Perception on Investing in Stocks with ESG Relevance: A Descriptive View on Influence of Key Demographic Variables and Risk Profiling of Investors

Dr R Satish [1], Dr S Saravanan [2,*], Dr. N. V. Ramachandran [3]

[1]Assistant Professor-Department of Management Studies, St.Joseph's Institute of Technology, Chennai
[2]Corresponding author, Assistant Professor - Crescent School of Business, B.S. Abdur Rahman Crescent Institute of Science and Technology, Chennai
[3]Assistant Professor-Department of Management Studies, SRM Arts and Science College, Chennai

Abstract

INTRODUCTION: To be purposeful beyond the return consideration by the way of giving importance to environment, society and governance of company through investing in companies that give priority to aforementioned factors by investors and their perception towards ESG is the crux of this research paper. For this several factors that measures the environment, social and governance are itemized and considered as the dependent variable.
OBJECTIVES: To know whether the influences of the three risk-acceptance levels on environment, social and governance factors were different based on selected demographic variables
METHODS: Some of the key demographic variables like Age range, Annual income and Employment status are taken as independent variables with another key variable the tolerance towards risk of the investors. The individual and interactive effect of the demographic variable along with the key variable (risk tolerance) in manipulating the effects over the dependent variables (ESG) in the key concept of discussion in this research. The research was conducted through a structured questionnaire among the investors in Chennai region of Tamilnadu (India). Data was analyzed through SPSS and the tool used to explain the purpose of the research was MANOVA.
RESULTS: All the three demographic variables considered in the research had a significant influence over the risk tolerance of the investors in manipulating the considerations over the ESG factors.
CONCLUSION: All the three demographic variables considered in the research had a significant influence over the risk tolerance of the investors in manipulating the considerations over the ESG factors.

1. Introduction & Theoretical Background

The phrase "sustainable investment" refers to a variety of tactics employed by investors to increase long-term environmental or social value while maximising profits. Investors have been able to conduct more extensive analyses and make better investment decisions by integrating conventional investment methods with "Environmental, Social, and Governance (ESG)" related factors [1].

Traditional profit-driven businesses now show a great deal of concern in considerate and handling the wider implications of their activities. Yet, efforts to address societal issues alike poverty, discrimination, and climate transformation by "businesses, nongovernmental organisations NGOs, and governments" have so far been ineffective. Sustainable investing has evolved into a potential remedy for social and conservation issues by making the financial marketplaces more liable for such effects [2]. Added investors today anticipate that their savings will replicate these greater beliefs and provide

answers to greater concerns. This creates a chance for sustainable or value-creating investments.

The concept of ESG investing, takes into description the environmental issues, social issues, and governance related issues and its factors when making investment decisions. The theoretical foundations of ESG investing and examines the empirical evidence of the influence of E-S-G factors on investment performance [3].

The affiliation between Corporate-Social-Responsibility (CSR) and financial outcome was explored and examined. The theoretical and experiential proof of the impact of CSR on financial outcomes explores the potential implications for sustainable investing [4].

The affiliation amongst corporate sustainability and organizational outcome was examined and it was argued that the firms that give more importance to sustainability are further likely to modernize, improve operational efficiency, appeal and retain employees, which may be prime to better financial performance [5].

The effectiveness of socially responsible marketing strategies is explored and it was argued that companies that encompass in socially responsible marketing can progress their reputation and customer loyalty, but that these tactics may be not as much of effective for firms that have a past of immoral behavior [6].

The influence, trades have over the surroundings has progressively been provided extra significance by an affluence of collected works due to the noticeable, influential effect on biodiversity, the mutilation to nature, and fast-tracked "global warming" triggered by corporates. Therefore, businesses with righteous environmental approaches can give confidence to the compeers of equitable and justifiable financial yields, together with pleasing their environmental liabilities. Quite a lot of prior studies have accepted the connection amongst environmental phases and investment administrative process, for specimen in the United States, Japan, India from Asia, France from Europe, and Australia. Investors in the United states articulated that appraisal of environmental disputes helps them review a companies' socially accountable conduct [7].

The survey suggests that governance rests the vital subject of the majority investor, dealer, and commercial experts matched to social and ecological standards [8]. Similarly, it was asserted that normal investors orders financial outcome as first factor, control mechanism as second factor, and last of all, a firm's commitment to society and environment [9]. The enhanced authority contrivance is in the search of wholesome financial reasonableness, but when it progresses its social and ecological outcome, this is undoubtedly further headed for sustainability. Sustainable and finance, both involve conflicting influences on investor risk forbearance and asset apportionment choice. Former readings follow on view that investors primarily concentrate on supremacy and heeds a minimum attention to ecological and social data. Yet, a fresh inclination of communally accountable investment and stakeholder involvement has refreshed the connotation of ecological and societal data to make complete investment choice [10]. It was proclaimed that social concerns stay more important than environmental

concerns for socially liable investors. In line with this argument, it is acknowledged that distinct investor does not likewise give importance to E-S-G magnitudes and governance continue be prudent to develop asset apportionment result than ecological and social aspect [11]. Similarly, it is also inferred grounded on earlier writings that ecological data has further exactitude and application to asset apportionment results than social evidence [12].

The variations in sub-classification ratings of G-R-I (namely, human rights, economic, products, labor, governance, society, and environment), display a minor but substantial impact on the stock's outcome during narrow periods or on narrow sectors, which contrasts midst the countries [13].

E-S-G and organizations outcome—Attempting the E-S-G exemplar's tender in relations of strong outcome means considerate the influence of modernization on organizations' financial and eco-friendly outcomes. Green novelty, for instance, can be appreciated as all those carry out lead to better eco-friendly novelty that inspect the association between carbon releases and financial outcome. Undeniably, green invention is an vital driver, having a substantial effect on organizations' financial and ecofriendly outcomes: financing in green improvement lessens carbon emissions (CO_2) and expands financial performance [14].

ESG needs establishments and commerce to study their ecological impacts, how a business delights and values their personnel, and the philosophies and strategies an entity uses to make choices. ESG has turn out to be a pivotal argument with shareholders and financial establishments as many shareholders are looking at businesses to speak microclimate and macroclimate transformation and how corporations should be carrying out on a moral basis [15]..

2. Research Background

2.1 Objectives

To know whether the influence s of the three risk-acceptance levels on environment, social and governance factors were different based on selected demographic variables.

The crucial aim is to decide whether there is a statistically significant interface effect.

2.2 Sample frame

Sample frame consists of investors from Chennai either having an idea over sustainable investment or invested in stocks in companies giving priority over sustainability. A structured questionnaire was used to collect the responses which possibly included factors detailing the environment, social and environmental considerations. A total of 201 sample were considered after rejecting the outliers and missing values.

Table 1: Variables

Independent	1	Age
	2	Annual Income

3	Employment Status		
4	Risk Tolerance level		
1	Environment Consideration	a. Product impact b. Investment in green energy c. Bio-diversity approach	
2	Social Considerations	a. Employee's concern b. Customer's satisfaction c. Community	
3	Governance Considerations	a. CSR Activities b. Board Composition c. Board independence d. Track Record & Control e. Minority shareholder's interest	

Dependent variables

2.3 Hypothesis

H0(Null): The influence of the three risk acceptance levels on environment, social and governance factors were same for various sub-classifications in selected demographic variables. (insignificant)

H1a(Alternate): The influence of the three risk acceptance levels on environment, social and governance factors were different for various age groups. (significant)

H2b(Alternate): The influence of the three risk acceptance levels on environment, social and governance factors were different for various range of annual income. (significant)

H3c(Alternate): The influence of the three risk acceptance levels on environment, social and governance factors were different for various groups of employment status. (significant)

3. Discussions

Table 2: Demographic variable frequency

Classification	Sub-Classification	Frequency	%
Age Range	18-34	152	75.6
	35-50	48	23.9
	50+	1	5
Annual Income	<400000	20	10.0
	4,00,000-8,00,000	133	66.2
	More than 8,00,000	48	23.9
Employment Status	Prefer not to answer	1	5
	Employed full time	178	88.6
	Self-employed	22	10.9

Source: Primary data

More respondents belong to the young age category falling less than 35 years of age. Annual income maximum frequency lies between 4 and 8 lakhs and most of the investors employment status is full time.

To explore more in the annual income perspective, being the most important factor in deciding the investment capacity, annual income is classified into two sub sets based on Tukey's score. On environmental considerations income category of 4 to 8 lakhs and more than 8 lakhs have similar approaches. On social considerations income category of less than or equal to 8 lakhs categories have similar approaches. On governance considerations income category of less than or equal to 8 lakhs categories have similar approaches.

Table 3: Tukey's test

Tukey HSD	Annual Income		More than 8,00,000	4,00,000-8,00,000	<4,00,000
	N		48	133	20
ENVIRONMENT	Subset	1	2.75	2.9148	
		2			3.5333
SOCIAL	Subset	1	1.9861		
		2		2.4962	2.5833
GOVERNANCE	Subset	1	2.5625		
		2		2.8707	2.92

Source: Primary data

p value of 0.000(i.e) Wilk;s Lambda, reflects there is noteworthy collaboration effect. This means the effect of Risk tolerance on the dependent variables (ESG factors) is not same for the various annual income levels.

Through table 4 it can be observed there was a statistically noteworthy collaboration effect between Annual Income and Risk tolerance on the combined dependent variables (Environment, Social and Governance factors), $F(3,193) = 48.346$, $p = 0.000$, Wilks Lambda = 0.571.

Risk tolerance level and Annual income in the model, additionally the model completely, is verified for its capability to account for deviation in the Environment, Social and Governance factors. Through table 5 it can be observed that the significance value of each of all the factors say environment, social and governance, is less than 0.05. Therefore, each term is statistically significant.

R square of approximately 0.70 means that the 70% of the variance in outcome variable (Environment, Social and Governance) is explained by the model (Annual income, Risk tolerance level and Annual income*Risk tolerance level).

Table 4: Multivariate Tests for Risk tolerance and Annual income:

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	A	0.811	276.807[b]	3	193	0.000
	B	0.189	276.807[b]	3	193	0.000
	C	4.303	276.807[b]	3	193	0.000
	D	4.303	276.807[b]	3	193	0.000
Risk Tolerance level	A	0.835	46.334	6	388	0.000
	B	0.207	76.980[b]	6	386	0.000
	C	3.622	115.9	6	384	0.000
	D	3.565	230.529[c]	3	194	0.000
Annual income	A	1.147	86.962	6	388	0.000
	B	0.176	89.156[b]	6	386	0.000
	C	2.855	91.37	6	384	0.000
	D	1.876	121.329[c]	3	194	0.000
Risk Tolerance level* Annual income	A	0.429	48.346[b]	3	193	0.000
	B	0.571	48.346[b]	3	193	0.000
	C	0.751	48.346[b]	3	193	0.000
	D	0.751	48.346[b]	3	193	0.000

Design: Intercept + Risk Tolerance level + Annual income + Risk tolerance level * Annual income

A.Pillai's Trace; B. Wilks' Lambda; C. Hotelling's Trace; D. Roy's Largest Root

Source: Primary data

Table 5: Tests of Between-Subjects Effects for Risk tolerance and Annual income

Source	Dependent Variable	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	ENVIRONMENT	154.449[a]	5	30.89	113.705	0.000
	SOCIAL	62.940[b]	5	12.588	109.875	0.000
	GOVERNANCE	76.280[c]	5	15.256	105.795	0.000
Intercept	ENVIRONMENT	143.706	1	143.706	528.98	0.000
	SOCIAL	79.525	1	79.525	694.138	0.000
	GOVERNANCE	113.915	1	113.915	789.964	0.000
Risk Tolerance level	ENVIRONMENT	145.015	2	72.508	266.9	0.000
	SOCIAL	51.629	2	25.815	225.325	0.000
	GOVERNANCE	71.42	2	35.71	247.638	0.000
Annual income	ENVIRONMENT	49.684	2	24.842	91.444	0.000
	SOCIAL	24.646	2	12.323	107.563	0.000
	GOVERNANCE	18.418	2	9.209	63.862	0.000
Risk Tolerance level * Annual income	ENVIRONMENT	24.735	1	24.735	91.051	0.000
	SOCIAL	5.58	1	5.58	48.706	0.000
	GOVERNANCE	8.846	1	8.846	61.346	0.000

Error	ENVIRONMENT	52.975	195	0.272	
	SOCIAL	22.34	195	0.115	
	GOVERNANCE	28.12	195	0.144	
Total	ENVIRONMENT	1941.222	201		
	SOCIAL	1226.778	201		
	GOVERNANCE	1682.48	201		
Corrected Total	ENVIRONMENT	207.424	200		
	SOCIAL	85.28	200		
	GOVERNANCE	104.399	200		

a. RSquared = .745 (Adjusted RSquared = .738)

b. RSquared = .738 (Adjusted RSquared = .731)

c. RSquared = .731 (Adjusted RSquared = .724)

Source: Primary data

p value of 0.000(i.e) Wiki;s Lambda, reflects there is noteworthy collaboration effect. This means the effect of Risk tolerance on the dependent variables (ESG factors) is not same for the various categories of employment.

There was a statistically noteworthy collaboration effect between Employment status and Risk tolerance on the combined dependent variables (Environment, Social and Governance factors), $F(3,193) = 48.346$, $p = 0.000$, Wilks Lambda = 0.897.

Table 6: Multivariate Tests for Risk tolerance and Employment status

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	A	0.681	137.500b	3	193	0.000
	B	0.319	137.500b	3	193	0.000
	C	2.137	137.500b	3	193	0.000
	D	2.137	137.500b	3	193	0.000
Risk Tolerance level	A	0.287	10.854	6	388	0.000
	B	0.714	11.798b	6	386	0.000
	C	0.398	12.744	6	384	0.000
	D	0.393	25.403c	3	194	0.000
Employment status	A	0.066	2.212	6	388	0.041
	B	0.935	2.216b	6	386	0.041
	C	0.069	2.219	6	384	0.041
	D	0.057	3.670c	3	194	0.013
Risk Tolerance level* Employment status	A	0.103	7.355b	3	193	0.000
	B	0.897	7.355b	3	193	0.000
	C	0.114	7.355b	3	193	0.000
	D	0.114	7.355b	3	193	0.000

Source: Primary data
Design: Intercept + Risk Tolerance level + Annual income + Risk tolerance level * Employment status

A.Pillai's Trace; B. Wilks' Lambda; C. Hotelling's Trace; D. Roy's Largest Root

Source: Primary data

p value of 0.000(i.e) Wiki;s Lambda, reflects there is noteworthy collaboration effect. This means the effect of Risk tolerance on the dependent variables (ESG factors) is not same for the various categories of employment.

There was a statistically noteworthy collaboration effect between Employment status and Risk tolerance on the combined dependent variables (Environment, Social and Governance factors), $F(3,193) = 48.346$, $p = 0.000$, Wilks Lambda = 0.897

Table 7: Tests of Between-Subjects Effects for Risk tolerance and Employment status

Source	Dependent Variable	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	ENVIRONMENT	136.029a	5	27.206	74.306	0.000
	SOCIAL	61.308b	5	12.262	99.741	0.000
	GOVERNANCE	75.220c	5	15.044	100.539	0.000
Intercept	ENVIRONMENT	72.266	1	72.266	197.377	0.000
	SOCIAL	40.824	1	40.824	332.08	0.000
	GOVERNANCE	59.724	1	59.724	399.13	0.000
Risk Tolerance level	ENVIRONMENT	20.468	2	10.234	27.952	0.000
	SOCIAL	8.791	2	4.396	35.756	0.000
	GOVERNANCE	9.186	2	4.593	30.694	0.000
Employment status	ENVIRONMENT	1.16	2	0.58	1.584	0.208
	SOCIAL	1.147	2	0.573	4.665	0.010
	GOVERNANCE	1.115	2	0.557	3.724	0.026
Risk Tolerance level * Employment status	ENVIRONMENT	4.818	1	4.818	13.16	0.000
	SOCIAL	2.717	1	2.717	22.104	0.000
	GOVERNANCE	1.769	1	1.769	11.825	0.001
Error	ENVIRONMENT	71.395	195	0.366		
	SOCIAL	23.972	195	0.123		
	GOVERNANCE	29.179	195	0.15		
Total	ENVIRONMENT	1941.222	201			
	SOCIAL	1226.778	201			
	GOVERNANCE	1682.48	201			
Corrected Total	ENVIRONMENT	207.424	200			
	SOCIAL	85.28	200			
	GOVERNANCE	104.399	200			

a. RSquared = .656 (Adjusted RSquared = .647)

b. RSquared = .719 (Adjusted RSquared = .712)

c. RSquared = .721 (Adjusted RSquared = .713)

Source: Primary data

Risk tolerance level and Employment status in the model, additionally the model completely, is verified for its capability to account for deviation in the Environment, Social and Governance factors. The significance value of each of all the factors say environment, social and governance, is less than 0.05, except employment status over the environment factor which is 0.208. Therefore, each term except employment status over environment is statistically significant.

R square of approximately 0.719 means that the 71.9% of the variance in outcome variable (Environment, Social and Governance) is explained by the model (Age range, Employment status and Age range*Employment status level).

Table 8: Multivariate Tests for Risk tolerance and Age range

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	A	0.603	97.792[b]	3	193	0.000
	B	0.397	97.792[b]	3	193	0.000
	C	1.52	97.792[b]	3	193	0.000
	D	1.52	97.792[b]	3	193	0.000
Age Range	A	0.642	30.554	6	388	0.000
	B	0.362	42.550[b]	6	386	0.000
	C	1.749	55.971	6	384	0.000
	D	1.743	112.694[c]	3	194	0.000
Risk Tolerance level	A	0.746	38.435	6	388	0.000
	B	0.285	56.212[b]	6	386	0.000
	C	2.404	76.936	6	384	0.000
	D	2.359	152.550[c]	3	194	0.000
Age range * Risk Tolerance level	A	0.396	42.167[b]	3	193	0.000
	B	0.604	42.167[b]	3	193	0.000
	C	0.655	42.167[b]	3	193	0.000
	D	0.655	42.167[b]	3	193	0.000

Source: Primary data
a.Design: Intercept + Risk Tolerance level + Age range + Risk tolerance level * Age range

A.Pillai's Trace; B. Wilks' Lambda; C. Hotelling's Trace; D. Roy's Largest Root

Source Primary data

p value of 0.000(i.e) Wiki;s Lambda, reflects there is noteworthy collaboration effect. This means the effect of Risk tolerance on the dependent variables (ESG factors) is not same for the various age categories.

There was a statistically noteworthy collaboration effect between Age range, Risk tolerance on the united dependent variables (Environment, Social and Governance factors), $F(3,193) = 48.346$, $p = 0.000$, Wilks Lambda = 0.604.

Table 9: Tests of Between-Subjects Effects for Risk tolerance and Age range

Source	Dependent Variable	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	ENVIRONMENT	133.651[a]	5	26.73	70.654	0.000
	SOCIAL	59.868[b]	5	11.974	91.878	0.000
	GOVERNANCE	72.950[c]	5	14.59	90.465	0.000
Intercept	ENVIRONMENT	49.71	1	49.71	131.395	0.000
	SOCIAL	29.644	1	29.644	227.471	0.000
	GOVERNANCE	45.882	1	45.882	284.49	0.000
Age range	ENVIRONMENT	10.758	2	5.379	14.218	0.000
	SOCIAL	18.243	2	9.122	69.993	0.000
	GOVERNANCE	10.367	2	5.183	32.139	0.000
Risk Tolerance level	ENVIRONMENT	128.743	2	64.372	170.15	0.000
	SOCIAL	48.326	2	24.163	185.412	0.000

	GOVERNANCE	67.316	2	33.658	208.694	0.000
Age range * Risk Tolerance level	ENVIRONMENT	33.164	1	33.164	87.66	0.000
	SOCIAL	6.975	1	6.975	53.521	0.000
	GOVERNANCE	10.778	1	10.778	66.827	0.000
Error	ENVIRONMENT	73.773	195	0.378		
	SOCIAL	25.413	195	0.13		
	GOVERNANCE	31.449	195	0.161		
Total	ENVIRONMENT	1941.222	201			
	SOCIAL	1226.778	201			
	GOVERNANCE	1682.48	201			
Corrected Total	ENVIRONMENT	207.424	200			
	SOCIAL	85.28	200			
	GOVERNANCE	104.399	200			
a. RSquared = .644 (Adjusted RSquared = .635)						
b. RSquared = .702 (Adjusted RSquared = .694)						
c. RSquared = .699 (Adjusted RSquared = .691)						
Source: Primary Data						

Risk tolerance level and Age range in the model, additionally the model completely, is verified for its capability to account for deviation in the Environment, Social and Governance factors. The significance value of each of all the factors say environment, social and governance, is less than 0.05. Therefore, each term is statistically significant.

R square of approximately 0.70 means that the 70% of the variance in outcome variable (Environment, Social and Governance) is explained by the model (Age range, Risk tolerance level and Age range*Risk tolerance level).

4. Conclusion

Investors perception towards the ESG parameters based on their demographic factors and risk profile was investigate in this research. And it was concluded that the influence of the three risk acceptance levels on environment, social and governance factors were different for various age groups, the influence of the three risk acceptance levels on environment, social and governance factors were different for various range of annual income, except employment status over the environment factor which was insignificant. And finally the influence of the three risk acceptance levels on environment, social and governance factors were different for various groups of employment status. Overall all the three demographic variables considered in the research had a significant influence over the risk tolerance of the investors in manipulating the considerations over the ESG factors.

Scope of further research

Even though the research paper was tried to attempt and include as many factors under consideration to measure the environment, social and governance related factors, still there is ample scope of including more variables. To give more generalization the research can be expanded to other major cities and more sample size. Can be further researched with more demographic variables.

Post-hoc test and more interactive effects between the variables can be explored and studied. Same research can be conducted as a longitudinal study to know the variations over time.

References

1. Tim Stobierski, 2022, *What is Sustainable Investing?* Business Insights Blog. Harvard Business School Online. Retrieved from https://online.hbs.edu/blog/post/sustainable-investing
2. Epstein, M. J., & Yuthas, K. (2014). *Measuring and improving social impacts: A guide for nonprofits, companies, and impact investors*. Berrett-Koehler Publishers.
3. Tomasz M. Michalski (2018), Social, and Governance (ESG) Investing: A Balanced Analysis of the Theory and Practice.
4. Akinwumi A. Olayemi and Olamide A. Ibiyemi (2021). The Relationship between Corporate Social Responsibility and Firm Financial Performance: A Review of the Literature.
5. Eccles, R. G., Ioannou, I., & Serafeim, G. (2014). The impact of corporate sustainability on organizational processes and performance. Management Science, 60(11), 2835-2857.
6. Grewal, R., Iyer, E. S., & Lehmann, D. R. (2018). Socially responsible marketing strategies: When and how

they pay off versus when and why they do not. Journal of Marketing, 82(4), 1-20.

7. Berry, T.C.; Junkus, J.C.(2013) Socially responsible investing: An investor perspective. *J. Bus. Ethics* , *112*, 707–720

8. Filatotchev, I., Poulsen, A., & Bell, R. G. (2019). Corporate governance of a multinational enterprise: Firm, industry and institutional perspectives. Journal of Corporate Finance, 57, 1-8

9. Walsh, G., Mitchell, V. W., Jackson, P. R., & Beatty, S. E. (2009). Examining the antecedents and consequences of corporate reputation: A customer perspective. British Journal of Management, 20(2), 187-203.

10. Kothari, S. (2019). Accounting Information in Corporate Governance: Implications for Standard Setting. The Accounting Review, 94(2), 357-361

11. Bradford, M., Earp, J. B., Showalter, D. S., & Williams, P. F. (2016). Corporate sustainability reporting and stakeholder concerns: Is there a disconnect? Accounting Horizons, 31(1), 83-102.

12. Brocas, I., Carrillo, J. D., Giga, A., & Zapatero, F. (2019). Risk aversion in a dynamic asset allocation experiment. Journal of financial and quantitative analysis, 54(5), 2209-2232

13. Sahut, J.-M., & Pasquini-Descomps, H. (2015). ESG Impact on Market Performance of Firms: International Evidence. Management International, 19(2), 40. doi:10.7202/1030386ar

14. Khalil, M.A.; Nimmanunta, K. Conventional versus green investments: Advancing innovation for better financial and environmental prospects. *J. Sustain. Financ. Invest.* 2021, 1–28.

15. Saba Khalid, Kaylene Hung, Jeremy Wiley, The ESG Value Opportunity: A Decision Point for Utilities, Climate and energy, Wiley online library, 09 November 2021, https://doi.org/10.1002/gas.22261