive image of the company in society.

ABSTRAK

Penelitian ini bertujuan untuk menguji dampak keterlibatan perusahaan dalam aktivitas yang berhubungan dengan lingkungan, sosial, and tata kelola pada kinerja profitabilitas. Selain itu, penelitian ini juga menguji pengaruh moderating dari likuiditas dan kendala keuangan dalam hubungan antara praktik ESG dan kinerja profitabilitas. Objek penelitian berupa 43 perusahaan yang terdaftar di Jakarta Islamic Index 70 (JII70) dan indeks SRI KEHATI pada periode 2021-2023. Jumlah observasi data sebanyak 129 data dan dianalisis dengan software EvIEWS versi 13. Hasil studi menunjukkan bahwa keterlibatan perusahaan dalam aktivitas ESG berdampak pada penurunan kinerja profitabilitas selama kurun waktu penelitian dan hasil ini mengkonfirmasi peran dari teori keagenan. Hasil studi juga menunjukkan bahwa kendala keuangan mampu memperkuat hubungan antara praktik ESG dan kinerja profitabilitas. Sebaliknya, likuiditas tidak dapat memoderasi hubungan praktik ESG dan kinerja profitabilitas. Implikasi teoritis dari sudut pandang teori keagenan adalah memperkuat peranan teori keagenan dalam menjelaskan dampak ESG pada profitabilitas dalam jangka pendek. Implikasi praktis bagi perusahaan berkaitan dengan pentingnya keberadaan aktivitas yang berkenaan dengan ESG, meskipun dalam jangka pendek mengurangi profitabilitas, dampak jangka panjang menumbuhkan citra positif perusahaan di tengah masyarakat.

1. INTRODUCTION

Corporate involvement in environmental, social, and governance (ESG) practices greatly influences the company's profitability performance. One theo-

ry that explains the relationship between ESG practices and corporate profitability performance is agency theory. According to this theory, ESG practices can result in a decrease in corporate wealth.

* Corresponding author, email address: kautsar@perbanas.ac.id

As agents, managers are required to run the company's business in accordance with the interests of shareholders. In addition, managers are not allowed to spend company resources on ESG activities because it will reduce shareholder value (Friedman, 1970, 2007).

There are several concepts and research findings that support agency theory. Corporate social responsibility is a manifestation of agency problems (Benabou & Tirole, 2010; Masulis & Reza, 2015). Managers who engage in corporate philanthropic activities will gain personal benefits at the expense of shareholders (Brown et al., 2006; Krüger, 2015). Agency costs arise when managers invest in social activities to enhance their personal reputation (Barnea & Rubin, 2010). Managers sometimes lose focus on core managerial responsibilities (Jensen, 2010). Declining ESG practices are associated with greater firm value (Nguyen et al., 2023).

The results of several previous studies related to ESG show inconsistent patterns (Ferrell et al., 2016). The results of research conducted by Cheng et al. (2023) show that managers enjoy personal benefits (profits) from ESG investments at the expense of shareholder interests (value). This finding is consistent with agency theory. Agency problems arise in companies that engage in ESG practices, where managers use accrual accounting policies to manipulate reported earnings (Dang et al., 2021). In contrast, the results of studies conducted by Dhaliwal et al. (2011), (Lee et al. (2013), and Verheyden et al. (2016) show that ESG practices have no significant effect on the company's financial performance. The relationship between ESG and financial performance is still a debate among researchers (Lu et al., 2014; Wang & Sarkis, 2017).

2. THEORETICAL FRAMEWORK AND HYPOTHESES

Agency Theory

According to agency theory, ESG practices can create agency conflicts between managers (agents) and shareholders (principals). This conflict arises because the costs associated with ESG practices are cash outflows, resulting in a decrease in the profits that shareholders will receive. The results of research conducted by Allouche & Laroche (2005), Barnea & Rubin (2010), Borghesi et al. (2014), Brown et al. (2006), Kao et al. (2018), and Schuler & Cording, (2006) are consistent with agency theory.

The Effect of ESG Practices on Profitability Performance

Agency theory states that corporate involvement in ESG practices can cause agency problems

in three ways. The first is the emergence of opportunistic behavior carried out by managers with the aim of taking personal advantage of ESG practices (Brown et al., 2006) by building their own reputation at the expense of shareholder interests (Barnea & Rubin, 2010). ESG practices are activities that drain company resources and harm company performance. Second, ESG practices are closely related to cost allocation, so they will certainly shift other projects that are more profitable for the company (Schuler & Cording, 2006). ESG practices require company resources. Therefore, companies that are active in social practices will be in a less advantageous position, compared to other companies that are not active (Allouche & Laroche, 2005). Third, corporate involvement in ESG practices may encourage managers to engage in window dressing to cover up poor corporate performance. Based on this description, the first hypothesis proposed is:

H₁: ESG Practices have an Effect on Profitability Performance

The Moderating Effect of Liquidity on the Relationship between ESG Practices and Profitability Performance

Conceptually, companies with high liquidity levels will have higher agency problems. This is different from companies with low liquidity levels. With high liquidity, companies will have greater freedom in making capital expenditures, so they are considered to have high agency costs (Ferrell et al., 2016; M. C. Jensen, 1986; Krüger, 2015; Masulis et al., 2009; Servaes & Tamayo, 2013). High liquidity can have an impact on poor company performance because cash, as the most liquid asset, can be used by managers to achieve their personal interests (Masulis et al., 2009). Thus, it can be said that liquidity increases the negative influence of ESG practices on company performance. Based on this description, the second hypothesis proposed is:

H₂: Liquidity moderates the relationship between ESG practices and profitability performance

The Moderating Effect of Financial Constraints on the Relationship between ESG Practices and Profitability

Financial constraints also have an impact on company performance. However, unlike liquidity, financial constraints can actually minimize agency problems, thus having a positive impact on company performance. This is because financial constraints, which are proxied by dividends and leverage, increase the closeness of the relationship between shareholders and market monitoring (Ferrell et al., 2016). Financial constraints in the form of debt interest and dividend cash flow prevent man-

agers from acting opportunistically which benefits them personally but is not beneficial to shareholders (La Porta et al., 2000; Morck & Yeung, 2005). It can be said that financial constraints increase the positive influence of ESG practices on company performance. Based on this description, the third hypothesis proposed is:

H₃: Financial constraints moderate the relationship between ESG practices and profitability performance

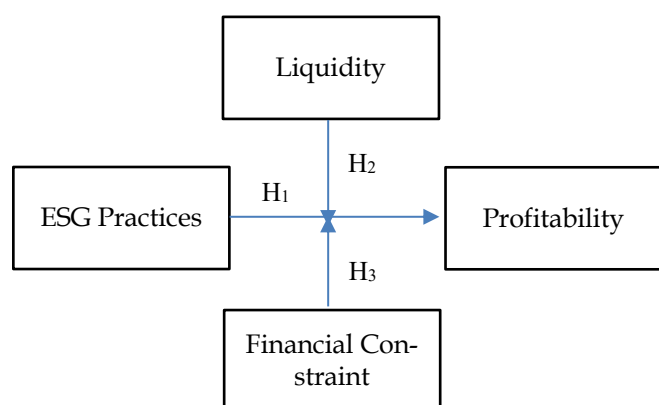


Figure 1. Conceptual Framework

3. RESEARCH METHOD

The population of this study is all sharia stocks listed on the Jakarta Islamic Index 70 (JII 70) during the 3-year research period (2021–2023). 2021 was chosen as the initial period of this study because at that time the company's performance was considered to have started to recover from the impact of Covid-19. The samples used in this study were companies that were consecutively listed on the JII70 during the research period (2021–2023). Sampling was carried out using the balanced sampling method.

This study uses return on assets (ROA) proxy to measure company's profitability because this proxy is the most commonly used in the literature (Li et al., 2017; Qi et al., 2014). The ESG variable in this study refers to the ESG assessment based on the SRI KEHATI index which reflects the company's commitment to sustainable and responsible investment. This variable is a dummy, where a score of 2 is given to JII70 companies included in the SRI KEHATI index, which indicates superior ESG practices. Meanwhile, a score of 1 is given to companies that are not included in the index. Inclusion in the SRI KEHATI index serves as a signal of strong ESG practices that are in line with better financial performance based on the integration of environmental, social and governance criteria. The liquidity variable is proxied by free cash flow measured by earnings before interest and tax (EBIT) after changes in net assets, scaled by total

assets. The financial constraint variable is proxied by the level of leverage measured by total debt divided by total equity. The control variables used in this study include: (1) company size (Size), calculated from the natural logarithm of total assets and (2) asset turnover (AsetTurn), calculated from operating income scaled by total assets.

Panel data are analyzed using Eviews software version 13. There are three approaches used in the regression model estimation method using panel data, such as Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). The regression model with the best results is used in the analysis and hypothesis testing. To determine the best model in this study, testing is carried out using the Chow test and the Hausman test.

4. DATA ANALYSIS AND DISCUSSION Results

The research sample is issuers listed on the Jakarta Islamic Index 70 (JII70) consecutively during the period 2021–2023. Sampling is conducted using balanced sampling method. Based on the screening, a sample of 43 companies and 129 firm year observations were obtained.

Based on the Chow test in Table 1, the probability value of the cross-section F is 0.000 (<0.05) and the probability value of the cross-section Chi-square is 0.000 (<0.05). These results indicate the model with fixed effects is better than the model without fixed effects.

Table 1. Chow Test

Effect Test	Statistic	d.f.	Prob.
Cross-section F	3.709756	(42,81)	0.0000
Cross-section Chi-square	138.3922	26	0.0000

Based on the Hausman test in Table 2, the probability value is 0.0344 (<0.05). So, the null hypothesis is rejected, which means that the random effect is correlated with the independent variable. Thus, the fixed effects model is more suitable than the random effects model, so it is continued to the hypothesis test.

Table 2. Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section ran-	12.027529	5	0.0344

dom

The results of direct effect test in Table 3 show that the variable of ESG practices has a p-value value of 0.0370 (<0.05) with a coefficient value of -0.017924, indicating that ESG practices have a negative and significant effect on ROA. Liquidity variable, as measured by free cash flow (FCF), has a p-value of 0.0000 (<0.05) with a coefficient value of 0.713160, indicating that FCF has a positive and significant effect on ROA. Furthermore, leverage variable has a p-value of 0.0449 (<0.05) with a coefficient value of -0.000278, indicating that leverage has a negative and significant effect on profitability.

Table 3. Results of Direct Effect Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ESG	-0.017924	0.008453	-2.120358	0.0370
FCF	0.713160	0.048491	14.70712	0.0000
LEV	-0.000278	0.000137	-2.036945	0.0449
LN_TA	0.003487	0.004064	0.858167	0.3933
ASETTURN	-0.019677	0.005930	-3.318356	0.0014
C	-0.057154	0.106816	-0.535073	0.5941

The results of moderating effect test in Table 4 show that the interaction between ESG practices and liquidity as measured by FCF has a p-value of 0.7759 (>0.05) with a coefficient value of 0.032905, indicating that liquidity as measured by FCF is not a moderating variable. Furthermore, the interaction between ESG practices and financial constraints as measured by leverage has a p-value of 0.0244 (<0.05) with a coefficient value of 0.016641, indicating that financial constraints as measured by leverage strengthen the relationship between ESG and ROA.

Table 4. Results of Moderating Effect Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ESG	-0.036601	0.015479	-2.364524	0.0205
FCF	0.689411	0.140509	4.906542	0.0000
LEV	-0.016923	0.007252	-2.333354	0.0222
LN_TA	0.000555	0.004304	0.129022	0.8977
ASETTURN	-0.025880	0.006461	-4.005730	0.0001
ESG_X_FCF	0.032905	0.115222	0.285578	0.7759
ESG_X_LEV	0.016641	0.007249	2.295458	0.0244
C	0.038598	0.118676	0.325236	0.7459

Discussions

The results of this study indicate that ESG practices implemented by sharia companies listed on JII reduce the company's profitability performance. The findings of this study support agency theory which states that the implementation of ESG practices may be viewed as an inefficient use of resources by managers who prioritize their own interests or long-term goals that do not immediately generate profits for shareholders (M. C. Jensen & Meckling, 1976). Based on signaling theory, companies implement ESG practices as a signal to attract investors or customers who care about social responsibility. However, if the market perceives that this signal has no direct impact on profitability, it can lead to a short-term decline in valuation (Spence, 1973).

The findings in this study support the results of previous research conducted by Bae et al. (2021), Bai et al. (2015), Bansal & Song (2017), Borgers et al. (2015), Liang & Renneboog (2020), López et al. (2007), and Nollet et al. (2016) that ESG practices have a negative effect on profitability. ESG practices have the potential to provide benefits but in the long term (Bae et al., 2021; Borgers et al., 2015). In the short term, ESG practices have a negative impact on ROA due to the high costs incurred that exceed the immediate benefits obtained (Nollet et al., 2016). In addition to incurring additional costs (López et al., 2007), ESG practices also cause major changes in operations and management (Bai et al., 2015). ESG practices also lead to strategic shifts (Liang & Renneboog, 2020).

The results of this study show that liquidity does not moderate the relationship between ESG practices and profitability performance. The results of this study are inconsistent with the concept that high liquidity provides greater freedom for managers to make any expenditures including those related to environmental, social, and governance expenditures, thus providing a greater possibility for agency conflicts with shareholders (Ferrell et al., 2016; M. C. Jensen, 1986; Krüger, 2015; Masulis et al., 2009; Servaes & Tamayo, 2013). The results of this study are also inconsistent with empirical results that show that high liquidity will potentially lead to abuse of authority by managers to use cash which is the most liquid asset in order to fulfill their personal desires (Masulis et al., 2009).

The results of this study also show that financial constraints strengthen the relationship between ESG practices and profitability. The results of this study are in line with the results of previous research conducted by Ferrell et al. (2016) that financial constraints, proxied by leverage, can increase the closeness of the relationship between

shareholders and market monitoring. Likewise, the results of this study are in line with the results of research conducted by La Porta et al. (2000) and Morck & Yeung (2005) that financial constraints can be a means of preventing opportunistic behavior of managers who tend to prioritize personal interests over company interests.

5. CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATIONS

This study aims to examine the effect of ESG practices on profitability. In addition, this study also examines the moderating effect of liquidity and financial constraints on the relationship between ESG practices and profitability. The results of this study show that in the short term ESG practices have an effect on reducing the company's profitability performance. Thus, the findings of this study confirm the agency theory that explains the impact of ESG practices on the company's profitability performance. In addition, the results of this study also show that financial constraints can strengthen the relationship between ESG practices and profitability. Conversely, liquidity cannot moderate the relationship between ESG practices and profitability.

The limitation of the study lies in the collection of data related to the number of issuers listed in the sharia index and ESG index. Because the data used is balanced panel data, several companies are excluded from the research sample so that the number of data observations is reduced. Therefore, further research is recommended to use unbalanced panel data. In addition, further research can also use other grand theories, such as stakeholder theory, in order to empirically prove the effect of ESG on the company's profitability performance. The ESG index used can be replaced with other ESG indexes that better reflect environmental, social, and governance activities in accordance with sharia principles. Further research can also extend the research period to obtain better research results.

REFERENCES

- Allouche, J., & Laroche, P. (2005). A Meta-analytical investigation of the relationship between corporate social and financial performance. *Revue de Gestion Des Ressources Humaines*, 57, 18–41. <https://hal.science/hal-00923906>
- Bae, K. H., El Ghouli, S., Gong, Z. (Jason), & Guedhami, O. (2021). Does CSR matter in times of crisis? Evidence from the COVID-19 pandemic. *Journal of Corporate Finance*, 67(November 2020), 101876. <https://doi.org/10.1016/j.jcorpfin.2020.101876>
- Bai, C., Sarkis, J., & Dou, Y. (2015). Corporate sustainability development in China: review and analysis. *Industrial Management & Data Systems*, 115(1), 5–40. <https://doi.org/10.1108/IMDS-09-2014-0258>
- Bansal, P., & Song, H. C. (2017). Similar but not the same: Differentiating corporate sustainability from corporate responsibility. *Academy of Management Annals*, 11(1), 105–149. <https://doi.org/10.5465/annals.2015.0095>
- Barnea, A., & Rubin, A. (2010). Corporate Social Responsibility as a Conflict Between Shareholders. *Journal of Business Ethics*, 97(1), 71–86. <https://doi.org/10.1007/s10551-010-0496-z>
- Benabou, R., & Tirole, J. (2010). Individual and corporate social responsibility. *Economica*, 77(305), 1–19. <https://doi.org/10.1111/j.1468-0335.2009.00843.x>
- Borgers, A., Derwall, J., Koedijk, K., & ter Horst, J. (2015). Do social factors influence investment behavior and performance? Evidence from mutual fund holdings. *Journal of Banking & Finance*, 60, 112–126. <https://doi.org/https://doi.org/10.1016/j.jbankfin.2015.07.001>
- Borghesi, R., Houston, J. F., & Naranjo, A. (2014). Corporate socially responsible investments: CEO altruism, reputation, and shareholder interests. *Journal of Corporate Finance*, 26, 164–181. <https://doi.org/https://doi.org/10.1016/j.jcorpfin.2014.03.008>
- Brown, W. O., Helland, E., & Smith, J. K. (2006). Corporate philanthropic practices. *Journal of Corporate Finance*, 12(5), 855–877. <https://doi.org/https://doi.org/10.1016/j.jcorpfin.2006.02.001>
- Cheng, I. H., Hong, H., & Shue, K. (2023). Do Managers Do Good with Other People's Money? *Review of Corporate Finance Studies*, 12(3), 443–487. <https://doi.org/10.1093/rcfs/cfad008>
- Dang, H. N., Hoang, K., Vu, V. T., & Nguyen, L. Van. (2021). Do socially responsible firms always disclose high-quality earnings? Evidence from an emerging socialist economy. *Asian Review of Accounting*, 29(3), 291–306. <https://doi.org/10.1108/ARA-11-2020-0174>
- Dhaliwal, D. S., Li, O. Z., Tsang, A., & Yang, Y. G. (2011). Voluntary Nonfinancial Disclosure and the Cost of Equity Capital: The Initiation of Corporate Social Responsibility Reporting.

- The Accounting Review*, 86(1), 59–100.
<http://www.jstor.org/stable/29780225>.
<https://doi.org/10.2308/accr.000000005>
- Ferrell, A., Liang, H., & Renneboog, L. (2016). Socially responsible firms. *Journal of Financial Economics*, 122(3), 585–606.
<https://doi.org/10.1016/j.jfineco.2015.12.003>
- Friedman, M. (1970). The Social Responsibility of Business Is to Increase Its Profits. *New York Times Magazine*, 13 September 1970, 122–126.
- Friedman, M. (2007). The social responsibility of business is to increase its profits. *Corporate Social Responsibility*, 31–35.
https://doi.org/10.1007/978-3-540-70818-6_14
- Jensen, M. C. (1986). Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers. *The American Economic Review*, 76(2), 323–329.
<http://www.jstor.org/stable/1818789>.
<http://dx.doi.org/10.2139/ssrn.99580>
- Jensen, M. C. (2010). Value Maximization, Stakeholder Theory, and the Corporate Objective Function. *Journal of Applied Corporate Finance*, 22(1), 32–42.
<https://doi.org/https://doi.org/10.1111/j.1745-6622.2010.00259.x>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
[https://doi.org/https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/https://doi.org/10.1016/0304-405X(76)90026-X)
- Jensen, M., & Meckling, W. (2012). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *The Economic Nature of the Firm: A Reader, Third Edition*, 283–303.
<https://doi.org/10.1017/CBO9780511817410.023>
- Kao, E. H., Yeh, C.-C., Wang, L.-H., & Fung, H.-G. (2018). The relationship between CSR and performance: Evidence in China. *Pacific-Basin Finance Journal*, 51, 155–170.
<https://doi.org/https://doi.org/10.1016/j.pacfin.2018.04.006>
- Krüger, P. (2015). Corporate goodness and shareholder wealth. *Journal of Financial Economics*, 115(2), 304–329.
<https://doi.org/10.1016/j.jfineco.2014.09.008>
- La Porta, R., Lopez-De-Silanes, F., Shleifer, A., & Vishny, R. W. (2000). Agency problems and dividend policies around the world. *Journal of Finance*, 55(1), 1–33.
<https://doi.org/10.1111/0022-1082.00199>
- Lee, D. D., Faff, R. W., & Rekker, S. A. C. (2013). Do high and low-ranked sustainability stocks perform differently? *International Journal of Accounting and Information Management*, 21, 116–132.
<https://api.semanticscholar.org/CorpusID:154728039>.
<https://doi.org/10.1108/18347641311312267>
- Li, D., Cao, C., Zhang, L., Chen, X., Ren, S., & Zhao, Y. (2017). Effects of corporate environmental responsibility on financial performance: The moderating role of government regulation and organizational slack. *Journal of Cleaner Production*, 166, 1323–1334.
<https://doi.org/10.1016/j.jclepro.2017.08.129>
- Liang, H., & Renneboog, L. (2020). Corporate Social Responsibility and Sustainable Finance: A Review of the Literature. *SSRN Electronic Journal*, September.
<https://doi.org/10.2139/ssrn.3698631>
- López, M. V., Garcia, A., & Rodriguez, L. (2007). Sustainable Development and Corporate Performance: A Study Based on the Dow Jones Sustainability Index. *Journal of Business Ethics*, 75(3), 285–300.
<https://doi.org/10.1007/s10551-006-9253-8>
- Lu, W., Chau, K. W., Wang, H., & Pan, W. (2014). A decade's debate on the nexus between corporate social and corporate financial performance: a critical review of empirical studies 2002–2011. *Journal of Cleaner Production*, 79, 195–206.
<https://doi.org/https://doi.org/10.1016/j.jclepro.2014.04.072>
- Masulis, R. W., & Reza, S. W. (2015). Agency problems of corporate philanthropy. *Review of Financial Studies*, 28(2), 592–636.
<https://doi.org/10.1093/rfs/hhu082>
- Masulis, R. W., Wang, C., & Xie, F. (2009). Agency problems at dual-class companies. *Journal of Finance*, 64(4), 1697–1727.
<https://doi.org/10.1111/j.1540-6261.2009.01477.x>
- Morck, R., & Yeung, B. (2005). Dividend Taxation and Corporate Governance. *Journal of Economic Perspectives*, 19(3), 163–180. doi: 10.1257/089533005774357752
- Nguyen, H. T., Phan, H. V., & Vo, H. (2023). Agency problems and corporate social responsibility: Evidence from shareholder-creditor mergers. *International Review of Financial Analysis*, 90, 102937.
<https://doi.org/https://doi.org/10.1016/j.irfa.2023.102937>
- Nollet, J., Filis, G., & Mitrokostas, E. (2016). Corporate social responsibility and financial performance: A non-linear and disaggregated approach. *Economic Modelling*, 52, 400–407.
<https://doi.org/https://doi.org/10.1016/j.ec>

onmod.2015.09.019

- Qi, G. Y., Zeng, S. X., Shi, J. J., Meng, X. H., Lin, H., & Yang, Q. X. (2014). Revisiting the relationship between environmental and financial performance in Chinese industry. *Journal of Environmental Management*, 145, 349–356.
<https://doi.org/https://doi.org/10.1016/j.jenvman.2014.07.010>
- Schuler, D. A., & Cording, M. (2006). A Corporate Social Performance-Corporate Financial Performance Behavioral Model for Consumers. *The Academy of Management Review*, 31(3), 540–558.
<http://www.jstor.org/stable/20159227>.
<https://doi.org/10.5465/amr.2006.21318916>
- Servaes, H., & Tamayo, A. (2013). How Do Industry Peers Respond to Control Threats? *Management Science*, 60(2), 380–399.
<https://doi.org/10.1287/mnsc.2013.1773>
- Spence, M. (1973). Job Market Signaling. *The Quarterly Journal of Economics*, 87(3), 355–374.
<https://doi.org/10.2307/1882010>
- Verheyden, T., Eccles, R. G., & Feiner, A. (2016). ESG for All? The Impact of ESG Screening on Return, Risk, and Diversification. *Journal of Applied Corporate Finance*, 28(2), 47–55.
<https://doi.org/https://doi.org/10.1111/jacf.12174>
- Wang, Z., & Sarkis, J. (2017). Corporate social responsibility governance, outcomes, and financial performance. *Journal of Cleaner Production*, 162, 1607–1616.
<https://doi.org/https://doi.org/10.1016/j.jclepro.2017.06.142>