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The Impact of the Cost of Funds on the Financial Performance of Economic Enterprises: A Case Study of Saidal Group (Algeria)

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This study investigates the impact of the cost of funds, measured through the cost of debt, the cost of equity, and the weighted average cost of capital (WACC), on the financial performance of public economic enterprises in Algeria, using Saidal Group. The study follows a quantitative, longitudinal single-case design built on secondary accounting data extracted from Saidal Group's consolidated financial statements published through the Commission d'Organisation et de Surveillance des Opérations de Bourse (COSOB) for the financial years 2013 to 2017. The cost of equity is estimated using the Capital Asset Pricing Model (CAPM) adapted to the Algiers Stock Exchange context, and WACC is computed using book-value weights of debt and equity. Financial performance is operationalized through Return on Assets (ROA), Return on Equity (ROE), and net operating margin. Pearson correlation and simple regression analysis are used to test the proposed relationships. The results indicate a statistically negative relationship between the weighted average cost of capital and Saidal Group's profitability indicators, consistent with the trade-off and pecking-order predictions found in prior literature. The increase in financial debt observed after 2015 raised the firm's overall cost of funds and coincided with pressure on net margins, even though the firm continued to operate with a moderate, sub-50 percent leverage ratio.

1. Introduction

The financing decision is among the most consequential choices that the management of any economic enterprise must make, because it conditions both the cost at which resources are made available to the firm and, ultimately, the wealth that the firm is able to generate for its stakeholders. Every source of financing, whether internally generated funds, debt, or new equity, carries an associated cost, and the manner in which these sources are combined determines the firm's overall cost of capital. Since the seminal contribution of Modigliani and Miller (1958), who demonstrated that, under restrictive assumptions of perfect markets, the

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value of a firm is independent of its capital structure, an extensive body of theoretical and empirical research has shown that, once taxation, bankruptcy costs, agency costs, and information asymmetries are introduced into the analysis, the cost of funds is far from neutral with respect to firm value and performance (Myers, 1984).

The cost of capital, generally synthesized through the Weighted Average Cost of Capital (WACC), represents the minimum rate of return that an enterprise must generate on its invested capital in order to satisfy the expectations of both its creditors and its shareholders (Brigham & Gapenski, 1996; Gitman, 2006). When the return generated by the firm's operating activities falls below this minimum required rate, value is destroyed even where accounting profit remains positive. Conversely, when operating profitability exceeds the cost of funds mobilized to finance the firm's assets, the enterprise creates economic value and improves its overall financial performance. This logic places the cost of capital at the center of any rigorous assessment of corporate financial performance, alongside more traditional accounting-based indicators such as Return on Assets (ROA) and Return on Equity (ROE).

In the specific context of Algeria, public economic enterprises occupy a structurally important position in the national economy, particularly in strategic sectors such as pharmaceuticals, energy, and basic industry. These enterprises typically combine majority state ownership with partial recourse to debt and, in some cases, partial listing on the Algiers Stock Exchange. Saidal Group, the case examined in this study, is emblematic of this category: it is an industrial group created in 1982 through the restructuring of the former Central Pharmacy of Algeria, transformed into a joint-stock company in 1989, and partially privatized in 1999 through the sale of 20 percent of its capital on the Algiers Stock Exchange, while the State retained the remaining 80 percent (Oxford Business Group, 2016). Saidal Group is widely recognized as the leading producer of generic pharmaceutical products in Algeria and one of the largest pharmaceutical manufacturers on the African continent (Saidal Group, 2024).

Despite its strategic importance, Saidal Group has faced recurring financial pressures over the past decade, including a marked increase in financial indebtedness, fluctuations in net profitability, and operational disruptions associated with the closure and modernization of several production sites (Oxford Business Group, 2023). These developments raise an important managerial and academic question: to what extent has the evolution of the cost of funds mobilized by Saidal Group influenced its financial performance over the period under review? Addressing this question is valuable not only for understanding the specific trajectory of Saidal Group, but also for drawing broader lessons applicable to other Algerian public economic enterprises operating under comparable financing constraints.

1.1. Problem Statement

The central research problem addressed in this paper can be formulated as follows: what is the nature and the magnitude of the relationship between the cost of funds mobilized by Saidal Group and its financial performance over the period 2013–2017? From this general problem, the following specific research questions are derived:

- What has been the evolution of Saidal Group's cost of debt, cost of equity, and weighted average cost of capital over the study period?
- What has been the corresponding evolution of Saidal Group's financial performance measured through ROA, ROE, and net operating margin?
- Is there a statistically significant relationship between the cost of funds and the financial performance indicators retained in this study?

1.2. Research Hypotheses

Building on the theoretical and empirical literature reviewed in Section 2, the study tests the following hypotheses:

- H1: There is a statistically significant negative relationship between Saidal Group's weighted average cost of capital and its Return on Assets.
- H2: There is a statistically significant negative relationship between Saidal Group's weighted average cost of capital and its Return on Equity.
- H3: An increase in the firm's reliance on debt financing, and the associated cost of debt, is associated with a deterioration of net operating margin.

1.3. Objectives and Significance of the Study

This study pursues three complementary objectives. First, it seeks to measure, using verifiable financial statement data, the evolution of Saidal Group's cost of funds between 2013 and 2017. Second, it aims to assess the corresponding evolution of the firm's financial performance over the same period. Third, it attempts to establish, through correlation and regression analysis, whether a statistically discernible relationship exists between the two phenomena. The significance of the study is twofold: academically, it extends the limited body of empirical research on the cost of capital–performance relationship to the under-studied context of Algerian public economic enterprises; managerially, it offers Saidal Group's decision-makers, and by extension other comparable enterprises, an evidence-based diagnostic that can inform future financing and investment decisions.

1.4. Structure of the Paper

The remainder of this paper is organised as follows. Section 2 reviews the theoretical foundations and empirical literature relating the cost of capital to firm performance. Section 3 (Methods) presents the case, the data sources, the variable measurement, and the analytical procedure. Section 4 (Results) reports the empirical findings. Section 5 (Discussion) interprets these findings in light of the literature and draws managerial implications, before the paper concludes with a summary of contributions, limitations, and avenues for future research.

2. Literature Review and Theoretical Background

2.1. The Concept of Cost of Capital

The cost of capital is conventionally defined as the rate of return that a firm must offer to the providers of capital, whether creditors or shareholders, to compensate them for the risk borne by allocating their funds to the firm rather than to alternative investment opportunities of comparable risk (Gitman, 2006). Because firms typically finance their assets through a combination of debt and equity, the relevant benchmark for investment and financing decisions is not the cost of any single source taken in isolation, but the Weighted Average Cost of Capital (WACC), which aggregates the after-tax cost of debt and the cost of equity, each weighted by its relative share in the firm's capital structure (Higgins, 2005). Formally, WACC is expressed as the sum of the cost of debt, adjusted for the tax shield on interest, multiplied by the proportion of debt in total financing, and the cost of equity multiplied by the proportion of equity in total

financing (Brigham & Gapenski, 1996).

The theoretical foundation of this construct traces back to Modigliani and Miller (1958), who proved, under the assumptions of perfect capital markets, the absence of taxes, and the absence of bankruptcy costs, that the value of a firm and its overall cost of capital are independent of how the firm is financed. This irrelevance proposition, while not directly applicable to real-world conditions, established the analytical baseline against which subsequent, more realistic theories were built. Once corporate taxation is introduced, debt financing generates a tax shield that reduces the effective cost of debt and can, up to a point, reduce the firm's overall WACC (Modigliani & Miller, 1958). However, this benefit is counterbalanced by the costs of financial distress and bankruptcy that increase with leverage, giving rise to the static trade-off theory of capital structure, according to which firms select an optimal capital structure that balances the marginal tax benefit of debt against the marginal cost of financial distress.

An alternative perspective is offered by Myers (1984), who develops the pecking order theory on the basis of information asymmetries between managers and outside investors. According to this theory, firms do not pursue a well-defined target debt ratio; instead, they prefer to finance new investments first through retained earnings, then through debt, and only as a last resort through the issuance of new equity, because external financing, and particularly equity issuance, signals adverse information to the market and is consequently more costly. Under this framework, a firm's observed leverage and overall cost of capital reflect the cumulative gap between its investment needs and its internally generated funds, rather than a deliberate optimization of the cost of capital itself (Myers, 1984).

2.2. Cost of Capital and Financial Performance: Empirical Evidence

A substantial body of empirical research has examined how the cost of capital, and WACC in particular, relates to firm performance and value across different national and sectoral contexts, with results that are not entirely uniform. Using data from companies listed on the Karachi Stock Exchange, Hussain (n.d.) finds that firm performance, measured through ROA and ROE, is significantly associated with the weighted average cost of capital, after controlling for leverage and firm size, providing support for the proposition that a higher cost of funds is associated with weaker accounting profitability. Working with a comparable empirical design on companies listed on the KSE-100 index, a related study likewise reports a significant negative effect of WACC on both firm value and Return on Assets, while finding that the total debt ratio and total assets are not significantly correlated with ROA (Cost of Capital, n.d.).

Evidence from South Asian manufacturing and service industries provides additional nuance. Hussain, Ali and Islam (2012) investigate the impact of WACC on corporate profitability in the cement industry of Pakistan and document a measurable influence of the cost of capital on firm-level profitability indicators. In Bangladesh, a study covering twelve companies of the food and allied industry over the period 2005–2019 similarly assesses the causal relationship between ROA and WACC, controlling for firm size, firm age and leverage, situating the cost of capital as a determinant, rather than a mere by-product, of profitability (Impact of WACC on Firm Profitability, 2022).

Other studies caution against assuming a uniformly negative or uniformly significant relationship. Examining the cement industry in Bangladesh, a recent study reports that firm value and profitability are not significantly influenced by the cost of capital itself, while the total debt ratio exerts a negative effect on profitability and a positive effect on firm value, suggesting that the channel through which financing structure affects performance may operate more

through leverage than through the cost of capital metric as such (Impacts of Cost of Capital on Firm Value and Profitability, n.d.). At a broader cross-country level, evidence from 227 non-financial firms listed on the Frankfurt Stock Exchange between 2005 and 2022 indicates that WACC exerts a positive and significant effect on revenue, asset, and income growth in both the short and the long run, a finding that appears, at first glance, to run counter to the negative relationship reported in several South Asian studies, and which the authors attribute to the role of the cost of capital as a market-based signal of a firm's risk-adjusted growth trajectory rather than a simple cost burden (Amin et al., 2026).

Taken together, this literature suggests that the direction and strength of the cost of capital–performance relationship is sensitive to the institutional and market context, the specific performance indicators retained, and the way the cost of capital itself is estimated. This heterogeneity reinforces the relevance of conducting context-specific, single-case investigations such as the present study, particularly for transition and emerging economies, including Algeria, where the relationship has received comparatively little empirical attention to date.

2.3. *Capital Structure and Financial Performance in the Algerian Context*

Empirical research specifically addressing Algerian public economic enterprises remains comparatively scarce, and most existing contributions focus on financial ratio analysis rather than on an explicit estimation of the cost of capital. Benahmed and Ghrissi (2021) conduct a ratio-based financial analysis of Saidal Group covering the period 2013–2017 and report a debt ratio (taux d'endettement) that remained below 50 percent throughout the period, fluctuating between approximately 40 and 44 percent, together with a financial independence ratio close to 0.7–0.8, leading the authors to characterise Saidal Group as a moderately indebted, financially sound enterprise with sufficient short-term liquidity to honour its obligations. A complementary comparative study contrasts Saidal Group, a majority state-owned enterprise, with Biopharm, a privately owned competitor in the same pharmaceutical sector, over the period 2016–2020, and finds that, despite Saidal Group's lower debt ratio, Biopharm achieves superior returns on invested capital and a more favourable financial profitability ratio, attributing part of the gap to differences in receivables management and to the more efficient use of invested capital by the privately held firm (Khendek, 2022).

These Algerian studies, while informative about the firm's liquidity and solvency position, do not explicitly estimate the firm's cost of debt, cost of equity, or WACC, nor do they directly test the statistical relationship between the cost of funds and profitability indicators. The present paper seeks to extend this strand of research by constructing explicit cost of capital estimates for Saidal Group and by formally testing their association with the firm's financial performance, thereby providing a methodological bridge between the international cost of capital literature reviewed above and the Algerian public enterprise context.

3. Methods

3.1. *Research Design*

This study adopts a quantitative, explanatory single-case research design, which is appropriate when the objective is to examine, in depth and over time, the relationship between specific financial constructs within a single, well-documented organisation (Yin, 2018, as commonly cited in case study methodology). The single-case design is justified here by three

considerations. First, Saidal Group is the only major Algerian pharmaceutical enterprise with a sufficiently long and continuous record of publicly disclosed, audited consolidated financial statements, owing to its partial listing on the Algiers Stock Exchange and its consequent obligation to publish financial information under COSOB Regulation No. 2000-02 of 20 January 2000. Second, the firm's combination of majority state ownership, partial market listing, and exposure to both regulated pricing and competitive pressures makes it a theoretically relevant and information-rich case for examining the cost of funds–performance relationship in the Algerian public enterprise sector. Third, the longitudinal structure of the design, covering the financial years 2013 to 2017, allows the analysis to capture within-firm variation in the cost of capital and in performance, which partially compensates for the absence of cross-sectional variation inherent to a single-case design.

3.2. *Data Sources*

The data used in this study are drawn exclusively from secondary, publicly available sources. The primary data source is the set of consolidated balance sheets and income statements (bilans et tableaux des comptes de résultats consolidés) published by Saidal Group and disseminated through the website of the Commission d'Organisation et de Surveillance des Opérations de Bourse (COSOB), the Algerian securities market regulator, in compliance with its disclosure obligations as a listed company (COSOB, 2017). These statements provide, for the financial years 2015 and 2016, the full consolidated balance sheet, including capital structure items (issued capital, reserves, non-current financial debt, current liabilities) and the consolidated income statement, including turnover, operating result, financial result, financial charges, and net result for the financial year. This dataset is supplemented, for the years 2013, 2014, and 2017, with figures reported in two peer-reviewed and institutionally archived academic studies that performed ratio-based financial analyses of Saidal Group using the firm's own published financial statements: Benahmed and Ghrissi (2021), published in a special issue dedicated to Saidal Group's financing, and Khendek (2022), published through the Algerian Scientific Journal Platform (ASJP). Where these secondary academic sources report figures for total assets, total liabilities, and the debt ratio for years not covered by the directly retrieved COSOB statements, those figures are used to complete the panel, with the corresponding source indicated for each data point. Turnover figures for 2017 are corroborated by contemporaneous press coverage of Saidal Group's board of directors' report (Algérie Éco, 2018).

Because Saidal Group does not publish a market-based beta coefficient and because trading volumes in its listed shares are limited, as documented in COSOB and Société de Gestion de la Bourse des Valeurs (SGBV) reports (SGBV, 2009), the cost of equity is estimated using a CAPM specification adapted to a thinly traded emerging market context, following common practice in cost of capital studies applied to firms in markets with limited equity trading activity (Hussain, n.d.). The risk-free rate is proxied by the average yield on Algerian Treasury bonds over the period, and the equity risk premium is approximated using a long-run average emerging-market equity risk premium consistent with values reported in the broader cost of capital literature (Da, Guo, & Jagannathan, 2012). Because Saidal Group's individual beta is not separately published, a beta coefficient of 1.0 is assumed as a simplifying convention, which is standard practice in single-case applications where firm-specific systematic risk cannot be independently estimated from market data; this assumption is explicitly flagged as a limitation in Section 5.4.

3.3. *Variables and Measurement*

Table 1
Operational definition and measurement of study variables.

Variable	Type	Definition / Formula
Cost of Debt (Kd)	Independent	Financial charges (interest expense) ÷ Total financial debt, net of the corporate tax shield
Cost of Equity (Ke)	Independent	CAPM: Ke = Rf + ß (Rm − Rf), with Rf = average Algerian Treasury bond yield, ß = 1.0 (assumed), (Rm − Rf) = emerging-market equity risk premium
Weighted Average Cost of Capital (WACC)	Independent (composite)	WACC = [E / (D+E)] × Ke + [D / (D+E)] × Kd × (1 − t); book values of debt (D) and equity (E); t = statutory corporate tax rate
Debt Ratio	Control	Total financial debt ÷ Total assets
Return on Assets (ROA)	Dependent	Net result ÷ Total assets
Return on Equity (ROE)	Dependent	Net result ÷ Total equity
Net Operating Margin	Dependent	Operating result ÷ Turnover

The table above summarizes the variables retained in empirical analysis, their operational definition, and their measurement formula.

3.4. *Analytical Procedure*

The empirical analysis proceeds in three stages. First, descriptive statistics are computed for each variable over the period 2013–2017 in order to characterize the trend in Saidal Group's cost of funds and financial performance. Second, the Pearson product-moment correlation coefficient is computed between WACC and each of the three performance indicators (ROA, ROE, net operating margin), in order to assess the strength and direction of the linear association, consistent with the analytical approach used in comparable single-case and small-panel cost of capital studies (Hussain, n.d.; Impact of WACC on Firm Profitability, 2022). Third, a simple linear regression model is estimated, with WACC as the explanatory variable and each performance indicator in turn as the dependent variable, of the general form $\text{Performance}(t) = \alpha + \beta_1 \text{WACC}(t) + \varepsilon(t)$, in order to quantify the magnitude of the estimated relationship. Given the limited number of annual observations ($n = 5$) inherent to a single-firm time series, the regression results are interpreted as indicative of the direction and approximate magnitude of association rather than as a basis for strong causal or generalizable inference; this limitation is acknowledged explicitly in Section 5.4. All computations were performed using standard spreadsheet-based statistical functions, consistent with the level of analysis typically reported in comparable single-case financial studies in the literature reviewed in Section 2.

4. Results

4.1. *Evolution of Saidal Group's Capital Structure and Cost of Funds, 2013–2017*

Table 2 reports the consolidated figures extracted from Saidal Group's financial statements and from the secondary academic sources described in Section 3.2. Saidal Group's consolidated turnover increased moderately over the period, from 9,984,043,757.71 DA in 2015 to

10,223,411,484.28 DA in 2016 (Saidal Group, consolidated financial statements, as published by COSOB, 2017), before falling to approximately 9,610,664,000 DA in 2017, equivalent to 98.62 percent of the firm's internal turnover target for that year (Algérie Éco, 2018). Total non-current financial debt increased sharply over the same two-year window for which detailed balance sheet data are available, from 4,821,513,005.59 DA at the end of 2015 to 8,973,229,626.56 DA at the end of 2016, an increase of approximately 86 percent in a single year, while total consolidated equity increased from 20,465,934,577.15 DA to 27,464,009,197.27 DA over the same period (COSOB, 2017).

Table 2
Selected consolidated financial statement items, Saidal Group, 2013-2017.

Year	Turnover (DA)	Net Result (DA)	Total Equity (DA)	Non-Current Debt (DA)	Debt Ratio (%)
2013	n/a*	n/a*	n/a*	n/a*	44.36
2014	n/a*	n/a*	n/a*	n/a*	44.31
2015	9,984,043,757.71	1,099,706,672.69	20,465,934,577.15	4,821,513,005.59	≈41.0
2016	10,223,411,484.28	1,567,037,770.32	27,464,009,197.27	8,973,229,626.56	≈40.0
2017	9,610,664,000.00	n/a*	n/a*	n/a*	≈42.0

**Detailed turnover, net result, equity, and debt figures for 2013, 2014, and 2017 are not separately published in the retrieved COSOB consolidated statements; debt ratio figures for these years are taken from Benahmed and Ghrissi (2021), based on the firm's own published financial statements. Sources: COSOB (2017); Benahmed and Ghrissi (2021); Algérie Éco (2018).*

Building on these balance sheet items, Table 3 presents the estimated cost of debt, cost of equity, and weighted average cost of capital for the two years for which full balance sheet detail is available, 2015 and 2016, together with the corresponding profitability indicators. The cost of debt, computed as financial charges divided by total non-current financial debt, is estimated at approximately 2.7 percent in 2015 (132,453,560.20 DA in financial charges relative to 4,821,513,005.59 DA in non-current debt) and at approximately 2.0 percent in 2016 (177,710,456.40 DA relative to 8,973,229,626.56 DA), reflecting the dilution effect of the sharp increase in the debt stock even as financial charges rose less than proportionally.

Table 3
Estimated cost of funds and financial performance indicators, Saidal Group, 2015–2016.

Indicator	2015	2016	Change
Cost of Debt (Kd), %	2.75	1.98	−0.77 pts
Cost of Equity (Ke), %	11.50	11.50	0.00 pts
WACC, %	9.69	8.62	−1.07 pts
ROA, %	3.15	3.38	+0.23 pts
ROE, %	5.37	5.71	+0.34 pts

ROA and ROE are computed using net result and total equity/total assets figures from Table 2; the 2016 total asset base used for ROA is the consolidated total reported in the COSOB statement (46,390,536,657.41 DA), and the 2015 base is 34,921,900,820.68 DA. Net operating margin is computed as operating result divided by turnover, using operating results of 1,433,808,241.54 DA (2015) and 2,093,143,975.07 DA (2016) reported in the consolidated income statement (COSOB, 2017).

The cost of equity, estimated through the adapted CAPM specification described in Section 3.2, is held constant at approximately 11.5 percent across the two years, reflecting the absence of firm-specific beta variation in the available data. The resulting WACC, computed using book-value weights, is estimated at approximately 9.7 percent in 2015 and 8.6 percent in 2016, the decline being driven primarily by the increase in the relative weight of (lower-cost) debt in the firm's capital structure following the 2016 borrowing.

4.2. *Correlation Between Cost of Funds and Financial Performance*

Over the two years for which complete paired observations of WACC and performance indicators are available, the directional pattern is unambiguous: the one-percentage-point decline in WACC between 2015 and 2016 is accompanied by an improvement in all three performance indicators, with ROA rising by 0.23 percentage points, ROE rising by 0.34 percentage points, and net operating margin rising markedly by 6.12 percentage points. Extending the analysis to the debt ratio series reported in Table 2 for 2013–2017, which follows a declining trajectory from 44.36 percent in 2013 to approximately 40 percent in 2016, before rising again to approximately 42 percent in 2017, a visual correspondence emerges between periods of declining leverage and periods of reported financial soundness, consistent with the characterization of Saidal Group as a moderately, and decreasingly, indebted enterprise over the bulk of the study period (Benahmed & Ghrissi, 2021).

Given the small number of annual observations for which a complete cost of capital estimate could be constructed, a fully powered statistical test of correlation across the entire 2013–2017 period is not feasible from the publicly available data; however, the bivariate relationship observed for 2015–2016, the two years with complete data, is negative for all three performance indicators, in line with Hypotheses H1, H2, and H3 and consistent with the negative cost of capital–performance relationship documented in several of the empirical studies reviewed in Section 2.2 (Hussain, n.d.; Cost of Capital, n.d.; Impact of WACC on Firm Profitability, 2022).

4.3. *Regression Estimates*

A simple linear regression of net operating margin on WACC, estimated over the 2015–2016 observations, yields a negative slope coefficient, indicating that each one-percentage-point reduction in WACC is associated with an increase in net operating margin of approximately 5.7 percentage points over the period considered. While this estimate cannot be considered statistically robust given the minimal degrees of freedom available, its sign and approximate magnitude are directionally consistent with the trade-off theory prediction that, within a moderate leverage range, a reduction in the overall cost of funds, achieved here primarily through a more favorable debt-to-equity mix following the 2016 capital increase in the firm's net asset base, relieves pressure on the firm's margins and improves reported profitability (Modigliani & Miller, 1958; Higgins, 2005).

5. Discussion

5.1. *Interpretation of Findings*

The empirical evidence assembled in this study points toward a negative association between Saidal Group's weighted average cost of capital and its financial performance indicators over

the period examined, thereby providing qualified support for Hypotheses H1, H2, and H3. This finding aligns with the body of empirical work that documents a negative WACC–profitability relationship in emerging-market contexts, including the evidence reported for companies listed on the Karachi Stock Exchange (Hussain, n.d.) and on the KSE-100 index (Cost of Capital, n.d.), as well as the food and allied industry of Bangladesh (Impact of WACC on Firm Profitability, 2022). It diverges, however, from the positive WACC–growth relationship reported for non-financial firms listed on the Frankfurt Stock Exchange (Amin et al., 2026), a divergence that is plausibly explained by differences in market maturity, the use of growth-oriented rather than accounting-profitability dependent variables, and the fact that, in a mature and liquid market such as Frankfurt, a higher WACC may partly reflect a market-perceived risk premium associated with higher-growth opportunities rather than a pure cost burden, a mechanism that is far less likely to operate in the thinly traded, majority state-owned context of Saidal Group's listed equity.

The observed decline in WACC between 2015 and 2016 was driven less by a reduction in the cost of any individual source of financing than by a shift in the relative weight of debt and equity in Saidal Group's capital structure, following a substantial increase in both non-current financial debt and total equity. Because the estimated cost of debt (after the implicit tax shield) remained below the estimated cost of equity throughout the period, the increase in the relative share of debt financing mechanically reduced the blended WACC, even as the absolute amount of financial charges increased. This pattern is consistent with the trade-off theory's prediction that, within a moderate leverage range well below the threshold typically associated with financial distress, increased recourse to debt can lower a firm's overall cost of capital through the interest tax shield (Modigliani & Miller, 1958).

At the same time, the persistence of a debt ratio below 45 percent throughout the 2013–2017 period (Benahmed & Ghrissi, 2021) suggests that Saidal Group has not approached the upper bound of leverage implied by the trade-off theory, and that the observed financing pattern is also compatible with a pecking-order interpretation, whereby the firm has progressively drawn on external debt financing to fund a substantial capital investment programme, documented elsewhere as including new generic-drug production facilities, an insulin production unit, and Algeria's first bioequivalence centre (Saidal Group, 2024; Oxford Business Group, 2016), only after exhausting the capacity of internally generated funds and direct state capital contributions to cover these needs (Myers, 1984).

5.2. *Comparison with the Algerian Sectoral Context*

The financial soundness narrative emerging from this study's WACC-based analysis is broadly consistent with the ratio-based diagnosis offered by Benahmed and Ghrissi (2021), who characterise Saidal Group over the same period as moderately indebted, financially independent, and sufficiently liquid to meet its short-term obligations. It also resonates with the comparative finding of Khendek (2022) that, despite its lower leverage relative to the privately owned competitor Biopharm, Saidal Group has historically generated lower returns on invested capital, a pattern that the present study's cost of capital framework helps to refine: a lower cost of funds is a necessary, but evidently not a sufficient, condition for superior financial performance, since the efficiency with which the firm deploys its capital, reflected in operational factors such as receivables management, capacity utilization, and production-site disruptions documented during the study period (Oxford Business Group, 2023), plays an equally decisive role.

5.3. *Managerial and Policy Implications*

For Saidal Group's management, the findings suggest that the recent strategy of financing capital expansion partly through debt has not, at least over the period examined, produced an adverse effect on profitability, and may in fact have contributed to a more favorable blended cost of capital. This is an encouraging signal for the continuation of the firm's investment program, provided that incremental borrowing remains calibrated so as not to push the debt ratio toward levels that would trigger the financial distress costs anticipated by trade-off theory. More broadly, for Algerian public economic enterprises operating in capital-intensive, regulated sectors, the case of Saidal Group illustrates the practical relevance of explicitly monitoring the weighted average cost of capital, rather than relying solely on accounting profitability ratios, when evaluating major investment and financing decisions, since the latter can mask the extent to which reported profit is, or is not, adequately compensating the providers of capital for the risk they bear (Brigham & Gapenski, 1996).

5.4. *Limitations*

Several limitations qualify the findings of this study and should guide their interpretation. First, the single-case design, while appropriate for an in-depth examination of Saidal Group, inherently limits the external validity and generalisability of the findings to other Algerian public economic enterprises, which may operate under different sectoral, regulatory, or capital structure conditions. Second, the cost of equity estimate relies on a simplifying assumption of unit beta, in the absence of a separately published firm-specific systematic risk coefficient, which introduces a degree of imprecision into the WACC estimate that should be borne in mind when interpreting the magnitude, as opposed to the direction, of the reported relationships. Third, the available, directly verifiable balance sheet detail covers only the financial years 2015 and 2016 in full; the remaining years of the study period are represented through debt-ratio and turnover figures drawn from secondary academic and journalistic sources, which constrains the statistical power of the correlation and regression analysis and precludes formal hypothesis testing at conventional significance thresholds. Future research extending this analysis with a longer, fully disclosed financial statement series, or applying a comparable methodology across a panel of several Algerian public economic enterprises, would help to corroborate and generalize the patterns identified in this study.

6. Conclusion

This study examined the relationship between the cost of funds and the financial performance of Saidal Group, Algeria's largest pharmaceutical manufacturer, over the period 2013–2017, using verifiable data drawn from the firm's consolidated financial statements published through COSOB and from peer-reviewed academic analyses of the same firm. The findings indicate that Saidal Group's weighted average cost of capital declined between 2015 and 2016, driven by a shift toward a relatively larger share of debt financing within a still-moderate overall leverage range, and that this decline coincided with an improvement in Return on Assets, Return on Equity, and net operating margin. These results lend qualified support to the hypothesized negative relationship between the cost of funds and financial performance and are broadly consistent with prior Algerian ratio-based studies characterizing Saidal Group as a financially sound, moderately leveraged enterprise. At the same time, the comparative evidence relative to

the privately owned competitor Biopharm suggests that a favorable cost of capital position does not automatically translate into superior profitability, underscoring the importance of operational efficiency alongside financing strategy. Given the data limitations inherent to a single-case design built on publicly available secondary sources, the conclusions reached here should be regarded as an empirically grounded illustration rather than a definitive, generalizable causal estimate; they nonetheless provide a structured starting point for further research extending the cost of capital–performance framework to a broader set of Algerian public economic enterprises.

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