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Assessment of ESG Integration in Corporate Valuation in GCC Region

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Abstract

The concept of Sustainability has been gaining steam in the past few decades in the boardrooms of corporations and regulators in order to decisively address the ecological and social impacts of operations carried by thousands of organizations around the globe. The ESG Score has been established in order to uniformly assess the considerations and effectiveness of initiatives taken by organizations to improve their ecological outlook, or internal relations and interactions among various levels of staff throughout the organizational structure. This paper aims to assess any relationship that may arise between the valuation and capital structure of an organization through assessing the ESG Score, as well as its individual components, namely Environmental, Social and Governance components, upon the Cost of Equity, Cost of Debt, Return on Equity, and Dividend Payout Ratio. The methodology used to observe any correlation between these variables is to conduct OLS regressions between the ESG Score, as well as each of its individual components, with the variables relating to the different methods of valuation, namely the Discounted Cash Flow Model and the Dividend Discount Model. A positive causality was observed between the environmental score and both free cash flow and profitability. Furthermore, we noted a strong association between the overall ESG score and the dividend payout ratio. Further observations were derived from juxtapositions between indices of publicly traded companies ranked based on their ESG performance and companies ranked by their equity, in the markets situated in the United Arab Emirates and the United States. Comparisons were also made between indices assessing the performance of conventional Bonds and Green Bonds.

Keywords: Esg, Valuation, Esg Score, Discounted Cash Flow Model, Dividend Discount Model, Gcc

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1. Introduction

The Global Sustainable Investment Alliance (GSIA, 2020) defined Environmental, Social and Governance (ESG) integration as "the systematic and explicit inclusion by investment managers of environmental, social and governance factors into financial analysis". At present, more than USD 18 trillion, or 15% of all global assets under management (AUM), is estimated to have incorporated ESG considerations (PwC, 2022). This report projects that the ESG AUM would grow at a 14% compounding annual growth rate (CAGR) over the course of five years, reaching USD 34 trillion by 2026. In contrast to the clear guidelines provided by national and international accounting standards for the disclosure of a company's financial information, the disclosure of ESG information is still very disorganized. Global Initiative for Sustainability Ratings reported that over 100 organizations are currently tracking, assessing, and rating or ranking the ESG performance of businesses (Eccles & Stroehle, 2018). Modern regulations have severely impacted the attitudes of major corporations toward sustainability and relevant reporting operations. Further pressures can be observed to be originating from investors and other stakeholders to declare ESG performance. Consequences have arisen, such as the manipulation of companies' ESG performance, the generation of deceptive value outcomes, unethical behavior in leveraging standards for legitimacy, and the manipulation of sustainability reporting (Aldowaish et al., 2022).

Hence, the initial segment of this investigation will concentrate on delivering a succinct elucidation of ESG and ESG Integration, as well as highlighting the advantages of integrating ESG practices in business and its application in the realm of Islamic finance.

1.1. Defining ESG

Environmental, Social, and Governance (ESG) represent the comprehensive viewpoint that sustainability encompasses more than just environmental concerns. (Winters, 2022) defined ESG as:

Environmental: These factors encompass the company's ability to withstand physical climate risks, responsible management of natural resources, and both direct and indirect contributions to greenhouse gas emissions, such as climate change, flooding, and fires.

Social: The social aspect serves as a connection between the business and its stakeholders. Other instances of criteria that a corporation may be evaluated against encompass its influence on the local communities it operates in and its impact on supply chain collaborators, particularly those in developing economies where environmental and labor regulations may be less stringent..

Governance: This pertains to the guidance and administration of a commercial enterprise. ESG analysts will analyze the perception of shareholder rights, the correlation between leadership incentives and stakeholder expectations, and the implementation of internal controls to promote leadership accountability and transparency.

1.2. ESG integration

ESG refers to conventionally unreported elements that are not reflected on the balance sheet but are crucial to a company's core values, such as its brand's worth and reputation. Increased risk-adjusted returns, long-term viability, and operational efficiency can all be impacted by corporate decisions that include ESG factors. As a result, it helps evaluate possibilities and risks in enterprises and portfolios (Winters, 2022).

The author mentioned that eventually, these opportunities and dangers reveal details about the business, such as its environmental impact and green initiatives, the extent of its community involvement, how well it will withstand pertinent laws and regulations, and any legal disputes. As a result, a comprehensive snapshot of company operations and impacts can be observed.

ESG integration leverages research, data, and insights to better influence investment and management decisions, even if the ESG concerns that are material will vary by investment style, sector, industry, market trends, and client objectives (Winters, 2022).

1.3. Why ESG integration is beneficial for corporate business

Beyond gaining the approval of institutional shareholders and fostering a positive public image, tackling ESG concerns has many advantages. Successful ESG programs, for instance, can give businesses access to significant finance sources, enhance their brand identity, and promote long-term growth. ESG integration has additional benefits such as employee retention, a higher market value, dedicated shareholders, higher stock liquidity, and more thorough analysis (Winters, 2022).

Hence, integrating ESG practices can enable companies to gain a significant edge over their competitors by enhancing their capacity to respond to changing socioeconomic and environmental conditions, as well as by identifying strategic opportunities and overcoming market obstacles. ESG investors exhibit a higher propensity to retain their investments due to their values-driven approach, prioritizing long-term outcomes over short-term quarterly performance. Investors who prioritize long-term wealth creation rather than short-term stock trading often integrate ESG (Environmental, Social, and Governance) principles into their investment strategy. These investors typically collaborate with companies to enhance their performance. Robust ESG principles

have been shown to aid businesses in attracting and retaining dedicated, enthusiastic, and valued personnel. This commitment has the potential to generate intangible favorability, enhancing the company's reputation and boosting employee efficiency. The incorporation of ESG considerations into investment research and decision-making processes enhances investment strategies and management. ESG data facilitates comprehensive assessments and appraisals by serving as a preemptive mechanism for identifying risks that are not accounted for in asset valuations (Winters, 2022).

1.4. Islamic Finance and ESG integration

Sairally (2015) mentioned, with the recent expansion of the ESG market, there has been a growing tendency of convergence between the Islamic finance industry and the ESG market to appeal to a more significant market segment of socially conscious investors with both Muslim and non-Muslim backgrounds. The author provided examples of recent initiatives by the Islamic finance sector to explicitly incorporate ESG considerations including the release of an SRI framework by the Securities Commission of Malaysia in August 2014, which facilitated the funding for SRI projects. Also, the Khazanah Nasional's Berhad issuance of the first SRI Sukuk in May 2015 under the SRI Sukuk framework and the Bursa Malaysia ESG index called FTSE4Good Bursa Malaysia Index in December 2014 (Sairally, 2015).

1.5. Report Structure

This study focuses on the impact of ESG integration on corporate valuation. We will examine the impact of ESG on a firm's valuation using the discounted cash flow and dividend discount models. The study is organized as follows: Section 2 discusses the literature review on ESG integration in business valuation; Section 3 describes our research methodology; Section 4 offers our findings, and Section 5 summarizes and concludes the report in a concise manner.

2. Literature Review

2.1. ESG Integration in investment

In 2011, Morgan Stanley Capital International (MSCI) published a research paper titled integrating ESG into the investment process. Four approaches to ESG integration in investing have been explained (Briand et al., 2011).

Tilting or Integrated ESG

The author described this strategy as a method to change the way a portfolio is set up so that it gives more weight to reducing exposure to negative ESG variables while incorporating more beneficial variables. Universal owners who control a portion of the economy through their portfolios understand that portfolio externalities must be

considered holistically. Selling or giving up ownership of some companies based on single factors is not always the best course of action. When making investment decisions, investors could use a capital allocation strategy that takes ESG factors into account. When all other financial factors are the same, the result is often to put more weight on companies with high ESG ratings and less weight on companies with low ESG ratings. In some cases, investors may also decide to use negative screening on their portfolios where they will rebalance the portfolio through removal of allocations to equities that do not implement the ESG initiative.

Active ownership

Investors may want to take an active approach by doing business with companies that don't care as much about ESG. Voting and taking part are ways to communicate the preferences and goals of the investors so that the companies may act in a way that coincides with these strategies. The idea behind this method is that investors hope their actions will make businesses act in a way that is more in line with the market's long-term viability which results in significant beta enhancement. Investors often think of active ownership as an extension of the integrated ESG investing method, even though deviates from the traditional method of building a portfolio. Investors have been known to use involvement as a last resort to keep holding on to companies with low ESG ratings. Investors will only take a company out of their portfolios if their attempts to engage with the company fail.

Targeted or thematic

Investors that are worried about the prospect of system-wide externalities may adopt a longer-term perspective by making investments in businesses with strategies that provide advantageous externalities. To address a potential future energy crisis and climate change, for instance, investing in clean technology, renewable energy, or water companies now might be a long-term risk mitigation approach. Making a special budgetary allocation for these strategic investments will often be part of an implementation strategy. This strategy is comparable to purchasing long-term portfolio insurance as a hedge to assure the sustainability of investment returns across multiple periods.

Collaboration

Some investors think that focusing on system-wide reform is the best way to improve the environment over the long run and guarantee a stable investment return. These investors usually favor a cooperative strategy with all parties involved. This method, nevertheless, can be far more time-consuming and resource consuming. It is also crucial to remember that the various ESG investing strategies mentioned above are not mutually exclusive. Depending on their level of experience and available

resources, investors may choose to use one or a combination of any number of strategies in their investment process.

2.2. ESG Integration in Valuation

In 2014, an article has been spread under the title "Using ESG Factor for Equity Valuation" in the CFA Institute magazine. This article includes several different ways of applying ESG factors in company valuation. One method of integrating ESG factors in corporate valuation is through Discounted Cash Flow (DCF). Hence, companies with low ESG metrics scores will result in higher risk profiles due to low discount rates and vice versa. Two drawbacks are identified while using this method. Firstly. Deciding the magnitude of the discount rate and secondly, counting the element of risk twice. If the company has a higher risk profile due to a market-known factor, then the beta will also represent that risk. To enhance this method, the ESG factor can be integrated into the DCF by adjusting future cash flows. Thus, considering relevant causes that could affect future cash flows will translate to better assumptions than those applied in the discount rate adjustment. Another way of ESG integration in equity valuation is multiple analysis. It is used by adjusting the target multiple. Companies with higher ESG scores can have a premium on their target multiple while others will have a discount. Although this method has the same drawbacks as DCF at least an attempt is made to integrate ESG factors into valuation (Bos, 2014).

In 2016, the Principles for Responsible Investment issued a practical guide to ESG integration for equity investing. Many techniques of ESG integration across investment strategies have been discussed (Sloggett & Gerritsen, 2016). The summary of each technique is as follows:

- Fundamental strategies (Traditional strategies): Forecasted financials can be adjusted such as revenue, capital expenditure, operating cost, etc. to process ESG factors through qualitative and quantitative analysis.
- Quantitative strategies (Systematic strategies): optimizing future price predictions by inferring the relationship between asset returns and relevant ESG factors alongside other factors such as value, size, momentum, etc. that drive weights of securities to fluctuate.
- Smart Beta Strategies (Strategic Beta): create a portfolio that outperforms the benchmark index by looking at market factors such as volatility, quality profitability, etc. along with relevant ESG factors to adjust the weights of companies included in an index.
- Passive and Enhance Passive strategies (Indexing and Enhanced Index): One strategy is to follow an index that modifies the weights of parent index constituents in accordance with the ESG risk profile or exposure to a certain ESG factor. Managers can incorporate ESG factors into enhanced passive

strategies because they can make active investment decisions, such as changing the weights of index constituents or eliminating stocks, to reduce downside risk or overcome the benchmark.

2.3. Overlapping Issues in ESG factors:

Delporte (2021) mentioned that Social factors bring a number of intriguing and complicated issues because it frequently overlaps heavily with other factors. One example is the idea of environmental justice, which says that laws and policies about the environment should protect people of all races, incomes, colors, and places of origin in the same ways. It is also important to consider about whether an environmental stance might conflict with social goals. Managing environmental problems at the corporate level is part of governance. People can also be hurt by bad governance, which brings it back to being a social issue (Chan, 2022).

3. Methodology:

The empirical approach aims to investigate a specific period for a cross-sectional analysis using secondary data extracted from the Refinitiv database and subjected to quantitative analysis. In addition, a comparison of various ESG and general bond and equity indices is included in the study.

3.1. ESG Score

Refinitiv's ESG scores aim to assess a company's comparative ESG performance, dedication, and efficacy in 10 key areas, including emissions, product innovation, human rights, shareholders, community, CSR strategy, etc., based on the company's reporting (Refinitiv, 2022), According to this document, it evaluates and computes over 450 environmental, social, and governance (ESG) indicators on a company-wide basis. Out of these, a total of 186 companies that are highly comparable and significant within their respective industries are classified into 10 categories. These categories contribute to the three pillar scores (E, S, and G), which are utilized to assess and assign a score to the company's environmental, social, and governance (ESG) performance on a scale of 0 to 100. The individual scores for each of the three pillars are obtained by calculating the scores for each category. As per the document, The ESG score is a calculated value that represents the combined importance of the "Environmental" and "Social" categories, with varying weights assigned to each category depending on the sector while all industries are assigned equal weights in terms of "Governance."

3.2. Sample

The original sample consisted of 179 publicly traded companies with Environmental, Social, and Governance (ESG) scores of at least ten (10) listed on different stock

exchanges in the Gulf Cooperation Council (GCC) countries, namely Saudi Arabia, the United Arab Emirates, Oman, Kuwait, Qatar, and Bahrain. We collected data on the combined and individual ESG ratings for each subcategory - environment, social, and governance, for these companies. In order to eliminate unreported companies, we specifically exclude those that have zero or no scores in any of the sub-sections. Due to the omission, our sample size was decreased to 123 firms, consisting of 35 banks and 88 general corporates.

Quantitative analysis

The study utilizes multiple linear regressions to facilitate statistical analysis. Furthermore, the report examines academic journals, theories, and pertinent studies to observe the documentary research methodology. Our main approach for assessing the influence of ESG on a company's value is through the utilization of the Discounted Cash Flow model and Dividend Discount Model.

3.3. Discounted Cash Flow Method:

Discounted cash flow (DCF) refers to a valuation method that estimates the value of an investment by discounting its expected future cash flow (Berk, 2017).

$$Enterprise\ value\ (EV) = \frac{FCF_1}{(1+WACC)^1} + \frac{FCF_2}{(1+WACC)^2} + \cdots + \frac{FCF_n}{(1+WACC)^n}$$

Where, FCF = EBIT (1-Tr) + D&A – CAPEX – Δ Net WC

DCF model has three variables namely Free Cash Flow (FCF), Cost of Equity (re, and Cost of Debt. As free cash flow is derived from the operating profit i.e., EBIT, we take the EBIT/Total Equity ratio as a dependent variable to find the impact of ESG scores.

For this method, we only considered the corporate companies and omitted the bank from the sample since the FCF model is not suitable for bank valuation due to their high leverage model and interest income and expense are included in their operating income and expense.

To determine the cost of equity, we compare the return of the ESG index to the return of the General index. From the Capital Asset Pricing Model (CAPM) model we see the rate of return (cost of equity) is proportional to market return if it has a positive relationship with market fluctuations (beta). According to CAPM: $Return\ on\ Equity = r_f + \beta\ (r_m - r_f)$.

To determine the cost of debt, we primarily compared the return of the ESG bond index to the return of the General bond index.

Hypothesis 1:

Null hypothesis: $H0$: $ESG\ score\ does\ not\ affect\ the\ EBIT/Equity\ ratio$

Alternative hypothesis $H1$: $ESG\ score\ does\ \ affects\ the\ EBIT/Equity\ ratio$

Equation 1: $\frac{EBIT}{Equity} = a + b\ (ESG\_Score)$

Equation 2: $\frac{EBIT}{Equity} = a + b_1\ (Env_{Score}) + b_2\ (Soc_{Score}) + b_3\ (Gov_{Score}) + \epsilon$

3.4. Dividend Discount Model

$$\text{Value of Stock} = \frac{Expected\ Dividend\ Payment}{Cost\ of\ Equity - Growth\ Rate}$$

Where, $Dividend = Profit$ x $Payout\ Ratio$ and Earning Growth Rate= (1 - Payout Ratio) * Return on New investment

For the Dividend Discount model, the variables are Dividends and Growth Rate which are derived from the profit at payout ratio. Therefore, to check the impact of ESG we regress the ESG scores with ROE and ESG scores with dividend payout ratio to check whether they could significantly explain effect of ESG score.

Hypothesis 2:

Null hypothesis: H_0: $ESG\ score\ does\ not\ affect\ the\ ROE$

Alternative hypothesis:H_1 : ESG score affects ROE

Equation 3: $ROE = a + b\ (ESG\_Score)$

Equation 4: $ROE = a + b_1\ (Env\_score) + b_2\ (Soc\_score) + b_3\ (Gov\_score) + \epsilon$

Hypothesis 3:

Null hypothesis: $H0$: $ESG\ score\ does\ not\ affect\ the\ payout\ ratio$

Alternative hypothesis: $H1$: $ESG\ score\ affects\ the\ payout\ ratio$

Equation 5: $Payout = a + b\ (ESG\_Score)$

Equation 6: $Payout = a + b_1\ (Env\_score) + b_2\ (Soc\_score) + b_3\ (Gov\_score) + \epsilon$

3.5. Cost of Equity:

- **Comparison Between the return from UAE ESG Index and Dubai Financial Market Indices**

The S&P/Hawkamah ESG UAE Index was utilized to evaluate the performance of companies that integrate ESG factors into their fundamental framework. This index was employed to extract the performance data of the 20 highest-performing companies in the UAE, based on the aforementioned ESG criteria. Subsequently, the index was compared to both the General Index of the Dubai Financial Market (DFM GI), which offers a summary of the overall market performance, and the Shariah Index (DFM SI), which displays the performance of the companies listed in the DFM that comply with Shari'ah principles.

- **Comparison Between return from The S&P 500 Equity and S&P 500 ESG Indices**

The Standard and Poor's 500 is a widely tracked index that provides information on the changes in value of the top 500 companies listed on major US stock exchanges, including NYSE and NASDAQ. Additionally, it offers the most extensive collection of data currently accessible, spanning a longer duration.

3.6. Cost of Debt:

- **Comparison Between The S&P 500 Bond and S&P 500 ESG Green Bond Indices**

The S&P 500 Bond rate index is a metric that evaluates the effectiveness of corporate bonds issued by companies that are listed in the S&P 500. By conducting a comparative analysis of the performance of corporate bonds against the S&P 500 Green Bond Index from November 1st, 2017 to November 1st, 2022, we can observe a distinct contrast in their respective performances.

- **KPI Indexed Bond/Sukuk**

This is accomplished by establishing specific Key Performance Indicators (KPIs) that evaluate the environmental effects in areas related to the activities of the Green Bond issuer. The terms of the Green Bond would incentivize the issuer to achieve KPIs by offering a reduced interest rate on the bond in such a situation. However, failing to meet the KPIs would require the repayment of the Green Bond at a higher interest rate

(Eggerstedt, 2021). This would lead to an increase in debt costs and move the issuer further from the optimal Cost of Capital due to the higher perceived risk by investors.

4. Findings and Discussion:

Table 1: Descriptive Statistics

VARIABLE	OBS	MEAN	STD. DEV.	MIN	MAX
(EBIT/Equity) EBIT_Equity	123	0.1264	0.1344	-0.1125	0.7600
(Total ESG Score) ESG_Score	123	39.9830	16.639	11.03	78.92
(Environmental Score) Env_Score	123	23.833	21.0339	.13	84.79
(Social Score) Soc_Score	123	35.2615	19.9279	3.21	81.85
(Governance Score) Gov_Score	123	57.3687	18.3830	13.33	93.95

4.1. Discounted Cash Flow:

Table 2: EBIT/Equity Discounted Cash Flow

$Y=\frac{EBIT}{Equity}$	M1: ESG	M2:2-Individual
ESG_Score	0.001	
	(0.001)	
ENV_Score		0.002**
		(0.001)
Soc_Score		-0.001
		(0.001)
Gov_Score		0.001
		(0.001)
Constant	0.080**	0.055
	(0.031)	(0.039)
Observations	123	123

Standard errors in parentheses

Source: Authors

* p < 0.1, ** p < 0.05

For Equation 1 we formulated the following result:

$$\frac{EBIT}{Equity} = \ 0.080 + 0.001\ (ESG\_Score)$$

That indicates the positive relationship between $\frac{EBIT}{Equity}$ and ESG score- for 1% change in ESG score $\frac{EBIT}{Equity}$ increases by 0.002%. However, from p-value (>5%) we may not conclude that the variable is significant to explain the dependent variable.

For Equation 2 we formulated the following from the resulting table seen below:

$$\frac{EBIT}{Equity} = \ 0.055 + \ 0.002\ (Env\_Score) - \ 0.001(Soc_{Score}) + \ 0.001\ (Gov\_Score)$$

That indicates the positive relationship between EBIT and Environmental score - for 1% change in ESG score, EBIT/Equity increases by 0.002% and from p-value (<5%), we may conclude that the variable is significant to explain the dependent variable. But from p-value we may not conclude the dependence of social score and governance score can explain the depended variable.

4.2. Dividend Discount model:

Table 3: ROE_Dividend Discount Model

Y = ROE	M1: ESG	M2:2-Individual
ESG_Score	0.001	
	(0.001)	
ENV_Score		0.002*
		(0.001)
Soc_Score		-0.001
		(0.001)
Gov_Score		0.001
		(0.001)
Constant	0.062*	0.036
	(0.036)	(0.050)
Observations	88	88

Standard errors in parentheses

Source: Authors

* p < 0.1, ** p < 0.05

For the Equation 3 we got:

Equation 3: $ROE = 0.062 + 0.001\ (ESG\_Score)$

From p-value (>5%) we may not conclude that the variable is significant to explain the dependent variable.

For the Equation 4 we got:

Equation 4: $ROE = 0.036 + .002\ (Env\_Score) - 0.001\ (Soc\_Score) + .001\ (Gov\_Score)$

That indicates the positive relationship between ROE and Environmental score - for 1% change in the ESG score, ROE increases by 0.002% and from p-value of we may conclude that the variable is significant to explain the dependent variable at 10% level of significance. But from p-value we may not conclude the dependence of Social score and Governance score can explain the depended variable.

Table 4: Payout Ratio_Dividend Discount Model

	M1: ESG	**M2:2-Individual**
ESG_Score	0.008**	
	(0.004)	
ENV_Score		0.004
		(0.004)
Soc_Score		0.001
		(0.004)
Gov_Score		0.002
		(0.004)
Constant	0.197	0.277
	(0.158)	(0.221)
Observations	88	88

Standard errors in parentheses

Source: Authors

* p < 0.1, ** p < 0.05

From the p-values we can conclude the dependence of payout ratio on ESG scores but from the p-values we cannot conclude the dependence of payout ratio on individual ESG scores.

4.3. Cost of Equity:

- **Comparison Between the UAE ESG Index and Dubai Financial Market Indices**

After reviewing the progress and return of each of the three indices over the period spanning November 1st, 2017 – November 1st, 2022, period, the average scores for the returns observed for DFM SI were found to be the lowest over the observation period, with an average return of 0.05%. This was followed closely by DFMGI, with an average return of 0.06%. The return for the general index is higher than the ESG index which means the cost of equity is higher for ESG stocks by 0.01% compared to the general stock.

- **Comparison Between The S&P 500 Equity and S&P 500 ESG Indices**

By comparing the daily return of this index with that of the Standard and Poor's 500 ESG Index over the period spanning October 31st, 2012 – October 31st, 2022, the strategy of the top performing companies can be assessed in terms of prioritization, focus and implementation. The average return of the S&P 500 index was found to be 0.046%, which was found to be marginally lower than that of the S&P 500 ESG Index, with an average return of 0.047%. Again, the cost of equity is slightly higher in ESG stocks.

4.4. Cost of Debt:

- **Comparison Between The S&P 500 Bond and S&P 500 ESG Green Bond Indices**

This will allow for the assessment of the impact of the environmentally focused aspects of Green Bonds upon their performance, by setting the average return of the conventional corporate bond as a control value. In this assessment, the average S&P 500 Bond Index daily return was found to be significantly higher than the average return of the S&P 500 Green Bond Index, with each scoring an average return of 0.0012% and -0.0167%, respectively. An overall difference of 0.02% can be observed between the average daily returns of the two indices, signaling a significantly lower performance of green bonds for the companies listed in the S&P 500 index, in comparison to that of conventional corporate bonds. The lower return indicates the lower cost of debt for green bonds compared to traditional bonds.

- **KPI based Sukuk**

An excellent epitome of this case can be represented by the SRI Green Sukuk, which is an Islamic alternative to Green Bonds which function largely in the same manner to the extent of the scope of this section. This Sukuk was issued by Khazanah National, a sovereign wealth fund, for the purpose of funding with the goal of improving the accessibility of education in Malaysian schools. IN the scenario that the KPIs set forward for the Green Sukuk were not met, the investors would receive a 4.3% return per annum and redeem 100% of the face value of their investment in the first tranche of the Sukuk. Whereas if these KPIs were met, then the return would be reduced to 3.5% per annum, while only redeeming 93.78% of the face value initially invested. Similar characteristics were also imposed on the second tranche of the same Green Sukuk issuance. Here, the cost of debt is lowered by $(4.3\% - 3.5\%) = 0.8\%$ if all KPIs are met.

4.5. Summary of the findings:

- For 1% (increase the score by 1) change in Environmental Score, EBIT/Equity increases by 0.002%
- For 1% (increase the score by 1) change in the Environmental Score, ROE increases by 0.002%
- For 1% (increase the score by 1) change in the ESG score, Payout Ratio increases by 0.008%
- The cost of equity is higher for ESG stocks by 0.01% compared to the general stocks
- The cost of debt is lower for ESG bond/sukuk by .02%-0.8% compared to general bond or sukuk

5. Conclusion:

The SDG agenda is a global call to action that was badly needed and gives everyone a chance to help fight the global crisis. As part of global action, the private sector must take part through investments, initiatives, and even responsible production. This sector is one of the best ones and has a lot of power to help the UN reach the SDGs. In return, it is important to show them that there will be benefits for them if they work to meet the SDGs. So, this study investigates the link between how well the SDGs do in terms of the environment and how well they do in terms of valuation.

From the ESG study in GCC countries, we found a positive relationship between cash flow and environmental factors. Environmental factors also had a significant effect on the profitability of firms in this region. However, we could not conclude the impact of social factors and governance factors in the valuation using the free cash flow model and dividend discount model. Further key findings were extrapolated from the analysis of various indices, which provided details regarding the growth of different financial markets, corporate bond performances, etc. in contrast to their ESG-based counterparts. The first finding stems from the indices related to the cost of equity. The daily returns of indices containing equities of the top-performing corporation in specific markets were generally lower than the average daily returns of top-performing companies in terms of their ESG scores. This was the case in the comparison of the Hawkamah/UAE ESG Index and DFM General Index, as well as the DFM Shari'ah Index. The second finding is in stark contrast to that of the first, as in the case of comparing indices relating to Cost of Debt, it was noted that the daily average return of green bonds was significantly lower than that of the conventional corporate bonds.

5.1. Limitation and Future research Scope:

The limitations of these studies arise from the immaturity of the GCC market in terms of ESG implementation, resulting in a relatively small sample size. The analysis does not comprehensively address the Multiplier valuation model, which could be explored in future research. Due to limited data availability in the GCC region, the analysis is restricted to a single period, thereby precluding the use of time series and panel data analysis. An additional constraint of the study is the absence of ESG indices in GCC countries. Furthermore, the study lacks qualitative analysis, which could be addressed in future research.

References:

Aldowaish, A., Kokuryo, J., Almazyad, O., & Goi, H. C. (2022, March 3). Environmental, Social, and Governance Integration into the Business Model: Literature Review and Research Agenda. Sustainability, 14(5), 2959. https://doi.org/10.3390/su14052959

Berk, D. M. (2017). Corporate Finance, Pearson Education, Fourth Edition.

Bos, J. (2014). Using ESG factors for equity valuation. CFA Institute Magazine, 25(6), 17.

Briand, R., Urwin, R., & Chia, C. P. (2011). Integrating ESG into the investment process. MSCI ESG Research, New York, NY. Retrieved from https://www.msci.com/www/research-report/integrating-esg-into-the/014288982

Ceramics World Web (2022). RAK Ceramics looks to expand in Saudi Arabia. Retrieved from: https://ceramicworldweb.com/en/news/rak-ceramics-looks-expand-saudi-arabia

Chan, W. (2022, July 29). The importance of ESG for SMEs. HSBC. Retrieved from https://www.business.hsbc.com.eg/en-gb/insights/sustainability/the-importance-of-esg-for-smes

Delporte, C. (2021, December 16). Overlapping Social and Climate Issues Shape Banks' ESG Efforts | ABA Banking Journal. Retrieved from https://bankingjournal.aba.com/2021/12/overlapping-social-and-climate-issues-shape-banks-esg-efforts/

Eccles, R. G., & Stroehle, J. (2018). Exploring Social Origins in the Construction of ESG Measures. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3212685

Eggerstedt, S. (2021, April 29). What are sustainability-linked bonds and how do they work? Schroders. Retrieved from https://www.schroders.com/en/us/private-investor/insights/fixed-income/what-are-sustainability-linked-bonds-and-how-do-they-work/

GSIA (2020). Global Sustainable Investment Review 2020; Global Sustainable Investment Alliance: Washington, DC, USA. Retrieved from www.gsi-alliance.org/wp-content/uploads/2021/08/GSIR-20201.pdf

PwC (2022). Asset and wealth management revolution 2022: Exponential expectations for ESG. PwC. Retrieved from https://www.pwc.com/gx/en/industries/financial-services/asset-management/publications/asset-and-wealth-management-revolution-2022.html

Refinitiv. (2022, May). Environmental, Social and Governance Scores From Refinitiv. Retrieved from https://www.refinitiv.com/content/dam/marketing/en_us/documents/methodology/refinitiv-esg-scores-methodology.pdf

Sairally, B. S. (2015). Integrating Environmental, Social and Governance (ESG) Factors in Islamic Finance: Towards the Realization of Maqāṣid al-Sharīʿah. ISRA International Journal of Islamic Finance, 7(2), 145–154. Retrieved from https://journal.inceif.org/index.php/ijif/article/view/210

Sloggett, J., & Gerritsen, D. (2016). A practical guide to ESG integration for equity investing. PRI Association, London.

Winters, M. (2022, March 24). What is ESG integration & why is it important? Conservice ESG. Retrieved from https://www.gobyinc.com/what-is-esg-integration/