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THE ROLE OF ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) PRACTICES IN ENHANCING FINANCIAL PERFORMANCE IN COMPANIES, WITH A FOCUS ON THE BANKING SECTOR: A LITERATURE REVIEW

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Abstract
This study reviewed the literature on the role of environmental, social, and governance (ESG) practices in improving the financial performance of companies, focusing on banking institutions. The study aimed to shed lights on methods and tools used in dealing with the role of ESG in enhancing financial performance in the scientific research literature, knowing the results drawn and the gaps between them, and synthesizing them into a coherent summary of the knowledge developed in this regard. The research included 45 previous studies for the period from 2012 to 2023. The study includes four topics: ESG and the environmental and social costs, ESG and the financial performance in the banking sector as well as other sectors, and finally indicators and models for measuring ESG and financial performance, and the relationship among them. The study adopted the methodology of analyzing previous studies by reviewing their contents and highlighting the objectives, sample, location, variables of the study, procedures and results. The study found that ESG indicators issued by rating agencies and accounting indicators such as ROA, ROE, and the regression equation are the most widely used measures and models in examining the relationship between ESG and financial performance, and that the role of ESG in companies and other sectors is more influential on financial performance than on banks.
Keywords: ESG, environmental factors, social factors, governance, financial performance, disclosure, sustainability, banking sector.
JEL Codes: Q5, Q56, I3, J1, G3, K2

Introduction

Environmental, social and governance (ESG) practices are receiving increasing attention around the world. This importance stems from the growing awareness of the concept of sustainability, which encompasses the social and environmental obligations and management of companies. The indicator of the financial success of financial or non-financial institutions today is that they can thrive in a complex and constantly changing environment, taking into account environmental, social aspects and working conditions. In this field, there are many factors that affect the performance of companies, and the most prominent of these factors are those related to

environmental, social and governance practices. This study aims to explore and analyze the role of these practices in improving the financial performance of companies, with a special focus on the banking financial sector due to the vital and crucial role that banks play in the contemporary economy at the level of financing and providing financial services to individuals and companies alike. The primary goal, in addition to these services, is to reduce environmental and social costs and enhance governance, thus enhancing the concept of financial sustainability in line with the entry of environmental, social, and governance factors as a significant element in the field of institutions' competitiveness, evaluation, and access to markets. The study includes a review of the available literature on the topic of ESG and its impact on financial performance in the banking sector and other sectors. Thus, it provides important insights into the relationship between ESG and financial performance in the banking sector and other sectors, which can have a positive impact on financing and investment decisions in this field and motivate companies and banks to adopt sustainable practices.

1. ESG and Environmental and Social Costs

ESG is a vital part of contemporary business policies. Companies and institutions seek to achieve a balance between financial profits and social and environmental responsibility. These practices reflect the commitment to achieving the sustainable development goals approved by the United Nations, which seek to meet current needs without harmful impact on future generations. Reducing environmental and social costs may be a challenge for many organizations. With the increasing focus on corporate social and environmental responsibility, companies must follow a framework based on global standards. This includes ESG standards, and the formation of a strategic vision that aims to integrate these practices into all aspects of the institutions' work as a path to achieving sustainable development goals. Several studies have indicated the relationship between ESG practices and sustainable development goals. In Radu et al. study (2023), the ESG performance of companies was linked to the Sustainable Development Goals (SDGs) for entities active in the financial or non-financial industries, with different importance being assigned to each of the three environmental, social and governance goals, and their results confirmed the adoption of ESG to varying degrees to achieve SDG. This study is consistent with the methodology of the report presented by the International Finance Corporation (2023), which included advancing sustainable development goals by adhering to ESG standards and linking them to these goals. The report found that ESG practices work to achieve the Sustainable Development Goals, and this is emphasized by the fact that these practices addressed all 17 Sustainable Development Goals. The study by Delgado-Ceballos et al. (2023) also indicated a statement of the association of ESG at the company level with the sustainable development goals to form a clear vision of the impact of business on society and the environment by building indicators for these practices that cover the sustainable development goals SDGs. While the study of Baratta et al. (2023) clarified this relationship by focusing on carbon emissions in the industrial sector, as it reviewed the literature on the impact of ESG in industry. The study reached positive results in that (ESG) works to reduce carbon emissions, thus achieving the goals

of a sustainable development in accordance with the United Nations 2023 Vision. In a related context, the study by Cong et al. (2022) confirmed, in its results, the positive role of ESG practices in reducing carbon emissions in China in line with (SDG).

2. ESG and Financial Performance in the Banking Sector

The application of ESG by banks refers to the adoption of certain criteria by banks and financial institutions with the goal of achieving a balance between financial performance, environmental and social impacts, and governance standards. This application aims to support the aforementioned practices in this sector in a manner that is consistent with reducing the environmental and social impacts of the financing process while maintaining the development of financial performance in these institutions. Nevertheless, the outcomes of investigations in this domain showed considerable variation. The study of Fijałkowska, et al. (2018) indicated that there was no effect of ESG on financial performance. The results of Alessandro, et al. (2023) showed a weak effect, while the studies of El Khoury et al. (2021) and Ersoy et al. (2022) revealed a non-linear relationship. In another study by El Khoury et al. (2021), he showed the existence of a negative relationship. While the results of studies of Buallay (2018), Quirós, et al. (2019), Wahua & Ezeilo (2021), Chiu (2022), and the Central Bank of Iraq (2022) agreed on the existence of a positive relationship between ESG and the financial performance of banks. Whereas the studies of Rahi et al. (2020) and Yuen, et al. (2022) showed that there was a positive and negative effects of ESG on financial performance. The results of the study Torre et al. (2021) revealed that there was a positive relationship of ESG with market indicators, while there was no relationship with accounting indicators that were employed to represent financial performance.

3. ESG and Financial Performance in Non-Banking Sectors

ESG practices directly affect the financial performance of non-banking companies, as their commitment to ESG standards enhances investor confidence and reduces potential risks, which contributes to achieving long-term sustainability. By reviewing the literature in this field, most studies indicate a positive relationship between ESG and financial performance. For instance, studies of Balatbat, et al. (2012), Zhao, et al. (2018), and Dalal & Thaker (2019), Sadiq, et al. (2020), Peng & Isa (2020), Ismai, et al. (2020), Powaski et al. (2021), Ahmad, et al. (2021), Naeem & Çankaya (2022), and Sandberg et al. (2022) indicated that there is a positive relationship between these practices and financial performance. However, several research have shown varying results between positive and negative effects of ESG on financial performance, such as the studies of Atan, et al. (2016), Saygili et al. (2021), and Almeyda & Darmansyah (2019), as indicated in Table (1).

4. ESG Indicators and Measurement Models

ESG indicators and measurement models as well as their relationship to financial performance are vital tools in measuring and evaluating companies' performance in terms of environmental,

social and governance, as well as financial performance and the relationship between them. These indicators and models aim to improve transparency, accountability and sustainability in the banking sector and other sectors and demonstrate the impact of this on financial performance. Studies have varied in how they represent and measure processes within this context. Accounting and market indicators were used to represent financial performance, as is the case in the study of Khadum & Muhamed (2021), Rooh et al. (2021), Dragomir, et al. (2022), Zhou, et al. (2022), Kumar & Firoz (2022), and Gholami et al. (2022), which adopted accounting indicators such as ROA and ROE. While other studies used market indicators, such as studies of Aras & Kazak (2022), Indrasuci & Rokhim (2023), and Zahid, et al. (2023). These studies agreed upon employing the ESG index or ESG data issued by an ESG rating agency to represent its performance. These studies, and others too, also agreed to use regression analysis models to measure the relationship between ESG and financial performance, such as the study of Awuor, L. (2023), and Gutiérrez-Ponce & Wibowo (2023). However, the study of Zheng et al. (2022) differed from this by using the Sobel–Goodman and Bootstrap test to demonstrate the partial mediation effect of indicators of environmental, social, and governance practices. Moreover, when testing the interactive effect of endogeneity, instrumental variables were applied along with two-stage least squares (2SLS) and generalized least squares (GMM) method. The study of Doni and Fiameni (2023) also differed from other studies by using Pearson Correlation Coefficients. Van Bommel's study (2023) was a review of the literature, and its analysis came without adopting any measurement model. Through the aforementioned information regarding the relationship between environmental, social and governance practices to financial performance in the banking and non-banking sectors, this literature can be summarized in a Table that shows this relationship and the most important results reached.

Table (1): A review of the literature on the relationship between ESG and the financial performance of companies

No.	Author	Publisher	Issuing Year	Place and Sample of Study	Goal of the Study	Variables of the Study	The Model Adopted	Results
1	Balatbat, et al.	Australian School of Business School of Accounting	2012	208 companies in Australia's Stock Exchange (ASX)	Showing the impact of ESG practices on financial performance	Independent variable: (ESG), dependent variables: (ROA) (ROE) (ROIC)	Correlation coefficient and multi-linear regression analysis	Positive Relationship

						(EBITDA) (NOPLAT) (EPS) (DY) (PER) (EV) (MC/TR) (P/BV).		
2	Atan, et al.	International Journal of Economics and Management	2016	Malaysia and Denmark: 100 companies listed on the Malaysian Bursa Malaysia and Nasdaq OMX Copenhagen	Showing the impact of ESG practices on financial performance	Independent variable: (ESG) and dependent variable: Economic Value Added (EVA)	Dichotomous score and comparing the results	No relationship exists between the two variables.
3	Zhao, et al.	Sustainability	2018	China Energy market. The sample included 20 companies.	Analysis of the relationship between ESG practices and financial performance.	Independent variable: Index (ESG) and dependent variables: (ROIC) (ROCE) (ROE) (ROA) (RONA).	Panel data regression.	Positive Relationship
4	Fijałkowska,	Sustainability	2018	Central and	Analysis of the	Independent	Panel data	No relationshi

	et al.			Eastern European banking sector.	relationship between ESG and financial performance.	variable: (ESG) data, dependent variables: (ROA) (ROE)	regression. and DEA	p exists between the two variables.
5	Buallay	Management of Environmental Quality: An International Journal	2018	The sample included 235 banks in Europe.	Analysis of the relationship between ESG and financial performance.	Disclosure Index for (ESG) (ROA) (ROE) (Tobin's Q)	Panel data regression.	Positive Relationship
6	Quirós, et al.	Sustainability	2019	The study sample included 166 banks in 31 countries from Europe, Asia, Africa, North America, and South America.	Showing the role of environmental, social and governance practices in creating value for shareholders.	Independent variable: disclosure data of (ESG) and dependent variables: (Tobin Q) (ROA) (LEV) (GDP)	Panel data regression.	Positive relationship with environmental and governance dimensions, but negative with social dimension.
7	Dalal & Thaker	IUP Journal of Corporate Governance	2019	65 Indian companies listed in the NSE 100 ESG index database.	Impact of ESG on performance of Indian companies.	Independent variable: annual ESG Data, depende	Panel data regression.	Positive Relationship

						nt variables : Tobin (Q) (RO)		
8	Almeyda & Darmansyah	IPTEK Journal of Proceeding Series	2019	G7 Companies involved in the real estate sector.	Showing the impact of ESG Disclosure on Financial Performance	Independent variable: Disclosure Index for (ESG), Dependent variables : (ROA), (ROC), Share Price and Profit Multiplier.	STATA to run multi-variable slopes to test correlations.	Positive relationship between ESG and (ROA) (ROC), but no relationship between share price and profit multiplier.
9	Rahi, et al.	Accounting Research Journal	2020	Banking sector in Sweden, Denmark, Finland, and Norway.	Showing the impact of ESG on Financial Performance.	Independent variable: Index (ESG), dependent variables : (ROIC) (EPS).	Panel data regression.	Existing of Both positive and negative effects.
10	Sadiq, et al.	International Journal of Energy Economics and Policy	2020	The sample included 122 companies listed on the	Analysis and disclosure of the impact of (ESG) on the	Independent variable: (ESG) indicators, depende	Panel data regression.	Positive Relationship

		(IJEEP)		Malaysian stock exchange : Bursa Malaysia	company's value.	nt variables : (Tobin Q) (ROA).		
11	Peng & Isa	Asian Academy of Management Journal of Accounting and Finance	2020	Sample Study included 461 MSCI Listed Companies.	Showing the impact of ESG on Financial Performance.	Independent variable: (ESG) Data, dependent variables : rate of Return on Assets (ROA) Economic Sustainability Performance Measure (Econ).	Panel data regression.	Positive Relationship
12	Ismai, et al.	International Journal of Accounting, Finance and Business	2020	Malaysia: 39 companies in various sectors.	Evaluating of sustainability performance and its relationship to financial performance.	Independent variable: (ESG) data, dependent variables : Company Age, Company Size, (ROA)	Pearson's correlation coefficient and multi-regression equation.	Positive Relationship

						(ROE)		
13								
14	El Khoury, et al.	An International Business Journal	2021	38 Banks in the Middle East and North Africa.	Analysis of the relationship between ESG and banking performance.	Independent variable: (ESG) Data, dependent Variables: (ROA), (LEV), (GPD)	Panel data regression.	Positive relationship with financial performance and negative with other indicators.
15	Torre, et al.	Corporate Social Responsibility and Environmental Management	2021	Banks listed in the STOXX Europe 600 Index.	Investigating the motives for banks to adopt (ESG).	Independent variable: (ESG), dependent variables: (ROA) (ROE) (Tobin's Q), Capitalization to market value ratio.	Panel data regression.	Positive relationship with market indicators and no relationship with accounting indicators.
16	Rooh, et al.	Journal of Business and Tourism	2021	17 public and private business banks in Pakistan.	Showing the effect of Corporate Governance and Financial	Independent variables: governance indicator	Panel data regression.	Results vary between positive, negative, or lack of relationshi

					Performance on (ESG).	s, Company Size, (LEV), (ROA); dependent variable: ESG Index.		p.
17	El Khoury, et al.	Journal of Sustainable Finance & Investment	2021	46 Banks from Middle East, East and North Africa, Turkey.	Showing the impact of ESG on financial performance.	Independent variable: (ESG), dependent variables: (ROA) (ROE) (Tobin's Q).	Panel data regression.	Non-linear relationship.
18	Wahua & Ezeilo	Journal of Global Economics, Management and Business Research	2021	Mortgage Banks in Nigeria.	Showing the impact of ESG on financial performance.	Independent variable: (ESG) data, dependent variables: value Added, Annual Profit, Earnings per Share and Total	MANCOVA A subset of the general linear model.	Positive Relationship.

						Value of Assets.		
19	Powaski, et al.	VinculaTégica EFAN	2021	Public companies in Australia and Japan.	Showing the impact of ESG on financial performance, corporate stock returns.	Independent variable: (ESG), dependent variables: (ROA) (ROE). Create and compare portfolios.	Steady Effect Regression Model.	Positive Relationship.
20	Ahmad, et al.	Cogent Business & Management	2021	351 companies in the UK from the FTSE350 Index.	Examining the impact of ESG on financial performance.	Independent Variable: (ESG) Degree, dependent variables: Earnings per Share, Market Value and Company Size.	Panel data regression.	Positive Relationship.
21	Sadiq, et al.	Elsevier	2022	Turkish companies listed in the Istanbul Stock Exchange	Analysis of the relationship between ESG and banking performan	Independent Variable: (ESG) data, dependent	Virtual Coding for (ESG) data and regressio	Results are varying between positive and negative.

				Corporate Governance Index (XKURY).	ce.	variables: (ROA) (Tobin Q)	n analysis.	
22	Yuen, et al.	Journal of Economics and Development	2022	487 banks from 51 countries worldwide.	Showing the impact of ESG on Profitability of the bank.	Independent variable: (ESG) indicator, dependent variables: (ROA) (ROE).	GMM Method.	Results are varying between positive and negative.
23	Cong, et al.	Frontiers in Environmental Science	2022	14 types of energy in China.	ESG's investing Impact on Low Carbon Emissions.	Independent Variable: (ESG) data, dependent variables: Carbon emission quantity CO2, carbon productivity CP and carbon emission density CEI.	Panel data regression.	The positive impact of ESG practices in reducing China's carbon emissions.
24	Ersoy, et al.	Sustainability	2022	176 Banks in	Showing the impact	Independent	Linear and non-	Existing of the

				America.	of ESG on market value.	variable: ESG index, dependent variable: market value.	linear regression models.	Non-linear relationship.
25	Chiu	Dipòsit Digital de la Universitat de Barcelona	2022	697 companies included banking, investment services in the EU, US and Asia, and fintech companies identified by the KBW, Nasdaq Fintech (KFTX) and NASDAQ Insurance Index (IXIS).	Analysis of the relationship between ESG and financial performance.	Independent variable: (ESG) data, dependent variables: (ROA) (Tobin's Q).	Generalized least squares Model (FGLS).	Positive Relationship.
26	Dragomir, et al.	Economic Computation and Economic Cyberneti	2022	333 banks located in 53 countries	Showing the impact of ESG on financial performan	Independent variable: (ESG) data,	Multi-regression equation.	Results are varying between positive,

		cs Studies and Research		in Europe, America, and Asia.	ce.	dependent variables: (ROA) (ROE) (SMR) (EPS).		negative, and no relationship.
27	Central Bank of Iraq (CBI).	Central Bank of Iraq.	2022	62 Banks in Iraq.	Showing the impact of ESG on financial performance.	Independent Variable: (ESG) data, dependent variable: (ROA).	Panel data regression.	Positive Relationship.
28	Aras & Kazak	Sustainability	2022	Banks operating in OECD countries.	The role of relative importance of (ESG) in the company's value.	Independent variable: (ESG) data, dependent variables: (PBV) (CAR) (ROE) (Tobin's Q)	Multi-regression equation.	Positive Relationship
29	Naeem & Çankaya	International Journal of Commerce and Finance	2022	International energy companies.	Analyzing the impact of ESG on the financial performance.	Independent variable: (ESG) data, dependent variables: (ROA) (ROE)	Panel data regression.	Positive Relationship

						(Tobin Q)		
30	Sandberg, et al.	Business Strategy and The Environment	2022	83 companies working in food industry in Europe.	Showing the impact of ESG classifications on financial performance.	Independent variable: (ESG) indicator, dependent variables: (ROA) (ROE).	Ordinary least squares regression.	Positive Relationship.
31	Zhou, et al.	Business Strategy and The Environment	2022	167 Chinese companies listed in Shanghai and Shenzhen A-share markets	Analysis of the relationships between sustainable development and (ESG) and financial performance as an intermediary variable.	Independent Variable: (ESG) Data, intermediate variables: Return Rate on equity, Asset Turnover Rate and Net Profit Growth Rate.	Linear regression model and mediating effect model.	Positive Relationship.
32	Kumar & Firoz	Australasian Accounting Business and Finance Journal AABFJ	2022	77 Companies in India.	Analysis of the relationship between ESG disclosure and finacial performan	Independent Variable: disclosure Index for (ESG), dependent	Multi-regression equation.	Positive Relationship.

					ce.	variables : (ROA), (ROC), company size, financial leverage, age, growth.		
33	Gholami, et al.	Sustainability	2022	3422 Companies in Australia.	Analysis of the relationship between ESG performance and financial performance in large, medium, and small companies.	Independent Variable: is Disclosure Index (ESG), dependent Variables: (ROA), Total Assets, Leverage, Capital Expenditure, Total Income and Cash Ratio.	Panel data regression.	Positive Relationship.
34	Zheng, et al.	Sustainability	2022	Companies listed in China Growth Enterprises Market (GEM)	Analysis of the relationship between green innovation, ESG and financial performan	Independent variables : patent to represent green innovation and	Analysis of Generalized Method of Moments (GMM).	Positive Relationship.

					ce.	(ESG), dependent variable: (ROA).		
35	Indrasuci & Rokhim	Indonesian Journal of Economics and Management	2023	142 banks from China, Hong Kong, Japan, South Korea, Taiwan, Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam.	Analysis of the relationship of ESG	Independent variable: (ESG), dependent variables: (ROA) (ROE) (Tobin's Q).	Panel data regression.	Negative Relationship.
36	Alessandro, et al.	International Journal of Accounting & Finance in Asia Pasific (IJAFAP)	2023	4 Banks in Indonesia.	Analysis of the relationship between sustainable financing dimensions and financial performance.	Independent Variable: (ESG) data, dependent variables: Net profit margin, return rate on assets, and	Panel data regression.	No relationship exists.

						return rate on equity.		
37	van Bommel	University of Twente	2023	44 Essays.	Impact of sustainable financing on banks' and financial institutions' financial performance.		Methodology of analyzing and literature review.	Results are varying between positive, negative, and neutral.
38	Awuor, L.	Strathmore University	2023	Commercial Banks in Uganda.	Analyzing the impact of ESG on the financial performance.	Independent variable: (ESG), dependent variables: (ROA) (ROE).	Regression equation. Panel data regression and the questionnaire form.	Results are varying between positive and negative.
39	Gutiérrez-Ponce & Wibowo	Sustainability	2023	Banking sector in Indonesia.	Analyzing the relationship between ESG and financial performance.	Independent variable: (ESG) data, dependent variables: (ROA) (ROE).	Panel data regression.	Negative Relationship.
40	Zahid, et al.	Cogent Economics & Finance	2023	19 Banks in Pakistan.	Showing the impact of ESG on financial performance.	Independent Variable: (ESG) data, depende	Panel data regression.	Positive Relationship.

						nt variable: (Tobin's Q)		
41	Doni & Fiamen i	Business Strategy and The Environm ent	2023	148 European companie s belongin g to the Euro Stoxx Index.	Analyzing the relationshi p between ESG practices, sustainabil ity policies, and financial performan ce.	Independ ent variable: (ESG) data, dependе nt variables : (ROA) (ROE) (ROI).	Pearson's correlati on coefficie nt.	Results vary between positive, negative, or lack of relationshi p.
42	Radu, et al.	Sciendo	2023	Romania' s oil, gas and financial services sectors.	Analysis of the relationshi p between ESG and financial performan ce.	Independ ent variable: (ESG) data, dependе nt variables : sustainab le develop ment goals.	Qualitati ve Search Method.	The degree to which ESG is linked to SDGs in the oil and gas sector is higher than in the service sector.
43	Internat ional Finance Corpor ation.	Internatio nal Finance Corporati on.	2023		Promoting sustainabl e developm ent goals through environme ntal, social and	ESG standard s set by the Internati onal Finance and Develop	Conform ity of ESG standards and coverage of SDGs.	Conformit y of ESG standards and coverage of SDGs.

					governance standards by linking ESG sub-indicators to these goals.	ment Corporation and the Sustainable Development Goals.		
44	Delgado-Ceballos, et al.	Business Research Quarterly	2023		Linking ESG practices at the corporate level to SDGs.	ESG indicators. Sustainable Development Goals.	Proposal for an indicator of (ESG) incorporating the three dimensions items and matching that to sustainable development goals.	ESG indicator is linking to Sustainable Development Goals.
45	Baratta, et al.	Sustainability	2023	13 studies.	Showing the role of environmental, social and governance practices in industrial sector.		Review of literature and use of bibliometric analysis.	The study found positive results of (ESG) to reduce carbon emissions to achieve sustainable development goals.

Discussion and Conclusion

According to the information of the previous studies mentioned above, it is obvious that there is a variation in the utilization of measuring techniques, models, and indicators. When investigating ESG, some studies revealed that they adopted the ESG index provided by rating agencies like Thomson Reuters and Refinitiv. In contrast, other investigations adopted the ESG disclosure index. Several studies used a dummy variable procedure to represent ESG, while others have shown that researchers develop ESG indicators using data in in line with sustainable development goals. The predominant method for representing ESG is through the utilization of ESG indicators provided by rating agencies, which function as international organizations. As for representing financial performance, researchers have adopted a wide range of accounting, market, and economic indicators to represent financial performance. The most widely adopted among them is the rate of return on assets (ROA) as an indicator of profitability. Most studies in measuring the relationship between ESG and financial performance have agreed to use regression methods; the most prominent of which is the panel data regression analysis. The results of these studies also showed that the impact of ESG on financial performance in the non-banking sectors is more pronounced than in the banking sector. The researchers believe that the reason for this is that ESG works to create long-term value for companies while the activity is characterized by the effects of banking are mostly short-term, and the environmental and social impacts are less apparent in aspects of financing based on the financial sector. In conclusion, studies have demonstrated contrasting relationships between the two variables, ranging from existing or absence relationships to positive and negative relationships in the banking sector. However, most studies in non-banking sectors demonstrate a positive relationship.

References

1. Ahmad, N., Mobarek, A., & Roni, N. N. (2021). Revisiting the impact of ESG on financial performance of FTSE350 UK firms: Static and dynamic panel data analysis. *Cogent Business & Management*, *8*(1), 1900500.
2. Alessandro, A. (2023). The Implementation of Sustainable Finance: A Case Study in Bank Performance. *International Journal of Accounting & Finance in Asia Pasific (IJAFAP)*, *6*(1), 27-37.
3. Almeyda, R., & Darmansya, A. (2019). The influence of environmental, social, and governance (ESG) disclosure on firm financial performance. *IPTEK Journal of Proceedings Series*, (5), 278-290.
4. Aras, G., & Hacioglu Kazak, E. (2022). Enhancing Firm Value through the Lens of ESG Materiality: Evidence from the Banking Sector in OECD Countries. *Sustainability*, *14*(22), 15302.
5. Atan, R. U., Razali, F. A., Said, J. A. & Zainun, S. A. (2016). Environmental, social and governance (ESG) disclosure and its effect on firm's performance: A comparative study. *International Journal of Economics and Management*, *10*(2), 355-375.

6. Awuor, L. (2023). *A Study on the effect of Environmental Social and Governance adoption and bank characteristics on the financial performance of commercial banks in Uganda* (Doctoral dissertation, Strathmore University).
7. Balatbat, M., Siew, R., & Carmichael, D. (2012, September). ESG scores and its influence on firm performance: Australian evidence. In *Australian school of business school of accounting, school of accounting seminar series semester* (2), 1-30.
8. Baratta, A., Cimino, A., Longo, F., Solina, V., & Verteramo, S. (2023). The impact of ESG practices in industry with a focus on carbon emissions: Insights and future perspectives. *Sustainability*, *15*(8), 6685.
9. Bommel, Z. (2023). *Sustainable Finance in Financial Institutions: A Literature Review of the Integration of ESG Factors and Balancing Profitability Goals*.
10. Buallay, A. (2018). Is sustainability reporting (ESG) associated with performance? Evidence from the European banking sector. *Management of Environmental Quality: An International Journal*, *30*(1), 98-115.
11. Central Bank of Iraq (2022). *Scorecard data analysis report for environmental, social and governance (ESG) practices of the Iraqi banking sector*.
12. Chiu, K. L. (2022). *The relationship between environmental, social and governance pillars and financial performance in the era of financial technology and Covid-19: The case of the banking industry.* (Master Thesis). Universitat de Barcelona: Spain.
13. Cong, Y., Zhu, C., Hou, Y., Tian, S., & Cai, X. (2022). Does ESG investment reduce carbon emissions in China? *Frontiers in Environmental Science*, *10*, 977049.
14. Dalal, K. K., & Thaker, N. (2019). ESG and corporate financial performance: A panel study of Indian companies. *IUP Journal of Corporate Governance*, *18*(1), 44-59.
15. Delgado-Ceballos, J., Ortiz-De-Mandojana, N., Antolín-López, R., & Montiel, I. (2023). Connecting the Sustainable Development Goals to firm-level sustainability and ESG factors: The need for double materiality. *BRQ Business Research Quarterly*, *26*(1), 2-10.
16. Doni, F., & Fiameni, M. (2023). Can innovation affect the relationship between Environmental, Social, and Governance issues and financial performance? Empirical evidence from the STOXX200 index. *Business Strategy and the Environment*.
17. Dragomir, V. D., BĂTAE, O. M., IONESCU, B. Ș., & IONESCU-FELEAGĂ, L. (2022). THE INFLUENCE OF ESG FACTORS ON FINANCIAL PERFORMANCE IN THE BANKING SECTOR DURING THE COVID-19 PANDEMIC. *Economic Computation & Economic Cybernetics Studies & Research*, *56*(4).
18. El Khoury, R., Nasrallah, N., & Alareeni, B. (2021). ESG and financial performance of banks in the MENAT region: concavity–convexity patterns. *Journal of Sustainable Finance & Investment*, *13*(1), 406-430.
19. El Khoury, R., Nasrallah, N., & Alareeni, B. (2021). The determinants of ESG in the banking sector of MENA region: a trend or necessity? *Competitiveness Review: An International Business Journal*, *33*(1).,7-29

20. Ersoy, E., Swiecka, B., Grima, S., Özen, E., & Romanova, I. (2022). The impact of ESG scores on the bank's market value? evidence from the US banking industry. *Sustainability*, *14*(15), 9527.
21. Fijałkowska, J., Zyznarska-Dworczak, B., & Garsztka, P. (2018). Corporate social-environmental performance versus financial performance of banks in Central and Eastern European countries. *Sustainability*, *10*(3), 772.
22. Gholami, A., Murray, P. A., & Sands, J. (2022). Environmental, social, governance & financial performance disclosure for large firms: is this different for SME firms? *Sustainability*, *14*(10), 6019.
23. Gutiérrez-Ponce, H., & Wibowo, S. A. (2023). Do Sustainability Activities Affect the Financial Performance of Banks? The Case of Indonesian Banks. *Sustainability*, *15*(8), 6892.
24. IFC. (2023). Advancing UN Sustainable Development Goals through IFC's Environmental, Social, and Governance Standards.
25. Indrasuci, A. W., & Rokhim, R. (2023). Exploring The Effects of Environmental, Social and Governance (ESG) on Banking Performance: A Case Study of Far East Asia. *Indonesian Journal of Economics and Management*, *3*(3), 522-534.
26. Ismai, N., Isa, M. A. M., Rahman, N. H. A., & Mazlan, N. F. (2020). Sustainability performance using environmental, social, and governance (ESG) scores: Evidence from public listed companies (PLCS) in Malaysia. *International Journal of Accounting*, *5*(30), 183-194.
27. Kadhum, H., & Mohamed, F. (2021). Measuring the Impact of the Financial Structure on the Financial Performance of Commercial Banks Listed in the Iraqi Stock Exchange using the Panel Data Model. *Middle East Journal for Scientific Publishing*, *4*(3), 9-44.
28. Kumar, P., & Firoz, M. (2022). Does Accounting-based Financial Performance Value Environmental, Social and Governance (ESG) Disclosures? A detailed note on a corporate sustainability perspective. *Australasian Accounting, Business and Finance Journal*, *16*(1), 41-72.
29. La Torre, M., Leo, S., & Panetta, I. C. (2021). Banks and environmental, social and governance drivers: Follow the market or the authorities? *Corporate Social Responsibility and Environmental Management*, *28*(6), 1620-1634.
30. Miralles-Quirós, M. M., Miralles-Quirós, J. L., & Redondo Hernández, J. (2019). ESG performance and shareholder value creation in the banking industry: International differences. *Sustainability*, *11*(5), 1404.
31. Naeem, N., & Cankaya, S. (2022). The impact of ESG performance over financial performance: A study on global energy and power generation companies. *International Journal of Commerce and Finance*, *8*(1), 1-25.
32. Peng, L. S., & Isa, M. (2020). Environmental, social and governance (ESG) practices and performance in Shariah firms: agency or stakeholder theory? *Asian Academy of Management Journal of Accounting & Finance*, *16*(1).

33. Powaski, M. C. K., Ordoñez, C. D., & Sánchez, L. J. (2021). ESG impact on financial corporate performance and portfolio returns: Evidence of Australia and Japan. *Vinculatégica EFAN*, *7*(1), 53-78.
34. Radu, O. M., Dragomir, V. D., & Ionescu-Feleagă, L. (2023). The Link between Corporate ESG Performance and the UN Sustainable Development Goals. In *Proceedings of the International Conference on Business Excellence*, 17(1), 776-790.
35. Rahi, A. F., Akter, R., & Johansson, J. (2021). Do sustainability practices influence financial performance? Evidence from the Nordic financial industry. *Accounting Research Journal*, *35*(2), 292-314.
36. Rooh, S., Zahid, M., Malik, M. F., & Tahir, M. (2021). Corporate Governance Characteristics and Environmental, Social & Governance (ESG) Performance: Evidence from the Banking Sector of Pakistan. *Journal of Business & Tourism*, *7*(1), 35-50.
37. Sadiq, M., Singh, J., Raza, M., & Mohamad, S. (2020). The impact of environmental, social and governance index on firm value: evidence from Malaysia. *International Journal of Energy Economics and Policy*, *10*(5), 555-562.
38. Sandberg, H., Alnoor, A., & Tiberius, V. (2022). Environmental, social, and governance ratings and financial performance: Evidence from the European food industry. *Business Strategy and the Environment*, *32*(4), 2471-2489.
39. Saygili, E., Arslan, S., & Birkan, A. O. (2022). ESG practices and corporate financial performance: Evidence from Borsa Istanbul. *Borsa Istanbul Review*, *22*(3), 525-533.
40. Wahua, L. A. W. R. E. N. C. E., & Ezeilo, F. I. (2021). Effects of environmental, social and governance imperatives on the performance of selected listed mortgage banks in Nigeria. *Journal of Global Economics, Management and Business Research*, *13*(4), 34-48.
41. Yuen, M. K., Ngo, T., Le, T. D., & Ho, T. H. (2022). The environment, social and governance (ESG) activities and profitability under COVID-19: evidence from the global banking sector. *Journal of Economics and Development*, *24*(4), 345-364.
42. Zahid, M., Naqvi, S. U. U. B., Jan, A., Rahman, H. U., & Wali, S. (2023). The nexus of environmental, social, and governance practices with the financial performance of banks: A comparative analysis for the pre and COVID-19 periods. *Cogent Economics & Finance*, *11*(1), 2183654.
43. Zhao, C., Guo, Y., Yuan, J., Wu, M., Li, D., Zhou, Y., & Kang, J. (2018). ESG and corporate financial performance: Empirical evidence from China's listed power generation companies. *Sustainability*, *10*(8), 2607.
44. Zheng, J., Khurram, M. U., & Chen, L. (2022). Can green innovation affect ESG ratings and financial performance? evidence from Chinese GEM listed companies. *Sustainability*, *14*(14), 8677.
45. Zhou, G., Liu, L., & Luo, S. (2022). Sustainable development, ESG performance and company market value: Mediating effect of financial performance. *Business Strategy and the Environment*, *31*(7), 3371-3387.