Determinants of Corporate Tax Avoidance: A Fuzzy Delphi and Factor Analysis Approach

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Abstract: Tax avoidance is a major challenge for tax systems and corporate governance because it can undermine financial transparency, distort resource allocation, and erode investor confidence. This study aims to identify and present a comprehensive model of the factors influencing tax avoidance in companies listed on the Tehran Stock Exchange (TSE). The research employs a mixed-method (qualitative-quantitative) approach. Initially, the primary factors were identified using thematic analysis. Subsequently, the fuzzy Delphi method was applied to prioritize the factors and reach a consensus among experts. In the final stage, the validity of the model was assessed using exploratory and confirmatory factor analysis. The results indicate that the most important factors influencing tax avoidance include financial and reporting characteristics, environmental factors, and audit quality, followed by corporate governance and market-related factors. In addition to its theoretical contribution, this study provides a practical model that can be used by managers, auditors, and regulatory bodies, and it can play an effective role in designing preventive policies, improving financial transparency, and reducing tax avoidance risk.

Keywords: Tax Avoidance, Corporate Governance, Financial Transparency

1. Introduction

Taxation constitutes one of the principal mechanisms through which governments mobilize financial resources, redistribute income, fund public services, and support economic and social development. The effectiveness of a tax system, however, depends not merely on statutory tax rates but also on the extent to which economic actors comply with the substance and intent of tax regulations. Corporate tax avoidance has therefore become a major concern for governments, regulators, investors, and researchers because it reduces the effective tax contribution of corporations while potentially creating distortions in competition, resource allocation, fiscal sustainability, and perceptions of distributive fairness. Although tax avoidance is generally distinguished from illegal tax evasion because it may involve arrangements that formally remain within legal boundaries, the economic and ethical distinction is often less straightforward when firms exploit legislative ambiguities, organizational complexity, related-party arrangements, or cross-jurisdictional differences to minimize tax liabilities. Contemporary research consequently treats tax avoidance not only as a technical taxation issue but also as a corporate governance, institutional, financial reporting, ethical, and strategic phenomenon [1, 2].

The growing internationalization and organizational complexity of corporations have further increased opportunities for tax planning. Differences in corporate tax regimes, the allocation of income among subsidiaries, related-party transactions, and variations in enforcement can enable firms to shift taxable income or structure transactions in tax-efficient ways. Evidence concerning subsidiary profitability and cross-jurisdictional corporate income tax differentials illustrates how differences in tax environments may create incentives for profit shifting [3]. Related-party transactions likewise represent an important channel through which firms may obtain tax advantages, although the extent of opportunistic behavior can depend on ownership and governance structures, including government ownership [4]. These developments imply that tax avoidance cannot be explained adequately by a single firm characteristic. Instead, it emerges from interactions among regulatory opportunities, ownership structures, managerial incentives, market pressures, organizational capabilities, and financial characteristics.

Information transparency is particularly important in this setting. Tax planning frequently involves transactions whose economic substance may be difficult for outside stakeholders to evaluate, thereby creating information asymmetry between managers, investors, tax authorities, and other parties. Regulatory interventions intended to improve private disclosure may also influence firms' public disclosure choices, demonstrating that mandatory and voluntary reporting decisions are interconnected [5]. At the same time, business complexity can materially affect voluntary disclosure behavior because managers must balance the benefits of transparency against proprietary and strategic costs [6]. Consequently, disclosure quality and financial statement transparency are relevant not merely as reporting outcomes but as components of the informational environment within which corporate tax decisions are formulated, concealed, monitored, and evaluated.

Corporate governance constitutes another central perspective for explaining tax avoidance. The separation of ownership and control provides managers with discretion over operational, financing, reporting, and taxation decisions. Depending on incentive structures and monitoring effectiveness, this discretion may be used either to create value through legitimate tax efficiency or to pursue aggressive strategies that increase managerial opacity and agency costs. Empirical evidence from emerging markets confirms that governance mechanisms can materially influence corporate tax avoidance and that the effects of particular governance characteristics may vary depending on institutional circumstances [7]. Iranian evidence similarly suggests that higher corporate governance quality can constrain corporate tax avoidance, although the effectiveness of governance depends on the structure of ownership and monitoring arrangements [8]. Board composition, independence, managerial oversight, and other board characteristics have also been identified as important correlates of tax avoidance among companies listed on the Tehran Stock Exchange [9].

Ownership structure adds another layer to the governance-tax relationship. Institutional investors possess both the resources and incentives to monitor managerial behavior, but their influence on tax planning may not necessarily be uniform. Institutional ownership can affect corporate tax avoidance by changing the intensity of monitoring, the pressure for after-tax performance, and managers' willingness to pursue complex tax strategies [10]. Government ownership may likewise change the incentives surrounding related-party transactions and tax minimization because government-linked firms can face distinct reputational, regulatory, and political expectations [4]. Moreover, the nationality diversity of corporate boards provides an additional governance dimension, with evidence showing that board composition and international diversity may influence tax-related corporate decisions [11]. These findings reinforce the view that governance should be conceptualized multidimensionally rather than reduced to a single indicator.

Managerial characteristics are equally important because tax avoidance decisions require judgment, expertise, risk assessment, and the capacity to identify and implement tax-planning opportunities. Managers with greater ability may be more successful in recognizing and exploiting available tax strategies because they possess stronger knowledge of organizational operations and can coordinate complex decisions more efficiently [12]. Psychological characteristics may also alter tax behavior. Iranian research indicates that CEO overconfidence can interact with organizational capital in shaping corporate tax avoidance, suggesting that tax policies partly reflect executives' perceptions and behavioral tendencies rather than purely mechanical financial optimization [13]. Similarly, organizational strategy and political connections can condition managerial incentives toward tax avoidance, demonstrating that tax decisions are embedded in broader strategic and institutional relationships [14]. Advertising expenditure, which contributes to reputation formation and stakeholder visibility, has also been associated with corporate tax avoidance in emerging markets, indicating that firms may balance tax savings against reputational exposure [15].

From an institutional perspective, tax avoidance is influenced by the clarity of tax regulations, the quality of enforcement, administrative efficiency, and the predictability of the legal environment. When tax rules are complex or inconsistently implemented, firms may have greater opportunities to exploit interpretive ambiguities and reduce their effective tax burdens. Evidence from Iran demonstrates that both the institutional environment and the quality of tax-law enforcement play significant roles in explaining corporate tax avoidance [16]. Research aimed specifically at developing preventive models has likewise identified several institutional, organizational, and regulatory factors that contribute to avoidance behavior and has emphasized the need for integrated mechanisms rather than isolated regulatory responses [17]. More broadly, studies of tax evasion in Iran have identified interconnected economic, administrative, cultural, legal, and organizational determinants, further illustrating that noncompliance-related tax behavior is generated by a system of mutually reinforcing factors rather than a single cause [18].

Legitimacy and corporate social responsibility provide a complementary explanation. Corporations do not operate solely under formal legal constraints; they are also exposed to societal expectations concerning fairness, accountability, and responsible participation in financing public goods. Excessive tax avoidance may therefore impose reputational costs, especially when stakeholders perceive a contradiction between a firm's public commitment to social responsibility and its tax practices. Iranian evidence examining tax avoidance through the lens of social legitimacy demonstrates the importance of stakeholder expectations and corporate legitimacy in explaining tax behavior [19]. Internationally, corporate social responsibility has also been linked to tax avoidance, suggesting that firms' social positioning and ethical commitments can influence their willingness to undertake aggressive tax strategies [20]. The moral dimension is further supported by analyses showing that attitudes toward tax avoidance are shaped by competing ethical positions concerning legality, corporate responsibility, fairness, and obligations to society [1].

Audit mechanisms are another fundamental component because external auditors can constrain aggressive reporting and tax positions by increasing the probability that questionable practices will be detected or challenged. Auditor expertise is especially relevant in complex tax environments. Evidence from the banking sector shows that industry specialization can reduce tax avoidance, indicating that auditors with greater sector-specific knowledge may be better positioned to identify aggressive tax practices [21]. Tax avoidance can also increase audit complexity and consequently prolong the time required to issue audit reports, while auditor characteristics may moderate this association [22]. These findings suggest that auditor size, expertise, tenure, fees, report characteristics, and

timeliness should be treated as interconnected components of audit quality when constructing a comprehensive model of tax avoidance.

The financial condition and reporting characteristics of firms provide another major group of determinants. Firm size and profitability may affect both the capacity and incentives for tax avoidance because larger and more profitable organizations possess greater resources for sophisticated tax planning while simultaneously facing greater regulatory and political scrutiny [23]. Financial market conditions also matter. Greater stock liquidity can strengthen external monitoring and alter the costs and benefits associated with extreme tax avoidance [24]. Aggressive tax planning has additionally been associated with capital-market informational outcomes such as stock price synchronicity, indicating that tax strategies can interact with the information incorporated into market prices [25]. Thus, tax avoidance should be examined together with reporting quality, profitability, liquidity, firm value, market information, and investor monitoring rather than as an isolated tax-accounting decision.

Labor and organizational resource decisions may also be relevant to corporate tax behavior. Labor investment inefficiency has been associated with corporate tax avoidance, suggesting that resource-allocation problems and tax-planning incentives may coexist within broader managerial decision systems [26]. Evidence further indicates that labor costs themselves can affect corporate incentives to engage in tax avoidance, demonstrating that operating cost structures can shape the economic benefits of tax planning [27]. These findings broaden the financial perspective by showing that tax avoidance is connected not only to traditional accounting ratios but also to the firm's employment, investment, and resource-allocation decisions.

The multidimensionality of tax avoidance also makes organizational knowledge, analytical capability, and structured decision-making relevant to the construction of explanatory models. Research in other Iranian organizational settings has demonstrated that managerial phenomena frequently result from combinations of technological, knowledge-based, behavioral, operational, and organizational factors. For example, knowledge-management components have been linked to marketing performance [28], while fuzzy analytical hierarchy techniques have been applied to evaluate multidimensional knowledge-management effectiveness in research institutions [29]. Integrated fuzzy decision-making procedures have similarly been used to evaluate and select suppliers when multiple qualitative and quantitative criteria must be synthesized [30]. Such research supports the methodological value of structured expert-based procedures where a phenomenon contains numerous interacting determinants whose importance cannot be adequately established using a single conventional metric.

Comparable evidence from management and organizational research also illustrates the importance of treating organizational performance as the product of interconnected systems. Studies have linked green supply-chain components with organizational performance [31], cloud-computing capabilities with customer relationship management effectiveness [32], and safety-management systems, ethical leadership, and self-efficacy with employee safety behavior [33]. Research in healthcare management has likewise examined mediated relationships among health literacy, self-care behavior, and quality of life, emphasizing the importance of modeling indirect and multidimensional relationships rather than focusing exclusively on simple associations [34]. In the financial sector, hybrid analytical methods have been employed to address complex problems such as bank credit-risk management [35]. Although these studies address domains other than taxation, they demonstrate the broader methodological principle that complex organizational outcomes are better understood through integrated models capable of organizing multiple dimensions and validating their underlying structures.

This methodological consideration is particularly important for corporate tax avoidance in Iran. Previous Iranian studies have produced valuable evidence regarding board characteristics [9], governance quality [8], firm size and

profitability [23], social legitimacy [19], business strategy and political connections [14], managerial characteristics [13], advertising expenditure [15], institutional quality and enforcement [16], and preventive mechanisms [17]. Nevertheless, these contributions largely illuminate particular relationships or subsets of determinants. International evidence simultaneously identifies additional roles for institutional ownership [10], managerial ability [12], stock liquidity [24], labor allocation [26], labor costs [27], audit characteristics [21, 22], governance diversity [11], business complexity and disclosure [6], mandatory disclosure [5], corporate governance [7], related-party transactions [4], cross-border profitability allocation [3], and tax administration and compliance [2]. Taken together, this evidence indicates that corporate tax avoidance is generated by a network of governance, environmental, audit, financial-reporting, managerial, institutional, and capital-market conditions.

Despite the breadth of this literature, an important research gap remains in determining how these heterogeneous factors can be integrated, prioritized, and empirically validated within a unified model appropriate to the institutional conditions of companies listed on the Tehran Stock Exchange. Findings obtained in one regulatory or market environment cannot automatically be generalized to another because the effectiveness of governance mechanisms, enforcement institutions, audit practices, ownership structures, and market monitoring varies across national settings. Moreover, conventional studies based on isolated regressions may identify statistically significant associations without establishing whether the numerous observed variables form coherent higher-order dimensions. A comprehensive model therefore requires a procedure that first incorporates expert knowledge to assess the relevance of candidate determinants and then empirically evaluates the latent structure, reliability, and validity of the resulting dimensions. The fuzzy Delphi method is particularly appropriate for expert consensus under conditions of linguistic uncertainty, while exploratory and confirmatory factor analyses enable the reduction of numerous indicators into interpretable latent constructs and the subsequent validation of their measurement structure. Such an integrated approach can move the literature beyond fragmented explanations toward a contextually grounded representation of the mechanisms underlying tax avoidance in Iranian listed firms.

Accordingly, the aim of this study is to identify, prioritize, and validate a comprehensive multidimensional model of the factors influencing corporate tax avoidance among companies listed on the Tehran Stock Exchange using the fuzzy Delphi method together with exploratory and confirmatory factor analysis.

2. Methods and Materials

The present study is applied in nature and employs a quantitative-analytical approach. Its primary objective is to rank and validate the factors influencing tax avoidance among companies listed on the Tehran Stock Exchange (TSE). A fuzzy Delphi questionnaire was utilized for data collection. The research sample consisted of 72 managers, owners, and tax and accounting specialists, selected through convenience random sampling.

In the first phase, qualitative factors extracted from prior research were incorporated into the initial model and included in the questionnaire. Experts were asked to evaluate the importance of each factor using a five-point linguistic scale (ranging from "very low" to "very high"). The linguistic responses were converted into triangular fuzzy numbers and then defuzzified. Fuzzy means were calculated using the Minkowski formula to achieve expert consensus.

In the second phase, Exploratory Factor Analysis (EFA) was employed to identify the underlying factor structure and reduce the number of components. Subsequently, Confirmatory Factor Analysis (CFA) was conducted using SPSS and SmartPLS3 software to validate the final model. Reliability, validity, and model fit indices were examined to ensure the robustness of the measurement model. This methodology enables the systematic ranking and

validation of key tax avoidance determinants, providing a scientific and practical framework for analysis and model development in the Iranian institutional context.

3. Findings and Results

Following the extraction of factors influencing tax avoidance through expert interviews, a questionnaire based on the initial codes (basic themes) was designed and distributed to 75 specialists, including managers, owners, board members, accounting professors, and financial managers. Of these, 72 questionnaires were deemed analyzable. In the questionnaire, experts expressed their level of agreement with each initial code using a five-point quantitative scale: very high, high, medium, low, and very low.

Data analysis was conducted using the fuzzy Delphi method across two rounds. In the second round, the defuzzified mean from the first round was included in the questionnaire to enable experts to revise their opinions in light of the collective perspective from the initial round [38, 39]. Ultimately, the difference in defuzzified means between the two rounds was less than 0.1 for all initial codes (Table 1), indicating a consensus among experts and a largely shared understanding of the factors influencing tax avoidance. Table 1 presents the fuzzy Delphi results, including first-round means, second-round means, and the differences between rounds for all identified factors, categorized by axial codes and selective codes.

Table 1. Fuzzy Delphi Results: Comparison of Defuzzified Means Across Two Rounds

Selective Code	Axial Code	Initial Code	Round 1 Mean	Round 2 Mean	Difference
Corporate Governance	Board Characteristics	Board Independence	0.854	0.814	0.041
		CEO Duality	0.797	0.766	0.031
		Board Financial Expertise	0.771	0.728	0.043
		Board Meeting Frequency	0.744	0.716	0.028
		Board Compensation	0.807	0.779	0.028
		Board Size	0.803	0.747	0.057
	Ownership Structure	State Ownership	0.814	0.780	0.034
		Institutional Ownership	0.803	0.750	0.053
		Ownership Concentration	0.801	0.771	0.030
		Managerial Ownership	0.758	0.738	0.020
	Managerial Personality Traits	Managerial Ability	0.605	0.584	0.021
		CEO Overconfidence	0.734	0.683	0.051
		Managerial Myopia	0.780	0.730	0.050
	Audit Committee Structure	Existence of Audit Committee	0.816	0.778	0.038
		Audit Committee Size	0.823	0.778	0.045
		Audit Committee Gender	0.828	0.785	0.043
	Other Governance Characteristics	Existence of Risk Committee	0.780	0.756	0.024
		Related-Party Transactions	0.791	0.736	0.054
		Internal Control Quality	0.806	0.766	0.039
		Agency Costs	0.804	0.782	0.022
Environmental Factors	Existing Laws and Regulations	Capital Market Laws	0.823	0.764	0.059
		Tax Risk	0.826	0.779	0.047
		Tax Laws	0.801	0.748	0.053
	Competitive Environment	Product Market Competition	0.794	0.767	0.027
		Corporate Reputation	0.819	0.795	0.024
		Information Asymmetry	0.807	0.762	0.045
		Firm Complexity	0.814	0.769	0.045
		Corporate Strategy	0.834	0.788	0.046

	Political Characteristics	Political Stability	0.830	0.794	0.036
		Economic Uncertainty	0.826	0.794	0.032
		Political Connections	0.851	0.797	0.053
	Social Performance	Environmental Disclosure	0.802	0.765	0.037
		Social Responsibility	0.791	0.745	0.045
Audit Quality	Auditor Characteristics	Auditor Tenure	0.822	0.780	0.042
		Auditor Size	0.791	0.766	0.024
		Auditor Industry Expertise	0.808	0.765	0.043
	Audit Report Quality	Audit Fees	0.831	0.792	0.039
		Audit Report Lag	0.818	0.758	0.060
		Audit Report Type	0.815	0.784	0.031
Financial and Reporting Characteristics	Dividend Characteristics	Earnings Forecast	0.831	0.811	0.020
		Price-to-Earnings Ratio	0.807	0.762	0.045
		Dividend Per Share	0.796	0.755	0.042
		EPS Growth Rate	0.831	0.778	0.053
	Earnings Quality	Earnings Quality	0.815	0.787	0.028
		Earnings Persistence	0.839	0.814	0.025
		Accruals	0.807	0.756	0.051
	Firm Performance	Sales Growth	0.792	0.764	0.028
		Firm Value	0.833	0.778	0.056
		Investment Opportunities	0.807	0.777	0.030
		Investment Efficiency	0.822	0.789	0.032
		Profitability	0.836	0.787	0.049
	Cash Holdings	Operating Cash Flow	0.830	0.791	0.039
		Cash Holdings	0.821	0.766	0.054
		Liquidity	0.826	0.793	0.034
	Firm Structure	Leverage Ratio	0.823	0.789	0.034
		Firm Size	0.813	0.779	0.034
		Firm Age	0.830	0.791	0.039
	Firm Costs	Wage Costs	0.814	0.757	0.057
		Cost of Debt	0.817	0.791	0.027
	Financial Constraints	Financial Distress	0.834	0.809	0.025
		Financial Constraints	0.825	0.780	0.045
	Financial Statement Quality	Disclosure Quality	0.816	0.767	0.049
		Financial Statement Comparability	0.836	0.786	0.050
		Restatements	0.816	0.779	0.037
Market and Stock-Related Factors	Stock Characteristics	Stock Liquidity	0.763	0.738	0.024
		Stock Market Reactions	0.821	0.773	0.047
		Private Stock Price Information	0.822	0.767	0.054
	Market Factors	Investor Protection	0.802	0.755	0.047
		Firm Risk	0.828	0.803	0.024
		Market Reaction	0.763	0.708	0.054

Using the second-round defuzzified means, the prioritization of overarching themes (selective codes) influencing tax avoidance was also determined. Figure 1 presents the ranking of these factors based on their importance as evaluated by the expert panel.

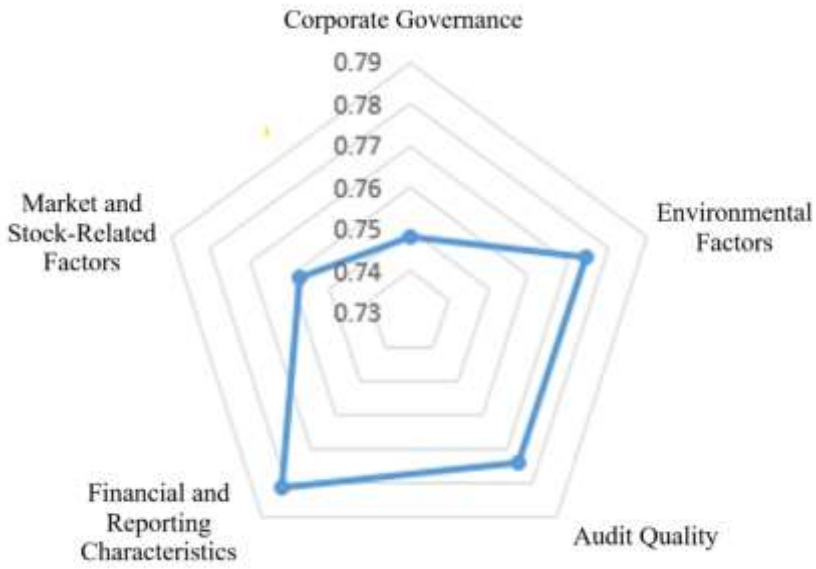


Figure 1. Radar Chart of Prioritized Overarching Themes Influencing Tax Avoidance

As illustrated in Figure 1, the dimensions are ranked from highest to lowest priority as follows:

- Financial and Reporting Characteristics emerged as the most influential dimension affecting tax avoidance in Iranian firms. This finding suggests that factors such as earnings quality, cash flow management, firm performance, and financial statement transparency are primary drivers of tax planning decisions.
- Audit Quality ranked as the second most important dimension. This indicates that external monitoring mechanisms—including auditor tenure, size, industry expertise, audit fees, and audit report characteristics—play a critical constraining role on tax avoidance.
- Environmental Factors—comprising laws and regulations, competitive environment, political characteristics, and social performance—ranked third.
- Market and Stock-Related Factors ranked fourth, suggesting that stock liquidity, market reactions, investor protection, and firm risk have a moderate but non-negligible influence on tax avoidance decisions.
- Corporate Governance ranked lowest among the five dimensions. While governance mechanisms—including board characteristics, ownership structure, and audit committee attributes—are traditionally emphasized in tax avoidance literature, the relatively lower priority in the Iranian context may reflect the prevailing weakness of governance institutions in emerging markets, where formal governance mechanisms are less effective than informal factors such as political connections and market pressures.

To assess the reliability and validity of the proposed model, a questionnaire based on the final initial codes was developed and administered to a sample of 354 tax specialists, university professors, financial managers, and graduate students. The analyses included Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) using SPSS and SmartPLS3 software.

The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity were employed to determine the suitability of the data for factor analysis. Table 2 presents these results for each of the five overarching themes.

Table 2. Sampling Adequacy for Overarching Themes

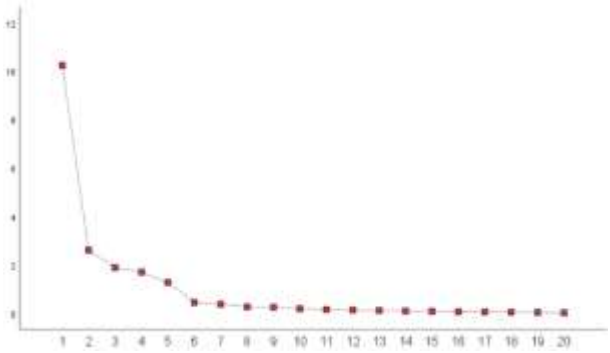
Overarching Theme	KMO	Bartlett's Test	Sig.	Result
Corporate Governance	0.831	9974.514	0.000	Confirmed
Environmental Factors	0.770	4309.199	0.000	Confirmed

Audit Quality	0.685	1406.390	0.000	Confirmed
Financial and Reporting Characteristics	0.746	8657.882	0.000	Confirmed
Market and Stock-Related Factors	0.681	1362.822	0.000	Confirmed

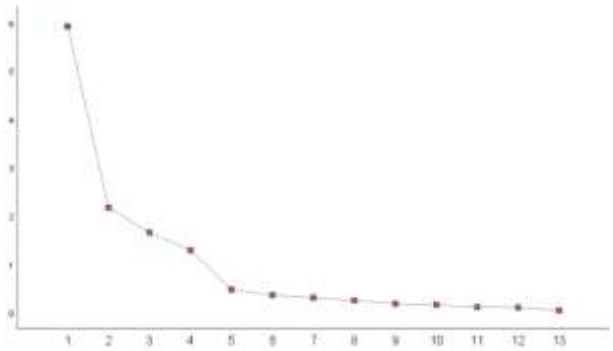
As presented in Table 2, the KMO values for all five themes exceeded the recommended threshold of 0.6, ranging from 0.681 to 0.831. Additionally, Bartlett's test of sphericity was significant at the 99% confidence level ($p < 0.01$) for all themes. These results confirm the adequacy of the sample and justify conducting exploratory factor analysis for each dimension.

Principal Component Analysis (PCA) with Varimax rotation was employed to determine the number of latent factors underlying each overarching theme, retaining factors with eigenvalues greater than 1 [41, 42]. The results revealed that Corporate Governance comprises 5 latent factors explaining 88.58% of its total variance; Environmental Factors comprises 4 factors explaining 84.89%; Audit Quality comprises 2 factors explaining 80.57%; Financial and Reporting Characteristics comprises 8 factors explaining 86.66%; and Market and Stock-Related Factors comprises 2 factors explaining 79.13% of its total variance.

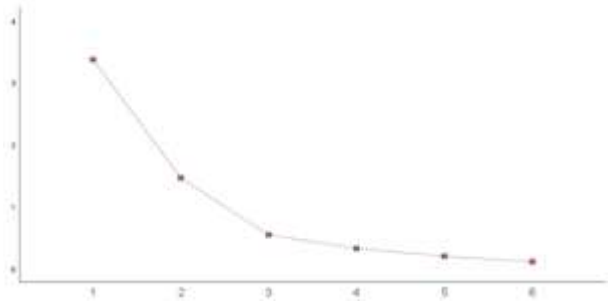
These findings confirm the multidimensional structure of the proposed tax avoidance model. Financial and Reporting Characteristics emerged as the most complex dimension with eight latent factors, while Audit Quality and Market and Stock-Related Factors exhibited the simplest structures with two factors each. All five overarching themes demonstrated cumulative variance explained exceeding 79%, indicating that the extracted latent factors effectively capture the underlying constructs.



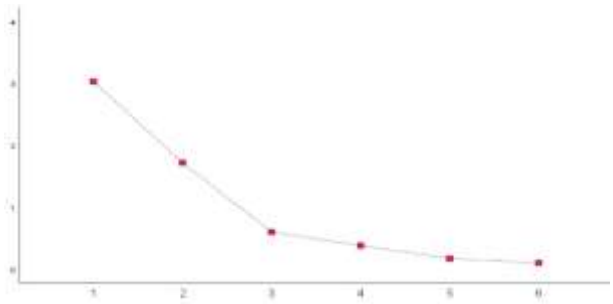
Corporate Governance



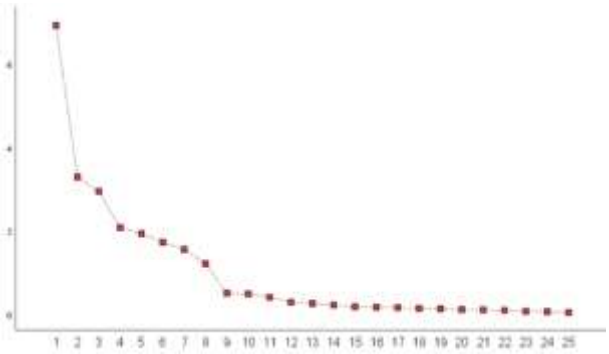
Environmental Factors



Audit Quality



Market and Stock-Related Factors



Financial and Reporting Characteristics

Figure 2. Scree Plot for Determining Latent Factors

A total of 21 latent factors were extracted across the five overarching themes of the tax avoidance model: Corporate Governance (5 factors), Environmental Factors (4 factors), Audit Quality (2 factors), Financial and Reporting Characteristics (8 factors), and Market and Stock-Related Factors (2 factors). All factors had eigenvalues above one and explained between 79.13% and 88.58% of the variance in their respective dimensions.

Table 5 presents the confirmatory factor analysis results for all 21 latent factors across the five overarching themes. Cronbach's alpha values range from 0.783 to 0.972, and composite reliability values range from 0.737 to 0.980, both exceeding the recommended threshold of 0.70, confirming strong internal consistency. The average variance extracted (AVE) values range from 0.602 to 0.956, all above the 0.50 threshold established by Fornell and Larcker, thereby confirming convergent validity for all constructs. These results collectively demonstrate that the measurement model possesses robust psychometric properties and is suitable for further structural analysis.

Table 3. Confirmatory Factor Analysis (CFA) Fit Indices: Convergent Validity and Reliability

Overarching Theme	Factors	Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)
Corporate Governance	Ownership Structure	0.962	0.972	0.898
	Audit Committee Structure	0.934	0.958	0.883
	Other Governance Characteristics	0.945	0.961	0.859
	Managerial Personality Traits	0.956	0.972	0.920
	Board Characteristics	0.968	0.974	0.861
Environmental Factors	Social Performance	0.954	0.978	0.956
	Existing Laws and Regulations	0.925	0.952	0.870
	Competitive Environment	0.925	0.944	0.770
	Political Characteristics	0.886	0.929	0.814
Audit Quality	Auditor Characteristics	0.912	0.945	0.851
	Audit Report Quality	0.839	0.903	0.757
Financial and Reporting Characteristics	Firm Structure	0.897	0.936	0.830
	Firm Performance	0.950	0.962	0.835
	Financial Constraints	0.828	0.921	0.853
	Firm Costs	0.869	0.737	0.602
	Cash Holdings	0.892	0.933	0.823
	Dividend Characteristics	0.972	0.980	0.923
	Earnings Quality	0.932	0.957	0.880
	Financial Statement Quality	0.913	0.945	0.851
Market and Stock-Related Factors	Market Factors	0.929	0.955	0.877
	Stock Characteristics	0.783	0.873	0.696

The Fornell-Larcker criterion for assessing discriminant validity among the 21 latent factors in the tax avoidance model is presented in Table 4. Discriminant validity ensures that constructs that are theoretically distinct are also empirically distinct.

Table 4. Fornell-Larcker Criterion for Discriminant Validity of Latent Factors Influencing Tax Avoidance

Factors	FS	OS	ACS	OGC	SP	FP	MF	ELR	FC	CE	FCt	CH	AC	SC	DC	MPT	PC	BC	AQ	FSQ	ARQ
Firm Structure (FS)	0.911																				
Ownership Structure (OS)	0.146	0.947																			
Audit Committee Structure (ACS)	0.036	0.365	0.940																		
Other Governance Characteristics (OGC)	0.158	0.474	0.345	0.927																	
Social Performance (SP)	0.319	0.197	0.128	0.280	0.978																
Firm Performance (FP)	0.141	0.108	0.069	0.169	0.049	0.914															
Market Factors (MF)	0.020	0.052	0.073	0.115	0.110	0.022	0.936														
Existing Laws and Regulations (ELR)	0.201	0.280	0.248	0.392	0.320	0.115	0.274	0.933													
Financial Constraints (FC)	0.112	0.147	0.076	0.202	0.133	0.091	0.010	0.179	0.923												
Competitive Environment (CE)	0.251	0.331	0.243	0.438	0.538	0.052	0.117	0.303	0.196	0.877											
Firm Costs (FCt)	0.105	0.026	0.028	0.061	0.043	0.030	0.020	0.083	0.160	0.054	0.779										
Cash Holdings (CH)	0.184	0.175	0.189	0.182	0.098	0.105	0.217	0.282	0.277	0.157	0.141	0.907									
Auditor Characteristics (AC)	0.064	0.254	0.221	0.099	0.217	0.087	0.090	0.229	0.020	0.177	0.082	-0.020	0.923								
Stock Characteristics (SC)	0.094	0.111	0.097	0.221	0.180	0.099	0.264	0.180	0.104	0.120	0.041	0.062	0.048	0.834							
Dividend Characteristics (DC)	0.252	0.280	0.095	0.226	0.144	0.262	0.024	0.171	0.081	0.229	0.043	0.072	0.121	0.084	0.961						
Managerial Personality Traits (MPT)	0.120	0.273	0.530	0.334	0.064	0.129	0.036	0.307	0.114	0.151	0.028	0.158	0.213	0.226	0.085	0.959					
Political Characteristics (PC)	0.100	0.279	0.347	0.336	0.303	0.032	0.189	0.335	0.190	0.409	0.001	0.106	0.297	0.154	0.145	0.349	0.902				
Board Characteristics (BC)	0.157	0.567	0.522	0.552	0.205	0.150	0.163	0.388	0.163	0.378	0.025	0.191	0.362	0.247	0.207	0.437	0.394	0.928			
Audit Quality (AQ)	0.074	0.235	0.291	0.148	0.361	0.048	0.090	0.239	0.074	0.254	0.041	0.013	0.862	0.085	0.115	0.204	0.371	0.376	0.750		
Financial Statement Quality (FSQ)	0.249	0.217	0.099	0.259	0.219	0.450	0.108	0.224	0.217	0.149	0.039	0.126	0.161	0.088	0.332	0.040	0.202	0.166	0.127	0.923	
Audit Report Quality (ARQ)	0.058	0.130	0.269	0.151	0.401	0.090	0.042	0.166	0.111	0.254	0.020	0.055	0.395	0.099	0.068	0.120	0.325	0.258	0.806	0.041	0.870

Note: Diagonal values (in bold) represent the square root of AVE (√AVE). Off-diagonal value

The results presented in Table 5 demonstrate that the square root of the Average Variance Extracted (√AVE) for each construct (values on the main diagonal) exceeds its correlations with other constructs (off-diagonal values). For instance, the √AVE for "Ownership Structure" is 0.947, while its highest correlation with any other construct ("Board Characteristics" at 0.567) remains substantially lower. Similarly, for "Audit Quality," the √AVE is 0.750, and its highest correlation is with "Auditor Characteristics" (0.862), which is still below the √AVE threshold. These findings confirm that the measurement model exhibits strong discriminant validity, indicating that each of the 21 latent factors represents a distinct and separate construct from the others.

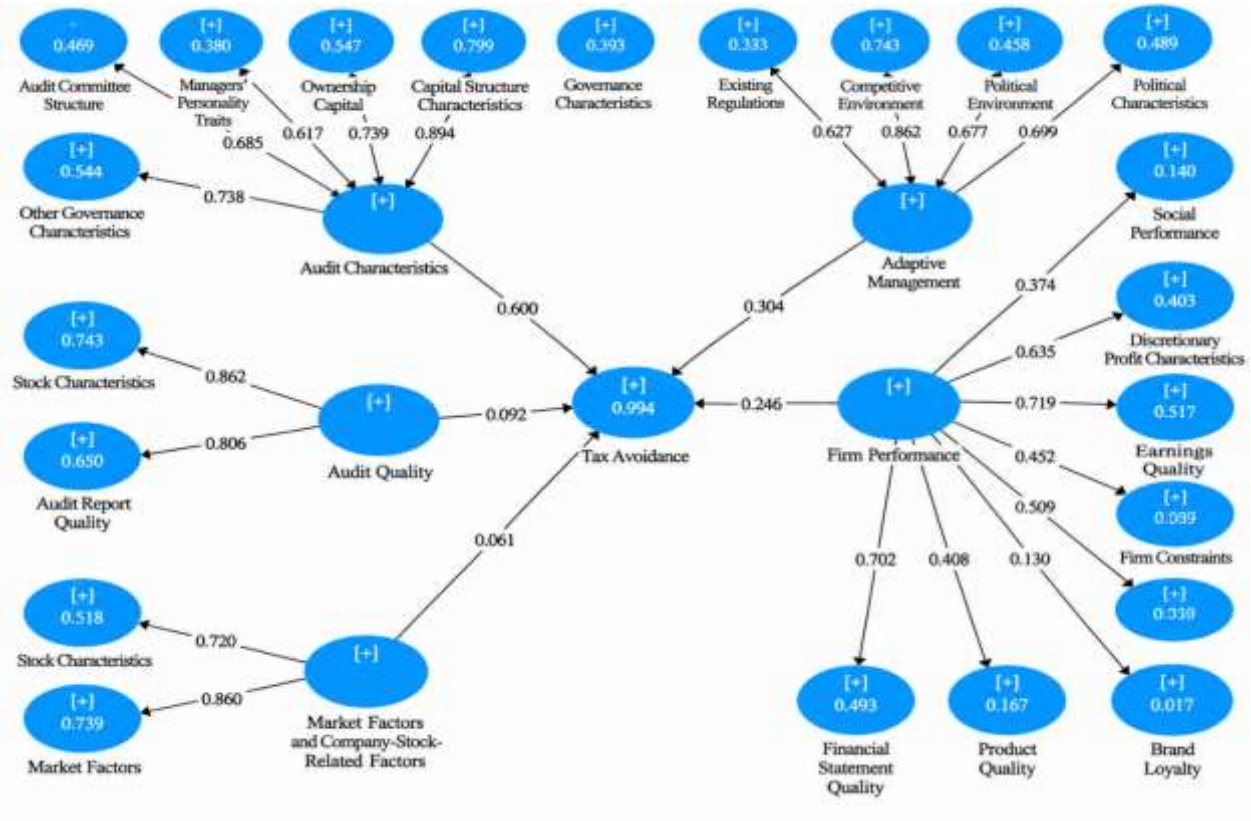


Figure 3. Path coefficients of the hidden factors in the tax avoidance model

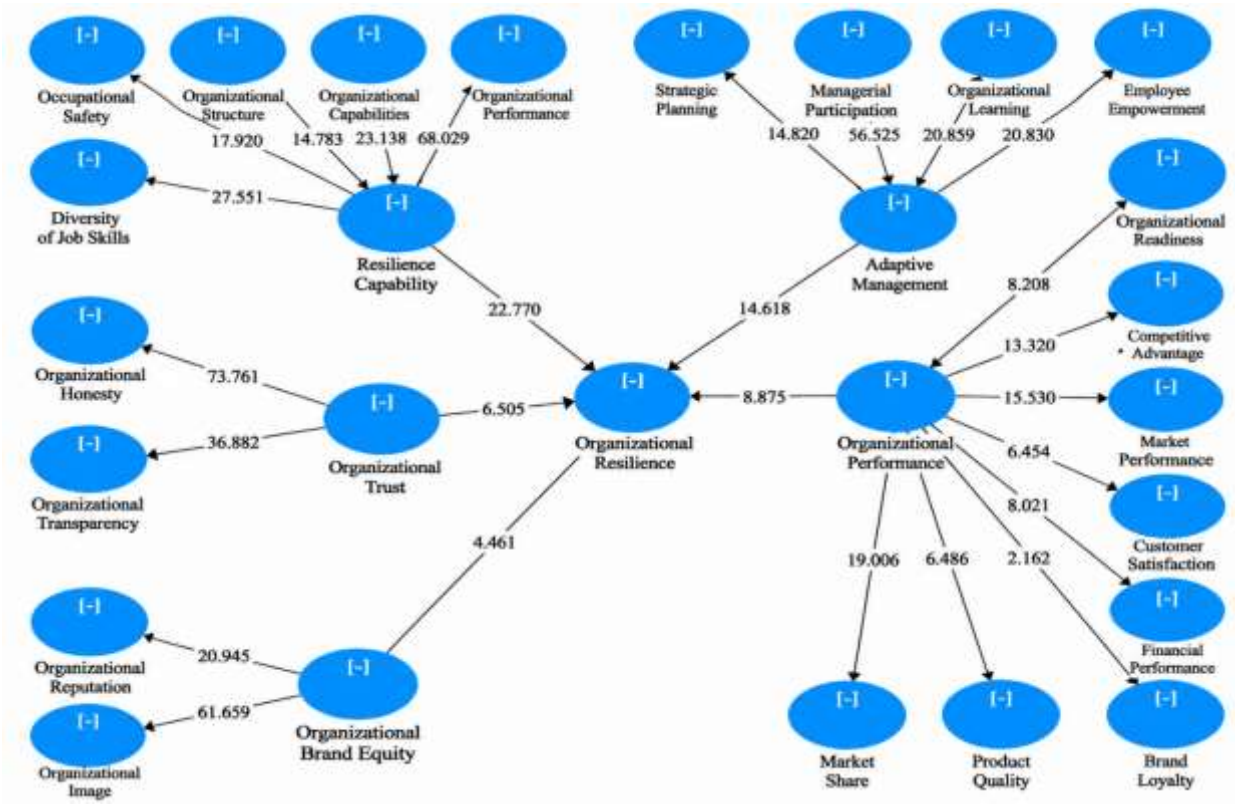


Figure 4. t-statistics of the hidden factors in the tax avoidance model

To assess the strength and statistical significance of the relationships between the latent factors and tax avoidance, the path coefficients (β) and t-statistics were calculated using a bootstrap resampling procedure with 5,000 subsamples. Table 5 presents these results for all 21 latent factors across the five overarching themes. Path coefficients indicate the direction and magnitude of each factor's effect on tax avoidance, while t-statistics greater than 1.96 and 2.58 indicate statistical significance at the 95% and 99% confidence levels, respectively.

Table 5. Path Coefficients and T-Statistics of the Latent Factors

Latent Factor	Overarching Theme	Path Coefficient	T-Statistic	Result
Corporate Governance	Tax Avoidance	0.600	22.770	
Board Characteristics	Corporate Governance	0.894	68.029	
Ownership Structure	Corporate Governance	0.739	23.138	
Audit Committee Structure	Corporate Governance	0.685	17.920	
Other Governance Characteristics	Corporate Governance	0.738	27.551	
Managerial Personality Traits	Corporate Governance	0.617	14.783	
Environmental Factors	Tax Avoidance		14.618	
Social Performance	Environmental Factors	0.699	20.830	
Existing Laws and Regulations	Environmental Factors	0.627	14.820	
Competitive Environment	Environmental Factors	0.862	56.525	
Political Characteristics	Environmental Factors	0.677	20.859	
Audit Quality	Tax Avoidance	0.092	6.505	
Auditor Characteristics	Audit Quality	0.862	73.761	
Audit Report Quality	Audit Quality	0.806	36.823	
Financial and Reporting Characteristics	Tax Avoidance	0.246	8.875	
Firm Structure	Financial and Reporting Characteristics	0.509	8.021	
Firm Performance	Financial and Reporting Characteristics	0.719	15.530	
Financial Constraints	Financial and Reporting Characteristics	0.408	6.486	
Firm Costs	Financial and Reporting Characteristics	0.130	2.162	
Cash Holdings	Financial and Reporting Characteristics	0.452	6.454	
Dividend Characteristics	Financial and Reporting Characteristics	0.374	8.208	
Earnings Quality	Financial and Reporting Characteristics	0.635	13.320	
Financial Statement Quality	Financial and Reporting Characteristics	0.702	19.006	
Market and Stock-Related Factors	Tax Avoidance	0.061	4.461	
Market Factors	Market and Stock-Related Factors	0.860	20.945	
Stock Characteristics	Market and Stock-Related Factors	0.720	61.659	

- Direct Effects on Tax Avoidance

Among the five overarching themes, Corporate Governance exhibited the strongest direct effect on tax avoidance (β = 0.600, t = 22.770), followed by Financial and Reporting Characteristics (β = 0.246, t = 8.875) and Audit Quality (β = 0.092, t = 6.505). Market and Stock-Related Factors demonstrated the weakest direct effect (β = 0.061, t = 4.461). All first-level factors were statistically significant at the 99% confidence level (t > 2.58), confirming their roles as determinants of tax avoidance in Iranian firms. The path coefficient for Environmental Factors was not directly estimated in the final model; however, its overall significance (t = 14.618) confirms the relevance of this dimension.

- Components of Corporate Governance

Within the Corporate Governance dimension, Board Characteristics (β = 0.894, t = 68.029) emerged as the most influential component, indicating that board independence, financial expertise, meeting frequency, and compensation structures critically shape tax planning decisions. Ownership Structure (β = 0.739, t = 23.138) and Other Governance Characteristics (β = 0.738, t = 27.551) also demonstrated strong effects, highlighting the

importance of ownership concentration, state ownership, and related-party transactions. Audit Committee Structure (β = 0.685, t = 17.920) and Managerial Personality Traits (β = 0.617, t = 14.783) showed moderate to strong effects, confirming that both structural governance mechanisms and managerial psychological characteristics influence tax avoidance behavior.

- Components of Environmental Factors

Among environmental factors, Competitive Environment (β = 0.862, t = 56.525) exhibited the strongest effect, suggesting that product market competition, information asymmetry, and corporate reputation are primary drivers of tax avoidance. Social Performance (β = 0.699, t = 20.830) and Political Characteristics (β = 0.677, t = 20.859) showed strong effects, indicating that environmental disclosure, social responsibility, political stability, and political connections significantly shape tax behavior. Existing Laws and Regulations (β = 0.627, t = 14.820) demonstrated a moderate-to-strong effect, confirming the role of tax laws, capital market regulations, and tax risk perceptions.

- Components of Audit Quality

Both components of audit quality exhibited strong effects. Auditor Characteristics (β = 0.862, t = 73.761) showed the highest t-statistic in the entire model, indicating exceptional precision in estimating this relationship. Auditor tenure, size, and industry expertise play critical roles in monitoring tax positions. Audit Report Quality (β = 0.806, t = 36.823) also demonstrated a very strong effect, confirming that audit fees, report lag, and report type influence the effectiveness of external tax oversight.

- Components of Financial and Reporting Characteristics

Within this dimension, Firm Performance (β = 0.719, t = 15.530) and Financial Statement Quality (β = 0.702, t = 19.006) exhibited the strongest effects, suggesting that profitable firms with high-quality financial reporting have greater capacity for sophisticated tax planning. Earnings Quality (β = 0.635, t = 13.320) and Firm Structure (β = 0.509, t = 8.021) showed moderate to strong effects. Firm Costs (β = 0.130, t = 2.162) demonstrated the weakest effect in the model, remaining statistically significant only at the 95% confidence level, indicating that wage costs and cost of debt play a relatively minor role in tax avoidance decisions compared to other factors.

- Components of Market and Stock-Related Factors

Both components in this dimension showed strong effects. Market Factors (β = 0.860, t = 20.945) and Stock Characteristics (β = 0.720, t = 61.659) confirmed that investor protection, firm risk, market reactions, stock liquidity, and private price information significantly influence tax planning strategies. The exceptionally high t-statistic for stock characteristics indicates remarkable precision in this estimate.

4. Discussion and Conclusion

The present study sought to identify, prioritize, and validate a multidimensional model of the determinants of corporate tax avoidance among companies listed on the Tehran Stock Exchange. The findings generally demonstrate that corporate tax avoidance is not attributable to a single organizational or financial characteristic; rather, it reflects the simultaneous operation of corporate governance, environmental conditions, audit quality, financial and reporting characteristics, and market- and stock-related factors. The fuzzy Delphi results first showed that financial and reporting characteristics received the highest priority from experts, followed by audit quality, environmental factors, market- and stock-related factors, and corporate governance. Exploratory factor analysis subsequently identified 21 latent factors distributed across the five overarching dimensions, with the extracted factors explaining between 79.13% and 88.58% of the variance in their respective dimensions. The reliability and convergent validity indices were also satisfactory, with Cronbach's alpha, composite reliability, and AVE values

exceeding conventional thresholds. These findings support the conceptualization of tax avoidance as a complex and multidimensional corporate decision that is embedded in accounting information, monitoring structures, institutional conditions, managerial behavior, and capital-market mechanisms.

An important finding concerns the apparent distinction between the expert-based prioritization and the structural relationships identified in the final model. Although corporate governance ranked below the other overarching dimensions in the fuzzy Delphi prioritization, it exhibited the strongest direct structural effect on tax avoidance ($\beta = 0.600$, $t = 22.770$). This result suggests that experts may perceive financial and reporting variables as more immediately observable manifestations of tax planning, whereas governance mechanisms constitute deeper organizational conditions that determine whether firms possess the incentives, discretion, and monitoring environment necessary to engage in avoidance. The finding is consistent with research demonstrating that corporate governance quality significantly shapes firms' tax strategies [7, 8]. It also accords with evidence from Iranian listed companies indicating that board characteristics are significantly associated with corporate tax avoidance [9]. Thus, even when governance is not perceived as the most visible determinant, it may operate as the organizational architecture through which other tax-related decisions are authorized and controlled.

Within corporate governance, board characteristics emerged as the most influential component ($\beta = 0.894$, $t = 68.029$), followed by ownership structure ($\beta = 0.739$), other governance characteristics ($\beta = 0.738$), audit committee structure ($\beta = 0.685$), and managerial personality traits ($\beta = 0.617$). The particularly strong role of board characteristics implies that board independence, financial expertise, meeting patterns, board size, and compensation arrangements can materially influence tax-planning behavior by affecting managerial monitoring and strategic oversight. This interpretation is supported by evidence showing that governance mechanisms constrain or facilitate tax avoidance depending on the effectiveness of internal supervision [7, 8]. The importance of ownership structure also corresponds with findings that institutional investors can influence corporate tax policies through their monitoring capacity and performance expectations [10]. Likewise, the role of related-party transactions within the governance dimension is compatible with evidence that these transactions can provide tax benefits and that government ownership can modify their relationship with tax avoidance [4].

The significant contribution of managerial personality traits further shows that tax avoidance cannot be understood purely through formal governance structures. Managers interpret uncertainty, evaluate regulatory risk, and decide how aggressively available tax opportunities should be pursued. The findings therefore align with evidence that managerial ability facilitates the identification and implementation of sophisticated tax-planning opportunities [12]. They are also consistent with Iranian evidence showing that CEO overconfidence is related to corporate tax avoidance and can modify the relationship between organizational resources and tax behavior [13]. Accordingly, boards may establish similar formal governance arrangements across firms, yet different executives can produce different tax outcomes because of variations in ability, risk tolerance, confidence, and strategic orientation.

Environmental factors also proved important. Although a direct path coefficient from the environmental dimension to tax avoidance was not estimated in the final structural model, its overall t-statistic of 14.618 demonstrated the significance of this dimension. Within it, the competitive environment produced the strongest loading or structural contribution ($\beta = 0.862$, $t = 56.525$), followed by social performance ($\beta = 0.699$), political characteristics ($\beta = 0.677$), and existing laws and regulations ($\beta = 0.627$). These findings indicate that corporate tax decisions are strongly conditioned by forces outside the firm. Competitive pressure may encourage managers to preserve cash and improve after-tax performance, while information asymmetry can reduce external stakeholders'

ability to observe aggressive tax positions. Corporate reputation may work in the opposite direction by increasing the reputational costs associated with controversial tax behavior.

The significant role of social performance corresponds with legitimacy-based explanations of corporate tax behavior. Companies that rely heavily on stakeholder approval may be less willing to undertake tax strategies that could be perceived as inconsistent with responsible corporate citizenship. Iranian evidence has similarly linked tax avoidance to social legitimacy, emphasizing that firms' taxation decisions are influenced by their need to maintain social acceptance [19]. International evidence also indicates that corporate social responsibility is related to tax avoidance, suggesting that firms must balance the financial gains from reducing tax liabilities against potential reputational and stakeholder costs [20]. This interpretation is strengthened by research emphasizing the moral dimension of tax avoidance and showing that perceptions of tax behavior involve competing evaluations of legality, fairness, responsibility, and corporate obligations to society [1].

Political characteristics and existing laws and regulations were likewise substantial components of the environmental dimension. This finding is particularly important in an emerging-market setting, where enforcement consistency, institutional stability, political connections, and regulatory complexity can significantly alter the expected costs and benefits of tax planning. Previous Iranian research has demonstrated that business strategy and political connections are associated with tax avoidance [14], while the quality of the institutional environment and tax-law enforcement has also been identified as an important determinant [16]. The present findings therefore reinforce the argument that formal tax regulations alone are insufficient to explain tax outcomes; what matters is also how regulations are implemented, how predictable enforcement is, and whether some firms possess political or institutional advantages. This conclusion is consistent with preventive models developed in the Iranian context that emphasize institutional oversight and regulatory conditions in controlling tax avoidance [17]. It is also compatible with broader Iranian evidence showing that tax noncompliance arises from interacting legal, administrative, economic, and organizational conditions [18].

Audit quality was ranked second in the fuzzy Delphi stage and also demonstrated a statistically significant direct effect on tax avoidance ($\beta = 0.092$, $t = 6.505$). More importantly, both components of this dimension showed very strong relationships with audit quality: auditor characteristics had a coefficient of 0.862 and audit report quality had a coefficient of 0.806. Auditor characteristics also generated the highest t-statistic among the modeled components ($t = 73.761$). These results indicate that auditor tenure, audit-firm size, professional expertise, audit fees, reporting lag, and report type collectively constitute an important external monitoring mechanism. The finding is strongly consistent with evidence that auditor industry specialization constrains tax avoidance because specialized auditors possess superior knowledge of sector-specific transactions and tax-planning opportunities [21]. It also agrees with research showing that tax avoidance is associated with longer audit-report delays and that auditor type can moderate this association [22]. Accordingly, aggressive or complex tax positions may require additional audit effort, while better-qualified auditors are more capable of recognizing transactions designed primarily to reduce taxable income.

Financial and reporting characteristics constituted the highest-priority dimension in the expert assessment and had the second strongest estimated direct effect among dimensions with reported coefficients ($\beta = 0.246$, $t = 8.875$). The dimension was also the most internally complex, comprising eight latent factors. Firm performance ($\beta = 0.719$) and financial statement quality ($\beta = 0.702$) were its strongest components, followed by earnings quality ($\beta = 0.635$), firm structure ($\beta = 0.509$), cash holdings ($\beta = 0.452$), financial constraints ($\beta = 0.408$), dividend characteristics ($\beta = 0.374$), and firm costs ($\beta = 0.130$). This pattern shows that tax avoidance is closely connected to the firm's broader

accounting and financial architecture. More profitable and financially capable firms may possess greater resources for specialist tax advice and complex tax planning, but greater profitability and size can simultaneously increase regulatory visibility. Earlier Iranian evidence has similarly shown that firm size and profitability are associated with tax avoidance [23].

The strong role of financial statement quality is also noteworthy because tax-planning decisions are closely linked to the informational environment of the firm. Financial reporting quality can improve external monitoring, yet sophisticated firms may also use accounting discretion when coordinating book and taxable income. Research on mandatory disclosure demonstrates that changes in private disclosure requirements can affect firms' public disclosure decisions [5], while evidence concerning business complexity indicates that organizational complexity materially influences voluntary disclosure behavior [6]. The present findings therefore suggest that transparency, comparability, restatements, earnings quality, and related reporting characteristics should be regarded as central elements of the tax-avoidance environment rather than merely secondary accounting outcomes.

Firm costs had the weakest component effect in the model ($\beta = 0.130$, $t = 2.162$), although the relationship remained statistically significant at the 95% confidence level. This result suggests that wage costs and cost-of-debt considerations are less influential in Iranian firms than governance, financial reporting, or competitive factors. The finding provides a useful qualification to international research showing that labor costs can create incentives for corporate tax avoidance [27]. It also differs in relative magnitude from evidence linking inefficient labor investment with tax avoidance [26]. One possible explanation is that labor-related costs in the Iranian institutional environment may provide fewer opportunities for tax optimization than other accounting, governance, or regulatory mechanisms. Alternatively, firms may respond to cost pressures primarily through operational adjustments rather than tax-planning strategies.

Market and stock-related factors had the smallest direct effect among the estimated overarching dimensions ($\beta = 0.061$, $t = 4.461$), but both of their underlying components remained strong: market factors had a coefficient of 0.860 and stock characteristics had a coefficient of 0.720. Thus, the relatively small direct effect should not be interpreted as evidence that capital-market variables are irrelevant. Rather, market influences may operate indirectly through governance, information transparency, financial performance, or investor monitoring. The importance of stock liquidity within this dimension is supported by evidence showing that greater liquidity affects firms' incentives and opportunities for tax avoidance by increasing capital-market monitoring [24]. Similarly, aggressive tax planning has been associated with stock-price synchronicity, demonstrating that taxation strategies can influence the amount and quality of firm-specific information reflected in stock prices [25]. Market visibility, investor protection, risk, and private information therefore constitute meaningful elements of the wider tax-planning environment.

The results also support the value of an integrated methodological approach. The fuzzy Delphi procedure achieved consensus regarding a large set of potential determinants, after which exploratory and confirmatory analyses reduced them to 21 empirically distinguishable latent factors. The satisfactory reliability and validity results indicate that the identified dimensions represent coherent constructs rather than an arbitrary collection of indicators. The usefulness of fuzzy and multicriteria techniques for structuring complex organizational decisions has been demonstrated in Iranian research using fuzzy analytical hierarchy methods [29] and integrated fuzzy decision-making approaches [30]. More generally, previous research in organizational settings has shown that performance and managerial outcomes typically arise from combinations of operational, technological, behavioral, and organizational determinants rather than isolated variables [28, 31, 32]. Similar multidimensional reasoning has

been applied to credit-risk management and organizational behavioral outcomes [33-35]. The present study extends this systems-oriented perspective to corporate taxation by empirically organizing a broad range of determinants into a validated framework.

Taken together, the findings indicate that tax avoidance among Tehran Stock Exchange-listed companies is best understood as the outcome of interdependent internal and external mechanisms. Financial and reporting variables appear particularly salient to experts, while corporate governance demonstrates the strongest direct structural relationship with tax avoidance. Audit quality provides an external monitoring mechanism, environmental characteristics determine the institutional opportunities and constraints within which firms operate, and capital-market conditions shape monitoring and informational incentives. This integrated interpretation is consistent with recent evidence that tax administration and compliance systems affect avoidance behavior [2], that tax differentials can generate profit-shifting incentives [3], and that ownership and related-party structures can create or constrain opportunities for tax minimization [4]. The principal contribution of the model is therefore to demonstrate that effective understanding and prevention of corporate tax avoidance require simultaneous attention to governance architecture, institutional enforcement, auditing, financial reporting, managerial characteristics, and market monitoring rather than dependence on any single explanatory mechanism.

The findings should be interpreted in light of several limitations. First, the study was conducted within the institutional and regulatory environment of companies listed on the Tehran Stock Exchange, which may limit the generalizability of the model to unlisted firms, smaller enterprises, financial institutions subject to specialized regulation, or companies operating in other national tax systems. Second, the fuzzy Delphi stage depended on expert judgments, which, despite the achievement of consensus, remain susceptible to respondents' professional experiences and subjective evaluations. Third, the quantitative validation relied substantially on questionnaire-based measures and cross-sectional data; therefore, the results demonstrate relationships among the identified constructs but do not establish temporal or definitive causal relationships. Fourth, some determinants of tax avoidance may evolve in response to changes in tax legislation, digital reporting systems, economic instability, and enforcement practices. Finally, although the final model incorporated a broad set of determinants, additional behavioral, technological, industry-specific, and macroeconomic factors may exist that were not captured within the present framework.

Future studies should test the proposed model using longitudinal data to determine whether the relative importance of its dimensions changes following amendments to tax laws, changes in enforcement intensity, economic shocks, or corporate governance reforms. Replication across industries would help establish whether sectors with different levels of regulation, capital intensity, international activity, or ownership concentration exhibit different patterns of tax avoidance. Comparative studies involving other emerging and developed economies could also clarify which determinants are specific to the Iranian institutional environment and which are more universal. Future research could integrate objective archival indicators of tax avoidance with questionnaire-based assessments and examine mediating or moderating mechanisms among governance, audit quality, reporting characteristics, political connections, and market monitoring. Researchers may also apply longitudinal structural equation modeling, machine-learning techniques, configurational approaches, or dynamic panel models to investigate nonlinear relationships and combinations of determinants that generate particularly high or low levels of tax avoidance. Additional attention should also be given to digital tax administration, artificial intelligence in tax auditing, managerial risk preferences, ownership networks, and the role of industry-specific tax incentives.

Tax authorities, corporate boards, auditors, and capital-market regulators should adopt an integrated risk-based approach to the control of corporate tax avoidance. Tax authorities can use the identified dimensions as a screening framework to detect firms displaying combinations of high-risk characteristics rather than relying exclusively on traditional financial ratios. Corporate boards should strengthen independence, financial expertise, audit committee effectiveness, internal controls, and oversight of related-party transactions while incorporating tax-risk governance into strategic decision-making. Audit firms should enhance industry-specific and tax-related expertise, improve the timeliness and quality of audit reporting, and devote greater attention to complex transactions and reporting structures associated with aggressive tax positions. Securities regulators should improve disclosure requirements, financial statement comparability, investor protection, and transparency concerning ownership and political connections. At the organizational level, firms should establish formal tax-governance policies that integrate financial reporting, risk management, ethical responsibility, and board oversight so that tax planning remains consistent with legal requirements, long-term corporate reputation, and sustainable value creation.

Authors' Contributions

Authors equally contributed to this article.

Ethical Considerations

All procedures performed in this study were under the ethical standards.

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Conflict of Interest

The authors report no conflict of interest.

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