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INTEGRATION OF ESG PRICNIPLES IN BUSINESS VALUATION ON THE EXAMPLE OF IBERDROLA S.A

Abstract: *the article discusses the issue of integration of ESG factors into business valuation practices, with a focus on the ESG premium exemplified by Iberdrola S.A. Through discounted cash flow analysis incorporating WACC adjustments, it demonstrates how superior ESG performance generates a negative premium, reflecting reduced systemic risk due to leadership in renewable energy and consistently top-tier sustainability ratings. This study highlights methodological considerations, such as the need for economic constraints and scenario validation, to address model sensitivities. Findings underscore ESG's pivotal role in enhancing long-term value creation and competitiveness for energy sector firms.*

Keywords: *ESG premium, business valuation, WACC adjustment, DCF model, systematic risk, renewable energy, sustainability ratings.*

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ИНТЕГРАЦИЯ ФАКТОРОВ ESG В ОЦЕНКУ БИЗНЕСА НА ПРИМЕРЕ КОМПАНИИ IBERDROLA S.A

Аннотация: *в статье рассматривается вопрос интеграции факторов ESG в бизнес-оценку на примере компании Iberdrola. S.A. с акцентом на отрицательную премию за ESG, обусловленную лидерством в возобновляемой энергетике и высокими рейтингами, что снижает систематический риск. На основе анализа дисконтированных денежных потоков с корректировкой WACC подчёркиваются методологические аспекты, включая необходимость экономических ограничений и сценарного анализа для учёта чувствительности моделей. Сделан вывод о ключевой роли ESG в создании долгосрочной стоимости и повышении конкурентоспособности энергетических компаний.*

Ключевые слова: *премия устойчивого развития, ESG, оценка бизнеса, Iberdrola, корректировка средневзвешенной стоимости капитала, модель дисконтированных денежных потоков, систематический риск, возобновляемая энергетика, рейтинги устойчивости.*

In recent years, Environmental, Social, and Governance (ESG) factors have gained significant importance in corporate finance, investment analysis, and valuation practices. Traditionally, corporate valuation relied primarily on financial indicators such as profitability, growth, and risk-adjusted discount rates [1]. However, growing awareness of climate change, social responsibility, and corporate governance failures has led investors and regulators to recognize ESG factors as material drivers of long-term firm value.

The integration of ESG considerations is particularly relevant in capital-intensive and regulated industries, such as the energy and utilities sector, where companies face long-term environmental risks, regulatory pressure, and substantial infrastructure investment requirements. This paper examines how ESG considerations can be incorporated into corporate valuation through adjustments to the weighted average cost of capital (WACC), using Iberdrola S.A. as a case study.

Iberdrola represents an appropriate subject for analysis due to its global leadership in renewable energy and consistently high ESG ratings. The study applies a traditional discounted cash flow (DCF) model and compares a base valuation with an ESG-adjusted valuation in order to assess the impact of ESG-related risk on firm value.

ESG factors influence corporate valuation primarily by affecting a firm's risk profile, cost of capital, and long-term cash flow sustainability [3]. Environmental performance is linked to exposure to climate transition risk and regulatory compliance costs; social performance affects labor productivity, reputation, and operational continuity; governance quality influences agency costs, capital allocation efficiency, and investor confidence.

Academic literature increasingly supports the view that strong ESG performance is associated with lower downside risk and improved access to capital, particularly for firms operating in environmentally sensitive industries [4]. Consequently, ESG integration has become an important extension of traditional valuation frameworks.

Common approaches to incorporating ESG into valuation include adjustments to discount rates, such as the cost of equity or WACC, scenario analysis of ESG-related cash flow impacts, or relative valuation using ESG-adjusted multiples [5]. This study adopts the discount-rate adjustment approach, reflecting the assumption that superior ESG performance reduces systematic risk and investors' required rate of return.

Table 1

Iberdrola's ESG Ratings, 2020–2024

	2024	2023	2022	2021	2020
MSCI	AAA	AAA	AAA	AAA	AAA
Sustainalytics	21,2	23,9	16,3	16,3	23,9
S&P Global	85	85	85	84	84

Source: composed by the author, basing on [8–10].

Iberdrola S.A. is widely recognized as a global leader in sustainability and renewable energy [7]. Between 2020 and 2024, the company consistently achieved high ESG ratings from major international rating agencies. See Table 1. These ratings reflect Iberdrola's strong environmental performance, commitment to decarbonization, robust

governance framework, and extensive use of sustainable finance instruments. Such characteristics support the hypothesis that ESG considerations reduce Iberdrola's long-term risk exposure relative to industry peers.

The weighted average cost of capital (WACC) is calculated using market value weights of equity and debt, where Re denotes the cost of equity estimated using Capital Asset Pricing Model (CAPM), Rd is the cost of debt, and T is the corporate tax rate.

$$WACC = \frac{E}{E+D} \cdot R_e + \frac{D}{E+D} \cdot R_d(1\text{-}T)$$

For 2024, Iberdrola's market value of equity amounted to approximately 81.6 billion euro, while market value of debt reached 122.6 billion euro. The estimated cost of equity was 7.87%, and the cost of debt was 8.04%, resulting in a market-value-based WACC of 6.69%. Comparable calculations were performed for the period 2020–2023.

An ESG risk premium is introduced to reflect the impact of ESG performance on the firm's perceived risk. The premium is determined based on Iberdrola's ESG ratings and relative industry position. Firms classified as ESG leaders are assigned a negative risk premium, indicating lower systematic risk. Please see Table 2. For Iberdrola the estimated ESG risk premium ranges from -5.00% to -6.67% over the analyzed period.

Table 2

ESG Risk Premium Calculation Criteria

	ESG Score						
	Top 1%	Market Leader	High	Moderate	Laggard	Low	Extremely Low
ESG Risk Premium	-15%	-10%	-5%	0%	5%	10%	15%

Source: composed by the author, basing on [1; 3; 5].

The ESG-adjusted WACC is calculated as follows:

$$WACC_{ESG} = WACC_{Base} + ESG\ Premium$$

A negative ESG premium therefor reduces the discount rate. For Iberdrola is results in ESG-adjusted WACC of 1.69% in 2024. In earlier years, extremely low base WACC values combined with large ESG premiums resulted in negative ESG-adjusted

WACC values. These outcomes highlight a methodological limitation of linear ESG adjustments and underline the need for economic constraints when applying ESG-adjusted discount rates.

The DCF valuation in this article is based on projected free cash flows to the firm (FCFF), derived from EBITDA forecasts, capital expenditures, depreciation and amortization, working capital assumptions, and corporate taxation. FCFF is projected to grow steadily over the forecast horizon. A terminal value is calculated using a perpetual growth approach [2].

Using a book-value-based WACC of 4.61%, the base DCF yields an enterprise value of 141.5 billion euro. After adjusting for net debt of 46.8 billion euro, the implied equity value equals 94.7 billion, corresponding to an estimated share price of 14.88 euro, which is below the current market price.

In the ESG scenario, a constrained ESG-adjusted WACC of 1.69% is applied, while all cash flow projections remain unchanged. The resulting enterprise value increases to approximately 319.8 billion euro. After net debt adjustment, the implied equity value reaches 273.0 billion euro, corresponding to a share price of 42.90 euro. Please see Table 3.

Table 3

DCF model results under classical and ESG approaches

	Basic	ESG
WACC, BV	0,0461	0,0169
Terminal Value	135 641 914,97	369 239 790,68
PV of FCFF	103 531 478,96	281 829 857,89
Total Value	141 478 688,68	319 777 067,61
Debt	50 850 000,00	50 850 000,00
Cash	4 082 000,00	4 082 000,00
Net Debt	46 768 000,00	46 768 000,00
Adjusted Equity	94 710 688,68	273 009 067,61
N of shares	6 364 251 000,00	6 364 251 000,00
Adjusted Price per Share	14,88	42,90
Market Price, current	18.61	18.61

Source: composed by the author, basing on [2; 6; 7].

The results demonstrate that ESG assumptions can significantly affect corporate valuation. The ESG-adjusted valuation implies a substantial increase in firm value, reflecting lower perceived risk and improved long-term sustainability. However, the magnitude of the valuation impact also emphasizes the sensitivity of DCF models to discount rate assumptions. ESG premiums should therefore be applied cautiously and supplemented with scenario analysis or discount rate focus to maintain economic plausibility.

Iberdrola's negative ESG premium stems from its leadership in renewables and top tier ESG ratings, which reduce systematic risk and WACC. This adjustment elevates DCF enterprise value, signaling lower capital costs and enhanced competitiveness [4]. It implies ESG-driven value creation but requires scenario validation due to model sensititvity.

This study demonstrates how ESG considerations can be incorporated into corporate valuation through adjustments to the weighted average cost of capital. Using Iberdrola as a case study, the Analysis shows that strong ESG Performance may justify a lower cost of capital and significantly higher firm valuation. At the same time, the findings highlight the importance of methodological rigor when integrating ESG into valuation models. ESG factors enhance traditional valuation analysis but do not replace financial fundamentals. Transparent assumptions and appropriate constraints are essential to ensure meaningful and credible results.

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