THE IMPACT OF TAXATION ON INVESTMENT FINANCING: THE CASE OF MOROCCAN SMALL AND MEDIUM-SIZED ENTERPRISES

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Abstract: Small and medium-sized enterprises (SMEs) are pivotal to investment, employment, and economic growth in developing economies. However, their financing decisions are often influenced by complex tax environments that can either encourage or hinder investment. This study investigates the impact of taxation on the investment financing decisions of Moroccan SMEs, focusing on three fiscal dimensions: tax pressure, fiscal incentives, and the tax treatment of financing modes. A quantitative survey was conducted between March 2024 and October 2024 among 390 SMEs operating in various sectors across Morocco. Data were collected through a structured questionnaire and analyzed using partial least squares structural equation modeling (PLS-SEM). The findings show that all three tax-related factors significantly and positively affect financing decisions, with fiscal incentives and tax treatment exerting the strongest influence. These results emphasize the strategic role of tax policy in shaping SME financial behavior and offer actionable insights for policymakers aiming to enhance private sector investment and support SME development.

Keywords: taxation, investment financing, SMEs, fiscal incentives, tax pressure, Morocco, PLS-SEM, tax policy

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Introduction

Investment financing is a key lever for ensuring the growth, competitiveness, and long-term sustainability of small and medium-sized enterprises (SMEs). In emerging economies, and particularly in Morocco, SMEs represent a significant share of the economic fabric and play a driving role in job creation and regional development. However, these enterprises often face major constraints when it comes to mobilizing the financial resources needed for their investment projects. Among the factors likely to influence their financing capacities, taxation plays a central role—both through its direct impact on business cash flow and its indirect effects on the business climate.

In Morocco, tax reforms implemented over the past decades have aimed to simplify the system, broaden the tax base, and encourage private investment. Nevertheless, despite these efforts, SMEs continue to perceive taxation as a constraint rather than a tool for development. High tax pressure, the complexity of procedures, and the weight of tax and parafiscal charges are frequently cited among the main obstacles to the growth of these enterprises. This raises the central question of whether the current tax system acts as a break or, on the contrary, as a catalyst for investment financing among Moroccan SMEs.

This issue is particularly relevant in an economic context where public authorities are striving to strengthen the national productivity base, especially through SME promotion. The national strategy for improving the business climate and recent targeted tax measures reflect this ambition. However, the actual effectiveness of these initiatives remains open to debate, particularly in light of the disparities between large companies and SMEs in terms of access to financing and fiscal incentives. It is therefore essential to rigorously analyze the impact of tax measures on SMEs' ability to finance investments, innovate, and grow sustainably.

Investment financing remains one of the major challenges facing Moroccan small and medium-sized enterprises (SMEs). These businesses, which form the backbone of the national economy, often struggle to access the resources needed to support their development and strengthen their competitiveness. In this context, taxation plays a decisive role, directly influencing the ability of SMEs to mobilize funds and make investment decisions. However, the nature of this impact is complex and uncertain. On one hand, a heavy tax burden can be a significant constraint, reducing available cash flow and increasing the cost of capital. On the other hand, tax

incentive schemes can stimulate investment by reducing the fiscal load and enhancing the attractiveness of business projects. This duality raises a central question: To what extent does taxation influence the investment financing decisions of Moroccan SMEs?

To provide answers to this issue, it is necessary to analyze the different ways through which taxation affects SME financing behavior. This involves examining the overall tax burden borne by these businesses, the effectiveness of fiscal incentives implemented by public authorities, and the differential tax treatment of various financing methods, such as self-financing, debt financing, or capital market funding. Such analysis will help shed light on how fiscal mechanisms shape the financing choices of SME managers, depending on their size, sector of activity, and financial structure.

Accordingly, this article aims to explore the impact of taxation on investment financing in Moroccan SMEs through both empirical and theoretical analysis. The objective is to identify the tax mechanisms that hinder or encourage investment, assess entrepreneurs' perceptions of the tax system, and propose recommendations to improve the efficiency of public policies in this area. Positioned at the intersection of economic and managerial perspectives, this study seeks to contribute to the academic debate on the relationship between taxation and SME development, while providing valuable insights for policymakers and practitioners.

1. Literature review

The impact of taxation on SME investment financing decisions has sparked growing interest in the economic literature, particularly in the context of emerging economies such as Morocco.

A growing body of empirical literature in the past decade has examined how taxes impact business investments and financing, with a mix of findings. Cross-country studies provide broad evidence that higher corporate taxes deter investment and shift financing behavior. According to the OECD, taxation is one of the major global obstacles to SME financing, as it reduces profitability and limits self-financing capacity. This tax burden, which weighs more heavily on SMEs with narrow profit margins, hinders their growth and competitiveness potential (OECD, 2024). The International Monetary Fund supports this analysis by emphasizing that in developing countries—where SMEs rely primarily on internal resources—excessive tax burdens erode those resources and discourage investment initiatives (IMF, 2023).

Moreover, fiscal complexity and uncertainty represent additional barriers, reducing SMEs' willingness to take risks and engage in productive investment projects.

Although findings from individual studies vary and are not always fully aligned with theoretical predictions, a broad consensus emerges from surveys and meta-analyses (Hassett & Hubbard, 2002; Devereux & Maffini, 2007; de Mooij & Ederveen, 2008): higher corporate tax rates—particularly headline rates, effective marginal tax rates (EMTRs), and effective average tax rates (EATRs)—tend to significantly reduce investment levels. This conclusion is further supported by more recent empirical research, such as Bond and Xing (2015). A particularly illustrative case is provided by Maffini, Xing, and Devereux (2019), who investigated the impact of enhanced capital allowances for medium-sized UK firms introduced in 2004. Their analysis found that eligible firms increased their investment rates by 2.1 to 2.5 percentage points compared to ineligible firms. While the literature is complex and does not lend itself to rigid generalizations, Devereux (2021) offers a useful rule of thumb: a 1 percentage point increase in the EATR is associated with a 2.5% decline in foreign direct investment inflows, and a 1 percentage point rise in the EMTR is estimated to reduce overall investment by approximately 7%.

In the same vein, the World Bank notes that tax burden not only restricts growth but also limits SMEs' investment strategies by lowering fixed capital investment and increasing project costs. It recommends lighter tax policies and better access to external financing to foster investment and innovation within these enterprises (World Bank, 2025). Similarly, the European Commission observes that in Europe, SMEs operating in more favorable tax environments tend to invest more and are better integrated into formal financial systems. Conversely, excessive taxation is correlated with reduced investment, particularly among SMEs that lack access to alternative financing options (European Commission, 2024). The report also emphasizes the crucial role of stable and predictable taxation in enabling SMEs to plan their investments over the medium and long term.

On the other hand, contemporary economic literature increasingly highlights the pivotal role of fiscal incentives in promoting investment, especially among SMEs. According to the OECD, instruments such as tax reductions, exemptions, and accelerated depreciation schemes are among the most commonly used levers to encourage private investment. These measures lower the fiscal cost of projects, increase their expected profitability, and encourage firms to allocate resources to productive

activities, particularly in industrial, technological, and export-oriented sectors (OECD, 2025). However, the OECD stresses that to maximize their impact, these incentives must be precisely targeted and supported by broader investment-facilitating policies. At the national level, the Casablanca-Settat Regional Investment Center lists several sectoral incentives—such as temporary corporate tax exemptions and tax advantages in industrial zones—designed to improve SMEs' ability to finance projects and stimulate both domestic and foreign investment (Casainvest.ma, 2025).

At the international level, the International Institute for Sustainable Development (IISD) confirms that well-designed tax incentives can effectively steer investment toward strategic sectors while enhancing local business competitiveness. However, it warns of the budgetary costs and risks of poor implementation (IISD, 2024). The World Bank highlights the essential role these tax tools play for SMEs facing financing constraints, as they help reduce initial project costs and improve net investment returns (World Bank, 2025).

In developing countries, the private sector alone cannot drive economic growth and development; the state therefore plays a crucial pioneering role in certain activities. In these contexts, development efforts often require public support through carefully designed tax incentives, particularly to assist those who lack sufficient financial resources. However, it is essential to precisely identify and appropriately target the beneficiaries of such exemptions. This can only be effectively achieved through a robust and well-managed state tax administration. When tax incentives are properly allocated to the right sectors, they can significantly contribute to fostering economic growth and advancing development (Siverekli Demircan, 2003).

By easing financing conditions, tax incentives enable companies to overcome financial barriers and undertake productive projects. The World Bank report further shows that countries combining these measures with structural reforms—such as administrative simplification and governance improvements—achieve stronger private investment growth and broader SME development (World Bank, 2025).

Furthermore, the relationship between the tax treatment of financing methods and investment decisions is attracting increasing attention in recent economic studies. According to the OECD, taxation significantly influences firms' financing choices, favoring instruments like debt through interest deductibility. This phenomenon—known as the "debt bias"—encourages firms to use debt financing over equity, as interest payments reduce taxable income (OECD, 2024). However, the OECD recommends rebalancing these

tax incentives to avoid excessive debt dependency, while noting that well-calibrated mechanisms can enhance investment capacity, especially for SMEs.

Recent empirical studies indicate that the responsiveness of firm investment to corporate tax rates is not uniform but varies significantly depending on firm-specific characteristics. Factors such as firm age and industry sector (Schwellnus & Arnold, 2008; Fuest, Peichl & Siegloch, 2018; Federici & Parisi, 2015), financing structure and liquidity constraints (Zwick & Mahon, 2017), degree of market power (Kopp et al., 2019), opportunities for tax planning (Sorbe & Johansson, 2017), and overall profitability (Millot et al., 2020) all contribute to this heterogeneity. These findings highlight the need for a more differentiated analysis of how corporate taxation affects investment.

For instance, Djankov et al. (2010) assembled data on effective corporate tax rates for 85 countries and found a strong negative effect of corporate tax rates on investment rates and entrepreneurship. They estimated that a 10 percentage-point increase in the effective corporate tax rate is associated with about a 2 percentage-point drop in a country's investment-to-GDP ratio. In the same study, the authors also observed that higher corporate tax rates press firms to use significantly more debt relative to equity, confirming the tax shield incentive empirically. This finding – that firms in higher-tax environments have higher debt-to-equity ratios – is consistent with the theoretical debt bias due to taxes.

Klapper et al. (2008) investigated the impact of taxation on corporate financing policy by utilizing the 2001 corporate tax reform in Croatia as a natural experiment. The study found compelling evidence that tax reductions influenced firms' capital structure, leading to increased equity financing and a decline in long-term debt. These results align with the trade-off theory of capital structure, which posits that lower tax rates reduce the attractiveness of debt due to diminished interest deductibility. Similarly, Clemente-Almendros et al. (2014) examined the influence of corporate taxation on financing decisions among firms listed on the Spanish stock exchange during the period 2007–2013, employing panel data analysis over seven consecutive years for each firm. The findings indicated that marginal tax rates significantly shaped the debt policies of Spanish firms, reinforcing the relevance of tax considerations in corporate financing decisions, particularly in light of Spain's specific tax regime.

When focusing on emerging and developing economies, studies often highlight that tax burdens and incentives materially shape SME performance

and growth. A common theme is that heavy or complex taxes impede small business expansion, while well-targeted tax incentives can alleviate financing constraints. For example, a recent Nigerian study by Babatayo and Adegbie (2021) examined tax incentives (such as tax holidays and exemptions) for SMEs. Using surveys of firms in Kwara State, they found that tax incentives have a significant positive impact on SME growth indicators, including sales revenue, profit growth, and business expansion. Similarly, Twesigye and Gasheja (2019), studying Rwandan SMEs, report that tax incentives significantly boosted the growth of small enterprises in their sample (Nyagatare district), underscoring the role of fiscal policy in SME development. In Iran, although a bit older, Farzbod's analysis (as cited by a 2022 study) revealed that exorbitant tax rates coupled with low incentives led to low productivity among SMEs, and recommended a more supportive tax system to spur entrepreneurship.

Other empirical evidence suggests a strong inverse relationship between corporate tax rates and industrial investment. Dobbins and Jacob (2016), for instance, found that lowering corporate tax rates stimulates investment activity, especially among firms that depend on internal financing. Similarly, Cristea and Nguyen (2016) highlight that high taxes can undermine managerial confidence and discourage industrial managers from pursuing new investments, primarily due to reduced utilization of machinery and production capacity.

Furthermore, Serrato and Zidar (2016) argue that elevated corporate taxes lead to higher industrial goods prices, which consequently dampen demand and lower sales volumes. This dynamic is particularly evident in capital-intensive sectors such as manufacturing, where investment decisions are more sensitive to tax burdens.

Turning specifically to the Middle East and North Africa (MENA) and similar developing regions, empirical literature in the last decade is somewhat limited but growing. Many MENA countries have introduced SME-specific tax policies (reduced corporate tax rates, simplified tax regimes, etc.), and researchers have been evaluating their effectiveness. Bird and Zolt (2014), in a policy analysis, suggested focusing on broadening tax bases and avoiding excessive special preferences, noting that poorly designed SME tax breaks can sometimes be exploited by larger firms or encourage firms to remain small to stay qualified.

In North African contexts, research has often centered on tax policy as part of the business environment. Chellaf and Chaabita (2023) conducted an econometric study on the impact of tax pressure on investment and growth

in Morocco. Using Moroccan quarterly data (2007–2020) and a vector autoregression (VAR) model, they found a statistically significant long-run relationship between the overall tax burden and macroeconomic performance. Interestingly, their model suggested that an overly large drop in the tax-to-GDP ratio could slightly reduce long-run growth (they estimate a 1% decrease in tax pressure might lead to a 0.23% drop in long-term GDP growth). This counter-intuitive result likely reflects the role of public investment and services funded by taxes – implying there is an optimal level of taxation needed to support infrastructure that SMEs rely on.

Amraoui, Jianmu & Bouarara (2018), analyzing 52 Moroccan firms, likewise found that macroeconomic factors, such as the corporate tax rate, had no significant effect on firms' leverage decisions in Morocco. Firm-specific characteristics (profitability, asset structure) were more salient.

This in-depth literature review highlights that taxation plays a crucial role in SME investment financing decisions, operating through multiple channels. On one hand, excessive tax burdens act as a major obstacle, limiting available internal resources and increasing project costs. On the other hand, well-designed tax incentives and favorable tax treatment of financing methods can mitigate these barriers and encourage investment—particularly within emerging economies like Morocco. These findings provide a strong conceptual basis to guide the empirical investigation of this study and to formulate policy recommendations aimed at optimizing tax policy in support of SME growth.

Based on this literature, the following hypotheses were formulated:

H1: Tax pressure (PF) has a significant influence on investment financing decisions (DF)

H2: Tax incentives (IF) positively influence investment financing decisions (DF)

H3: The tax treatment of financing modes (TF) positively affects investment financing decisions (DF)

2. Methods

This study adopted a quantitative research design using a cross-sectional survey approach. The target population consisted of managers of small and medium-sized enterprises (SMEs) operating in Morocco. A intentional sampling technique was used to select firms that had recently undertaken investment projects and were involved in financing decisions

influenced by tax considerations. Inclusion criteria required participants to be directly involved in their company's investment financing decisions.

The survey was administered to managers and financial decision-makers of Moroccan SMEs who had recently engaged in investment activities. The questionnaire was prepared in both Arabic and French.

The study adopted a non-probability convenience sampling strategy to identify SME participants, offering flexibility and ease of access to firms from different sectors and regions across Morocco. This approach was deemed appropriate given the practical constraints related to time, limited resources, and availability of a comprehensive list of SMEs and their financial decision-makers.

Following the methodological guidelines of Hair et al. (2013), the final version of the survey was distributed online via email and professional networks. The survey introduction clearly outlined the study's objectives, the confidentiality of responses, and the voluntary nature of participation. Participants provided informed consent before completing the questionnaire.

In the absence of a comprehensive database detailing Moroccan SMEs and their employee information, the study was conducted between March 2024 and October 2024 and a target sample size of 500 was initially set. Following the distribution of the questionnaire, a total of 390 valid responses were collected.

The variables used in this study were primarily derived from established and validated literature related to corporate finance and taxation, with contextual adaptations made to fit the specific case of Moroccan SMEs. A structured questionnaire was developed to measure these variables using a five-point Likert scale, ranging from 'strongly agree' (5) to 'strongly disagree' (1). The aim was to investigate the influence of various tax-related factors—such as tax pressure, fiscal incentives, and tax treatment of financing modes—on investment financing decisions.

The questionnaire was composed of two main sections. Section 1 collected demographic and organizational information about the SMEs and their respondents (e.g., company size, sector, respondent's role). Section 2 comprised of multiple choice items designed to capture perceptions and experiences regarding the fiscal environment and its impact on financing choices. The tax-related dimensions were operationalized as follows: five items for tax pressure, four items for fiscal incentives, and four items for the tax treatment of financing modes. These items were adapted from relevant prior studies and tailored to reflect the Moroccan context. The finalized

instrument, detailed in Table 1, was used to ensure a comprehensive evaluation of the study's conceptual framework.

Table 1.
Items of the measurement instrument

Variable	Code	Item (Likert Scale Statement)
Tax Pressure (PF)	PF1	The nominal tax rates applied to my company (legal fixed rates) negatively influence our investment financing decisions.
	PF2	The effective tax rates (after exemptions and deductions) applied to my company have a significant impact on our investment financing decisions.
	PF3	The tax burden related to financing significantly affects my company's financial situation.
	PF4	The current taxable base of my company is considered high relative to its actual capacity.
Tax Incentives (IF)	IF1	The five-year corporate tax exemption for industrial companies provides a significant fiscal advantage for investment.
	IF2	The deductibility of donations made to the COVID-19 relief fund (tax credit) positively impacts the financing of our investments.
	IF3	The 100% tax exemption on distributed dividends encourages investment decisions.
	IF4	The exemption from paying minimum contribution (CM) during the first three years of a company's existence facilitates investment.
	IF5	The VAT exemption on the purchase of capital investment goods positively supports investment decisions.
	IF6	The VAT exemption on imported equipment, machinery, and tools provides financial relief for investment.
Tax Treatment of Financing Modes (TF)	TF1	The tax treatment of self-financing has favorable implications for our investment choices.
	TF2	The fiscal consequences of capital increases affect our decisions on equity financing.
	TF3	Using shareholder current accounts as a financing method provides tax advantages.
	TF4	Bank borrowing leads to significant fiscal implications for our company.
Financing Decision (DF)	DF1	Self-financing using internal reserves is beneficial for our company's investment strategy.
	DF2	Relying on shareholder current accounts to finance the company is advantageous in our case.
	DF3	Bank financing provides relevant advantages for our investment needs.
	DF4	Our company has used leasing (credit-bail) as a means to finance specific investments.

For data analysis, structural equation modeling (SEM) using the partial least squares approach (PLS-SEM) was employed via SmartPLS v.4

software. This method was chosen for its effectiveness in analyzing complex relationships between latent and observed variables, particularly suited to testing the conceptual model developed to examine the influence of tax-related factors on investment financing decisions in Moroccan SMEs.

Validity measures how well an instrument evaluates a particular concept, ensuring the concepts and measurements used by researchers are appropriate. Valid data show no discrepancies between the data reported by the researcher and the data gathered as the object of research. In PLS-SEM, two types of validity are used: convergent and discriminant validity.

Convergent validity assesses the extent to which a measurement correlates positively with alternative measures of the same construct. It is evaluated using two metrics: outer loadings and average variance extracted (AVE). Outer loadings, with a standard of 0.70, indicate how much variation within the item is explained by the construct. If an indicator's outer loadings value is greater than 0.70, it meets convergent validity and is considered reliable. AVE, with a standard of 0.50, implies that the construct explains more than half of the variance of its indicators. Specifically, an AVE greater than 0.50 means that the construct accounts for at least 50% of the variance in its manifest variables.

The formula is as follows:

$$AVE = \frac{\sum \lambda_i^2}{\sum \lambda_i^2 + \sum \theta_i}$$

Where:

λ_i: are the factor loadings of the indicators for a construct.

θ_i: are the error variances of the indicators.

Reliability indicates the stability and consistency of instruments measuring concepts, assessing measurement correctness and error. Cronbach's alpha, a conservative measure of reliability, provides estimates based on the intercorrelation of observed indicator variables. Due to its limitations, composite reliability is also used to measure consistency. For this study, the acceptable range for reliability is a minimum of 0.70 and a maximum of 0.90, with the desired range being between 0.80 and 0.90.
The formula is as follows:

$$\alpha = \frac{N}{N-1}\left(1 - \frac{\sum_{i=1}^{N} \sigma_i^2}{\sigma_{total}^2}\right)$$

Discriminant validity compares the value of loadings of a parameter with those of other latent variable constructs. It is measured using the

Heterotrait-Monotrait ratio (HTMT) and the Fornell-Larcker criterion. HTMT assesses discriminant validity by evaluating whether correlations between constructs within a measurement model differ significantly from correlations across different constructs. If HTMT is significantly less than 0.9, discriminant validity is suggested; if it approaches or exceeds 1, there may be issues. The Fornell-Larcker criterion compares the square root of the AVE value with the correlation between latent variables.

Structural Model Analysis

Inner model testing, also known as structural model testing, aims to describe the relationships between latent variables. This study considers several factors including collinearity, the coefficient of determination (R^2), effect size (f^2), predictive relevance (Q^2), and path coefficients.

The coefficient of determination (R^2) is a widely used metric for evaluating structural models. It predicts the model and is calculated as the squared correlation between the actual value and the predicted endogenous construct based on the number of connected exogenous constructs. The R^2 value ranges from 0 to 1 and is categorized into three levels: 0.75 (substantial), 0.50 (medium), and 0.25 (weak). Higher R2 values indicate greater predictive accuracy.

Effect size (f2) measures the change in R^2 value before and after removing exogenous constructs from the model, indicating the substantive impact of exogenous constructs on endogenous constructs. The f^2 values are categorized as 0.02 (small), 0.15 (medium), and 0.35 (large). Values smaller than 0.02 suggest no significant effect of the latent exogenous variable.

Path coefficients test the relationships between constructs as part of the research hypothesis. Standard path coefficients range from −1 to +1. Values close to +1 indicate a strong positive relationship, while values close to −1 indicate a strong negative relationship. Values near zero suggest a weakening relationship.

Model fit analysis evaluates how well the proposed model structure aligns with empirical data, helping to identify specification errors. The normalized impact factor (NIF) index is commonly used in fit model analysis to evaluate the quality of previous research journals.

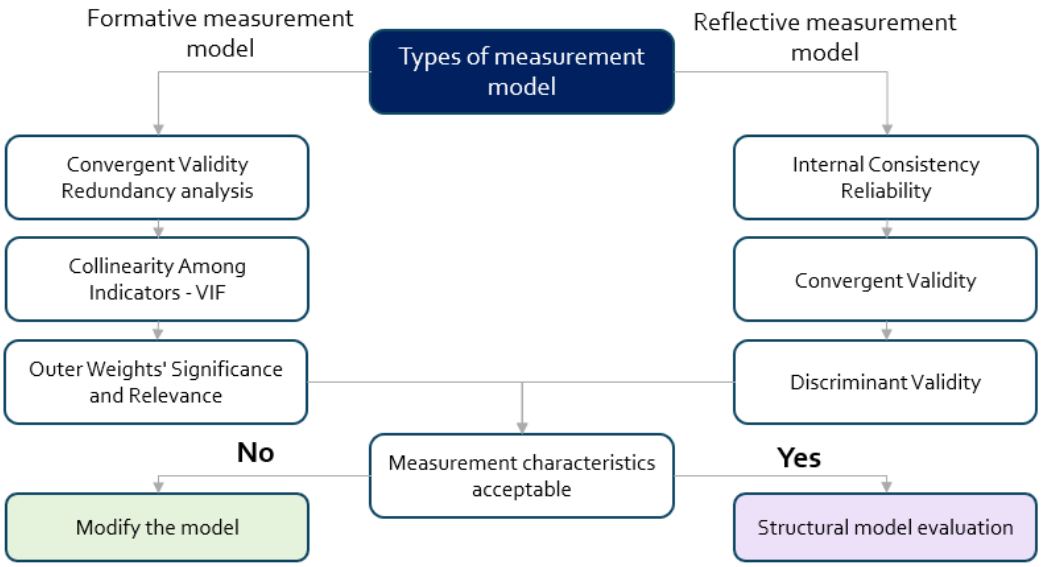

Figure 1. Decision Flowchart for Measurement Model Validation in PLS-SEM

Source: Author's elaboration

After running the PLS-SEM algorithm, researchers use path coefficients to test hypothetical estimates for structural model relationships. The significance of these coefficients depends on the standard error obtained through bootstrapping, which assesses the contribution of indicators to the corresponding construct. The standard error allows for calculations using t-values and p-values for all structural path coefficients. When the t-value exceeds the critical value, the coefficient is considered statistically significant at a certain probability level.

Hypothesis testing reveals whether the estimated hypothesis is accepted or rejected. Critical t-values are used to determine the significance of the coefficient. If the empirical t-value exceeds the critical t-value (typically >1.65 for a significance level of 5% with one-tailed tests), the hypothesis is rejected.

The demographic analysis of the 390 respondents offers insights into the diversity of the SME decision-makers who participated in the study. In terms of gender, 62% of the respondents were male and 38% female. The majority (46%) were between 31 and 45 years old, followed by 28% aged 46 to 60, 18% under 30, and 8% over 60. Regarding educational attainment, 52% held a university degree, 30% had a postgraduate qualification, and 18% had a high school diploma or lower. In terms of professional role, 41% were business owners, 35% were general managers or directors, and 24% held financial or administrative roles.

Table 2.
Demographic analysis of respondents

Demographic Variable	Category	Count	Percentage (%)
Gender	Male	242	62
	Female	148	38
Age Group	Under 30	70	18
	31–45	179	46
	46–60	109	28
	Over 60	32	8
Education Level	High school or less	70	18
	University degree	203	52
	Postgraduate (Master/PhD)	117	30
Professional Role	Business owner	160	41
	General manager/director	137	35
	Financial/administrative staff	93	24
Company size	Less than 5 employees	168	43
	Between 5 and 20 employees	149	38
	Between 20 and 50 employees	67	17
	Between 50 and 100 employees	4	1
	Over 100 employees	2	1
Sector	Agribusiness	124	32
	Industrial	97	25
	Service	169	43

Source: Author's elaboration based on SPSS

3. Results

To ensure the reliability and validity of the questionnaire, the measurement model was evaluated following established guidelines in the PLS-SEM literature. The analysis was carried out using SmartPLS, which facilitates a rigorous assessment of both the latent constructs and the subsequent structural model. This evaluation step is crucial to confirm that the survey items accurately capture the theoretical dimensions they are designed to measure (Becker, 2022).

To begin with, the factorial structure of the model was validated through an analysis of item loadings. As shown in Table 3, all item loadings exceeded the recommended threshold of 0.70, confirming satisfactory convergent validity.

Table 3.
Factor loadings results

	DF	IF	PF	TF
DF1	0.777			
DF2	0.733			
DF3	0.86			
DF4	0.843			
IF1		0.728		
IF2		0.786		
IF3		0.963		
IF4		0.96		
IF5		0.961		
IF6		0.938		
PF1			0.933	
PF2			0.943	
PF3			0.953	
PF4			0.904	
TF1				0.701
TF2				0.763
TF3				0.977
TF4				0.851

Source: Author's elaboration based on SmartPLS

Specifically, for the Financing Decision (DF) construct, item loadings ranged from 0.733 to 0.860, indicating strong contributions of all four items to the underlying factor. The Tax Incentives (IF) construct also demonstrated excellent convergence, with item loadings between 0.728 and 0.963. Similarly, the Tax Pressure (PF) construct revealed high factor loadings (ranging from 0.904 to 0.953), and the Tax Treatment of Financing Modes (TF) construct showed loadings between 0.701 and 0.977.

Table 4.
Internal consistency results

	Cronbach's alpha	Rho_A	Rho_C	Average variance extracted (AVE)
DF	0.767	0.771	0.784	0.593
IF	0.94	0.975	0.953	0.775
PF	0.971	0.952	0.973	0.879
TF	0.963	0.924	0.922	0.704

Source: Author's elaboration based on SmartPLS

Following this, the internal consistency and reliability of the measurement model were assessed using Cronbach's alpha, composite reliability (CR), and average variance extracted (AVE). All constructs displayed Cronbach's alpha values above the 0.70 benchmark, confirming strong internal reliability. In particular, PF and TF demonstrated excellent reliability with alpha values of 0.971 and 0.963, respectively. Composite reliability values (CR) ranged from 0.784 to 0.973, and AVE values were all above the minimum recommended level of 0.50—further confirming convergent validity (see Table 4). The AVE scores were particularly high for PF (0.879) and IF (0.775), indicating that the majority of variance in these constructs is explained by their indicators.

Table 5.
Fornell-Larcker results

	DF	IF	PF	TF
DF	0.702			
IF	0.468	0.88		
PF	0.095	0.281	0.938	
TF	0.117	0.138	0.013	0.839

Source: Author's elaboration based on SmartPLS

After evaluating the internal consistency of the measurement model, it was necessary to examine its discriminant validity. To do so, the Fornell–Larcker criterion was employed (see Table 5). The square roots of AVE (diagonal values) were greater than the inter-construct correlations (off-diagonal values), demonstrating that each construct shared more variance with its own indicators than with others. For example, the square root of AVE for PF (0.938) exceeded its correlation with IF (0.281) and with DF (0.095), satisfying the condition for discriminant validity. The same pattern was observed across all constructs, confirming the distinctiveness of the four latent variables in the model.

To further assess discriminant validity, the HTMT criterion was applied. According to Henseler et al. (2015), HTMT values below the threshold of 0.85 (or more conservatively, 0.90) indicate adequate discriminant validity. As shown in the HTMT matrix (see Table 6), all inter-construct values fall well below the 0.85 threshold.

Table 6.
HTMT criterion results

	DF	IF	PF	TF
DF				
IF	0.526			
PF	0.19	0.294		
TF	0.099	0.111	0.049	

Source: Author's elaboration based on SmartPLS

To evaluate the structural model, multicollinearity diagnostics and the coefficient of determination (R^2) were examined to assess the predictive power and reliability of the model relationships.

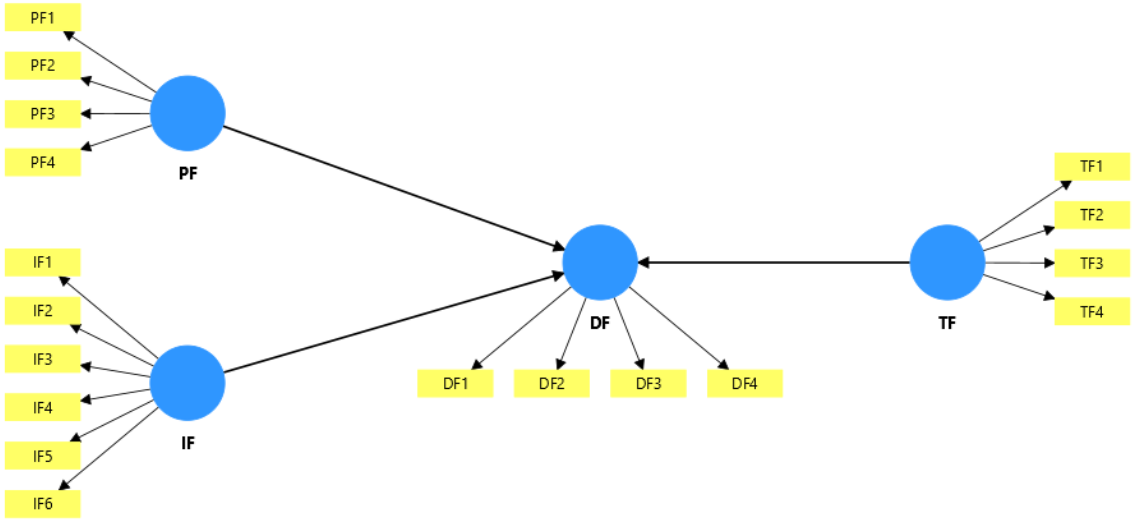

Figure 2. Conceptual model
Source: SmartPLS

Variance Inflation Factor (VIF) values were inspected to detect potential multicollinearity issues among the predictor variables. According to Hair et al. (2017), VIF values below 5 are considered acceptable, and values under 3 are preferred for more conservative assessments. As presented in Table 7, all VIF values in the model range from 1.153 to 4.604, with the highest being IF3 (4.604) and IF5 (3.417). Despite this, all values remain below the critical threshold of 5, indicating no serious multicollinearity problem. Therefore, the latent constructs included in the model do not exhibit redundancy, and the model structure is statistically reliable for further analysis.

Table 7.
Colinearity assessment - VIF

Item	VIF	Item	VIF
DF1	1.226	**IF1**	2.450
DF2	1.153	**IF2**	2.115
DF3	1.616	**IF3**	4.604
DF4	1.544	**IF4**	2.908
PF1	2.974	**IF5**	3.417
PF2	2.093	**IF6**	2.498
PF3	1.942	**TF1**	1.282
PF4	3.370	**TF2**	1.793
TF3	2.104	**TF4**	1.740

Source: Author's elaboration based on SmartPLS

The R^2 value for the endogenous variable "Financing Decision (DF)" is 0.224, indicating that approximately 22.4% of the variance in investment financing decisions among Moroccan SMEs can be explained by the three exogenous constructs: tax pressure (PF), tax incentives (IF), and tax treatment of financing modes (TF). The adjusted R^2 value is 0.199, which accounts for model complexity and suggests a modest explanatory power. According to Chin (1998), R^2 values of 0.19, 0.33, and 0.67 can be classified as weak, moderate, and substantial respectively in PLS-SEM. Based on this, the explanatory power of the model is considered weak to moderate, yet still meaningful given the complex and multidimensional nature of tax policy effects on financing decisions.

Table 8.
R^2 values

	R-square	R-square adjusted
DF	0.224	0.199

Source: Author's elaboration based on SmartPLS

To evaluate the structural relationships proposed in the research model, path coefficients were tested using the bootstrapping procedure with 5,000 subsamples. The significance of each path was assessed based on the coefficient magnitude, standard error, t-statistic, and corresponding p-value. Table X summarizes the results of hypothesis testing.

Table 9.
Research hypothesis results

	Coefficient	Ecart-type	T Statistic	P values
IF -> DF	0.442	0.099	4.465	0.000
PF -> DF	0.392	0.148	2.649	0.009
TF -> DF	0.432	0.124	3.484	0.001

Source: Author's elaboration based on SmartPLS

H1: Tax pressure (PF) has a significant influence on investment financing decisions (DF)

The path coefficient for PF → DF is 0.392, with a t-value of 2.649 and a p-value of 0.009, indicating a statistically significant and positive effect at the 5% level. Therefore, H1 is supported, suggesting that higher perceived tax pressure influences SME financing decisions in a meaningful way.

H2: Tax incentives (IF) positively influence investment financing decisions (DF)

The path coefficient for IF → DF is 0.442, with a t-value of 4.465 and a p-value of 0.000, indicating a highly significant and positive relationship. This supports H2, confirming that fiscal incentives such as exemptions and deductions encourage SMEs to invest by improving financing feasibility.

H3: The tax treatment of financing modes (TF) positively affects investment financing decisions (DF)

The path coefficient for TF → DF is the strongest at 0.432, with a t-value of 3.484 and a p-value of 0.001, signifying a highly significant impact. This validates H3, suggesting that favorable tax treatments linked to self-financing, leasing, or shareholder advances play a critical role in shaping SMEs' financing choices.

4. Discussion

The findings of this study confirm that fiscal variables exert a statistically significant influence on the investment financing decisions of Moroccan SMEs. Specifically, the three independent variables—fiscal pressure (PF), fiscal incentives (IF), and the tax treatment of financing modes (TF)—were all found to have significant positive effects on the dependent

variable, financing decision (DF). These results provide robust support for the study's hypotheses H1, H2, and H3.

First, the positive and significant relationship between fiscal pressure and financing decisions ($\beta = 0.382$, $p = 0.011$) suggests that even though high tax burdens are often perceived as constraints, firms may adapt their financing strategies accordingly. This aligns with earlier studies by Ibrahim et al. (2018), which found that corporate tax rates influence the capital structure choices of firms in Nigeria through increased awareness and strategic planning. Also, fiscal pressure on equity demonstrated a generally small negative influence on asset profitability and investment levels. This outcome may reflect the impact of rising tax obligations and various levies, which can increase operational costs and reduce available resources for reinvestment. In some cases, however, fiscal pressure on equity was also associated with a positive relationship with return on investment (ROI), suggesting that certain companies might respond to higher tax burdens by optimizing their capital structures or improving operational efficiency to sustain returns (Batrancea et al., 2021).

Second, fiscal incentives ($\beta = 0.472$, $p < 0.001$) emerged as a strong predictor of financing decisions, indicating that tax exemptions and deductions play a critical role in stimulating investment among SMEs. These findings are consistent with the results of Afolabi et al. (2023), who demonstrated that incentives such as education tax credits and capital allowances significantly enhance firms' ability to mobilize capital for expansion. The importance of tax incentives in shaping financing behavior confirms the practical relevance of policy tools designed to lower the effective tax burden. Empirical evidence from Japan further confirms that SMEs using tax incentives experienced a significantly higher capital investment rate and improved productivity, particularly among financially constrained firms, indicating that incentives mitigate financing obstacles (Hosono, 2023). Similarly, studies in China demonstrate that VAT and income tax incentives substantially boost SME asset growth and sales revenue.

Third, the tax treatment of financing methods ($\beta = 0.538$, $p < 0.001$) was also significantly associated with investment decisions, underscoring how favorable fiscal treatment of methods such as leasing, equity contributions, or retained earnings can incentivize firms to pursue particular funding strategies. This corroborates theoretical models that emphasize the impact of differential tax treatments on debt-versus-equity choices, as noted in Schanz and Schanz (2011), who showed how tax deductions for interest payments increase the attractiveness of debt financing compared to equity.

These results challenge traditional perspectives that associate high corporate tax rates solely with reduced investment. Instead, they suggest that when coupled with targeted fiscal incentives and supportive tax treatments, even higher tax regimes can encourage firms to leverage diverse financing sources to maintain or expand investment levels. The positive moderating role of fiscal policy on financing decisions highlights its potential to mitigate the adverse effects of tax burdens and strengthen firms' resilience, as suggested by Ohrn (2018) and Wu and Yue (2009).

Finally, at the macroeconomic level, complementary factors such as firm size, profitability, and sales growth further interact with fiscal measures to shape investment patterns. Larger firms, driven by higher market demand, tend to make substantial investments in productive assets (Ajide, 2017), while sales growth compels additional capital expenditure to support expanding operations (Adelino et al., 2017; Al-Gamrh et al., 2020; Farooq et al., 2021b). Meanwhile, GDP growth provides an enabling environment that further supports investment activity (Ajide, 2017).

Conclusion

This study set out to examine the influence of taxation on the investment financing decisions of Moroccan small and medium-sized enterprises (SMEs), focusing on three key fiscal dimensions: tax pressure, fiscal incentives, and the tax treatment of financing methods. Using a quantitative approach and partial least squares structural equation modeling (PLS-SEM), the results reveal that all three fiscal variables exert a statistically significant and positive influence on SMEs' financing decisions.

The findings demonstrate that tax pressure, although typically seen as a constraint, influences financing behavior, possibly by compelling firms to adopt more strategic financial planning. More notably, fiscal incentives emerged as a powerful determinant, highlighting the effectiveness of tax exemptions and deductions in fostering a more favorable investment environment. Likewise, the tax treatment of financing modes—such as leasing, shareholder advances, and self-financing—was found to play a critical role in shaping financing strategies.

By confirming the relevance of these fiscal factors, the study contributes both theoretically and practically. It reinforces the applicability of financing theories such as the pecking order theory in a tax-sensitive context

and provides policymakers with evidence-based insights to refine tax policy for greater SME support.

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Lastly, by investigating sector-specific tax consequences, incorporating qualitative methods to gather managers' perspectives, or carrying out comparison studies, a future study could build on these findings. Also, it is important to highlight that one of the limitations our study is the low R^2 of the explained variable which could be enhanced by including more variables in the conceptual model. Our comprehension of the complex interaction between taxes and SME financing options in the Moroccan context will be enhanced by such work.

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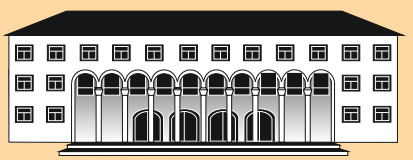

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