Journal of Information Systems Engineering and Management
2025, 10(47s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/

Research Article

Ranking the Factors Affecting Tax Administration Efficiency for Construction Enterprises: A Delphi-AHP Approach

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ARTICLE INFO

Received: 30 Dec 2024

Revised: 12 Feb 2025

Accepted: 26 Feb 2025

ABSTRACT

Tax administration efficiency plays a pivotal role in ensuring fiscal sustainability and fostering a transparent business environment, particularly in the construction sector, where financial complexity and regulatory demands pose significant challenges. This study aims to identify and prioritize the key factors influencing tax administration efficiency for transportation infrastructure construction enterprises in Hanoi, Vietnam. Employing a two-phase Delphi-AHP approach, expert consensus was first established through iterative Delphi rounds to refine a set of relevant criteria. Subsequently, the Analytic Hierarchy Process (AHP) was utilized to quantify the relative importance of these factors through structured pairwise comparisons. The results reveal that "Tax Policies and Regulations" is the most influential factor, followed by "Tax Administration Functions" and "Socio-Economic Environment." Among 27 sub-factors, the clarity and enforceability of tax policies emerged as the top priority. These findings offer empirical insights for policymakers and tax authorities to formulate targeted reforms aimed at enhancing the effectiveness of tax administration in the construction industry. The integrated Delphi-AHP framework also demonstrates its practical applicability in complex multi-criteria decision-making contexts related to public sector governance.

Keywords: Tax administration efficiency; Construction enterprises; Delphi method; Analytic Hierarchy Process (AHP); Vietnam; Tax policy.

INTRODUCTION

Efficient tax administration plays a crucial role in ensuring government revenue collection while fostering a fair and transparent business environment. In developing economies like Vietnam, the construction sector, particularly transportation infrastructure enterprises, contributes significantly to economic growth. However, tax administration for construction enterprises presents unique challenges due to the complexity of financial transactions, project-based operations, and regulatory compliance requirements (Andrade Moreno et al., 2021; Davletshin, 2019; Hashani et al., 2022; Luzgina, 2017; Matarirano et al., 2019a). In Hanoi, Vietnam, these challenges are further compounded by evolving tax policies and administrative inefficiencies, which can impact compliance and revenue collection.

Several factors influence the effectiveness of tax administration, including regulatory frameworks, taxpayer compliance behavior, administrative procedures, and digital transformation in tax management. Identifying and prioritizing these factors is essential for policymakers and tax authorities to implement targeted reforms and enhance efficiency. Despite extensive research on tax administration, limited studies focus specifically on the construction sector, where project financing, contract-based transactions, and fluctuating cash flows create distinct tax-related issues. This study aims to fill this gap by systematically evaluating and ranking the factors affecting tax administration efficiency for construction enterprises in Hanoi.

To achieve this, we adopt a Delphi-AHP approach. The Delphi method is employed to gather expert opinions and establish a consensus on key influencing factors. Subsequently, the Analytic Hierarchy Process (AHP) is used to

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Research Article

determine the relative importance of these factors through pairwise comparisons. This combined methodology ensures a comprehensive and systematic assessment, enabling data-driven decision-making for tax authorities and policymakers (Aoun et al., 2021; Jiménez Borges et al., 2024; Kadkhodazadeh et al., 2025; Karam et al., 2021; Khan et al., 2022; Lin & Huang, 2024; Qureshi et al., 2024; Sahoo & Thakur, 2024; Wei et al., 2025).

KEY FACTORS INFLUENCING TAX ADMINISTRATION EFFICIENCY

Tax administration efficiency is shaped by a complex interplay of regulatory, institutional, technological, and behavioral factors. Within the context of transportation infrastructure construction enterprises, six critical domains stand out as particularly influential: tax policies and regulations, socio-economic environment, internal resources of tax authorities, enterprise compliance capacity, digital technology, and administrative functions. Utilizing a systematic literature review and the Delphi method, this study identifies and synthesizes the key factors impacting tax administration efficiency, as summarized in Table 1 and illustrated in Figure 2.

APPLICATION OF DELPHI AND AHP METHODS IN TAX RESEARCH

The Delphi Method and the Analytic Hierarchy Process (AHP) have been widely used in tax administration research to identify and prioritize influential factors:

– Delphi Method: This structured expert-based approach is effective in evaluating tax administration challenges, as it allows iterative refinement of expert opinions (Okoli & Pawlowski, 2004). Previous research has successfully used Delphi to assess tax policy effectiveness and tax officer competencies (Gómez & Rodríguez, 2020).

– AHP: This method facilitates multi-criteria decision-making by ranking factors based on their relative importance (Saaty, 1980). AHP has been applied in tax policy evaluation and enterprise tax compliance analysis (Wang & Lee, 2021).

By integrating Delphi and AHP methodologies, this study aims to systematically rank the factors affecting tax administration efficiency in Vietnam's transportation infrastructure construction sector, providing empirical insights for policymakers and tax authorities.

METHODOLOGY

This study employs a mixed-method approach, integrating both qualitative and quantitative techniques to systematically rank the factors influencing tax administration efficiency in transportation infrastructure construction enterprises in Hanoi, Vietnam. The Delphi Method is used to gather expert consensus on key criteria, while the Analytic Hierarchy Process (AHP) is applied to quantify the relative importance of these factors. The research methodology is shown in Figure 1.

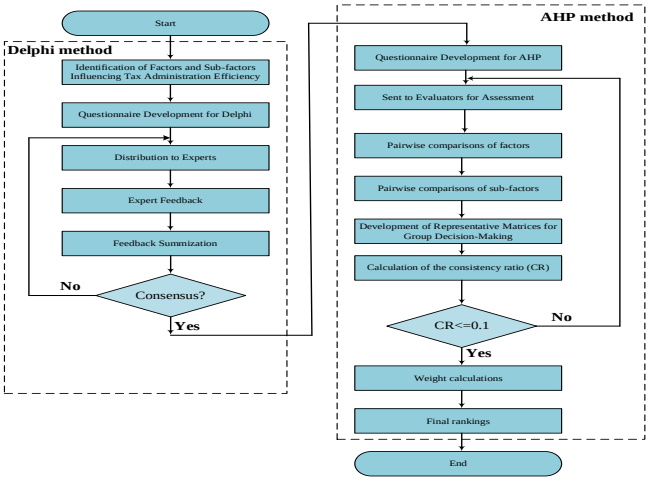

Figure 1: The research methodology

The Delphi method is a structured communication technique designed to elicit and refine expert judgments through a series of iterative survey rounds. It is particularly valuable in contexts characterized by uncertainty, limited

Journal of Information Systems Engineering and Management
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Research Article

empirical data, or the need to reach consensus on multifaceted or subjective issues. Originally developed by the RAND Corporation in the 1950s, the Delphi method has since been widely adopted across disciplines, including policy analysis, healthcare, education, and management science.

Central to the Delphi method is the use of a panel of experts who are selected based on their knowledge and experience in the subject area. The process typically begins with the development of a questionnaire, often grounded in literature review or exploratory research, which is then distributed to the panel. In the first round, experts are invited to evaluate a set of items—such as factors, criteria, or statements—using a predefined response scale (commonly a Likert scale) and may also provide suggestions for revisions or additions.

Following the first round, the responses are aggregated and analyzed, and a statistical summary is prepared. In the second and any subsequent rounds, the panel is presented with the revised list of items along with anonymized feedback from the previous round. Experts are then asked to reconsider their evaluations in light of the group's responses, facilitating convergence of opinion. This iterative process continues until a predefined level of consensus is achieved.

Consensus is often assessed using statistical indicators such as the percentage of agreement, the standard deviation, or the interquartile range (IQR). A commonly used criterion is that at least 75% of experts must agree on an item (e.g., by rating it above a certain threshold), or that the IQR does not exceed 1.0 on a Likert scale. The number of rounds may vary depending on the complexity of the topic and the level of agreement reached.

The strengths of the Delphi method lie in its ability to structure expert judgment while minimizing the effects of groupthink, peer pressure, and dominant voices. Its iterative and anonymous nature allows for more thoughtful and independent contributions, ultimately enhancing the reliability and validity of expert-derived insights. As such, the Delphi technique is particularly suited to the development of frameworks, identification of critical factors, and validation of criteria in both theoretical and applied research.

The Analytic Hierarchy Process (AHP), introduced by Saaty (1980), is a structured technique for analyzing complex decision problems involving multiple criteria. It decomposes a problem into a hierarchical structure and uses pairwise comparisons to assign relative weights to decision elements. When multiple experts are involved, Group AHP is used to synthesize individual judgments into a collective priority ranking, ensuring the decision outcome reflects a balanced group perspective.

- Step 1: Hierarchical Structuring

The first step in AHP is to construct a hierarchy that typically includes three levels:

  - Level 1: The overall goal (e.g., evaluating tax administration efficiency)
  - Level 2: Factors (e.g., Tax Policies and Regulations, Socio-Economic Environment)
  - Level 3: Sub-factors (e.g., Clear, consistent, and enforceable tax policies, Probability of tax audits)

- Step 2: Pairwise Comparison

Each expert provides pairwise comparisons of elements at the same hierarchical level with respect to an element at the immediate upper level using the fundamental 1–9 scale proposed by Saaty:

  - 1 = equal importance
  - 3 = moderate importance
  - 5 = strong importance
  - 7 = very strong importance
  - 9 = extreme importance

Let expert k (where $k = 1,2,\ldots,m$ provide a pairwise comparison matrix $A^{(k)} = \left[a_{ij}^{k}\right]$, where a_{ij}^{k} indicates how much more important element i is over element j.

- Step 3: Aggregation of Judgments

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Research Article

To derive a group consensus matrix, the geometric mean is used to combine the individual judgments:

$$a_{ij}^{group} = \left(\prod_{k=1}^{m} a_{ij}^{(k)}\right)^{\frac{1}{m}} \quad (1)$$

The aggregated matrix $A^{group} = \left[a_{ij}^{group}\right]$ is then used for further analysis.

– Step 4: Priority Vector Calculation

The priority vector $w = [w_1, w_2, \ldots, w_n]^T$ is computed from the group matrix using the eigenvector method, satisfying:

$$A^{group}.w = \lambda_{max}.w \quad (2)$$

where λ_{max} is the principal eigenvalue. Alternatively, the normalized geometric mean method can be used as an approximation:

$$w_i = \frac{\left(\prod_{j=1}^{n} a_{ij}^{group}\right)^{\frac{1}{n}}}{\sum_{i=1}^{n}\left(\sum_{j=1}^{n} a_{ij}^{group}\right)^{\frac{1}{n}}} \quad (3)$$

– Step 5: Consistency Check

To ensure the judgments are logically consistent, the Consistency Index (CI) and Consistency Ratio (CR) are calculated:

$$CI = \frac{\lambda_{max}-n}{n-1},\ CR = \frac{CI}{RI} \quad (4)$$

where:

- λ_{max} is the maximum eigenvalue of the matrix
- n is the number of elements compared
- RI is the average random consistency index (depends on n)

A $CR \leq 0.10$ is generally considered acceptable. In group AHP, only the judgments with CR within this threshold are included in the aggregation.

– Step 6: Synthesis and Ranking

Once local priorities are derived for each level of the hierarchy, the global weights of alternatives are calculated by multiplying the weights across levels. The final output is a prioritized ranking of factors or alternatives.

RESULTS AND DISCUSSION

The Delphi process was conducted in February 2025 and involved a purposive sample of nine experts who possess extensive knowledge and practical experience in tax administration. The panel comprised senior tax officers from district- and provincial-level tax departments, financial directors of transportation construction companies, and academic specialists in taxation and public finance. Positions included, for example, Deputy Heads of Tax Departments, Chief Financial Officers, and university lecturers in public sector economics. This diverse composition ensured a comprehensive perspective on the challenges and dynamics of tax management in the construction sector.

The Delphi process was carried out over two rounds of surveys. Initially, a comprehensive literature review informed the development of a structured questionnaire, comprising 28 sub-factors organized under six overarching factors. In the first round, experts were asked to rate each sub-factor's relevance using a 5-point Likert scale and to propose any additions or modifications. Based on their responses, 26 sub-factors achieved an average rating of ≥4.0, reflecting expert agreement on their importance. Furthermore, one additional sub-factor was suggested and subsequently incorporated into the list. Thus, a total of 27 sub-factors were retained for the second Delphi round.

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Research Article

In the second round, experts reviewed the revised list of 27 sub-factors and indicated their agreement or disagreement with each item. The results demonstrated a high level of consensus, with all 27 sub-factors receiving agreement from at least 88% of participants, thereby meeting the predetermined consensus threshold.

As a result of the Delphi process, 27 sub-factors (Table 1 and Figure 2) were finalized and deemed sufficiently validated for inclusion in the subsequent Analytic Hierarchy Process (AHP) phase, where their relative importance was quantitatively assessed.

Table 1: Identified Factors and Sub-factors Influencing Tax Administration Efficiency

Code	Factor/Sub-Factor
F1	**Tax Policies and Regulations**
F11	Clear, consistent, and enforceable tax policies
F12	Tax policies tailored to the characteristics of the transportation infrastructure construction sector
F13	Alignment between tax policies and accounting regulations
F2	**Socio-Economic Environment**
F21	Government economic development policies for transportation infrastructure construction activities
F22	High inflation reduces tax administration efficiency by affecting corporate financial capacity and compliance
F23	Public investment disbursement impacts cash flow and tax obligations of transportation infrastructure construction enterprises
F24	Political and national security stability facilitates the implementation of tax policies and management measures
F3	**Internal Resources of Tax Authorities**
F31	Adequate and modern tax administration support equipment
F32	A work environment that ensures favorable conditions for tax officers
F33	Professional competence of tax officers
F34	Clear organizational structure with a well-defined hierarchy in tax management
F35	Effective coordination among functional units within the tax authority
F4	**Tax Compliance Awareness and Capacity of Enterprises**
F41	Enterprises clearly understand their tax responsibilities and obligations
F42	Probability of tax audits
F43	Financial capacity of enterprises
F44	Enterprises' ability to apply and utilize information technology
F5	**Digital Technology**
F51	Level of application of the electronic tax management system
F52	Integration and synchronization capability of tax data
F53	IT proficiency of tax officers
F54	Online taxpayer support systems
F6	**Tax Administration Functions**
F61	Timely and comprehensive tax notifications
F62	Appropriate procedures for tax registration, declaration, payment, refund, exemption, and reduction
F63	Sufficient tools for tax inspection and auditing to detect violations
F64	Strong enforcement mechanisms to deter tax violations
F65	Tax awareness campaigns that help enterprises understand their tax obligations
F66	Timely resolution of tax complaints
F67	The tax collection management approach adopted by the tax authority

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Research Article

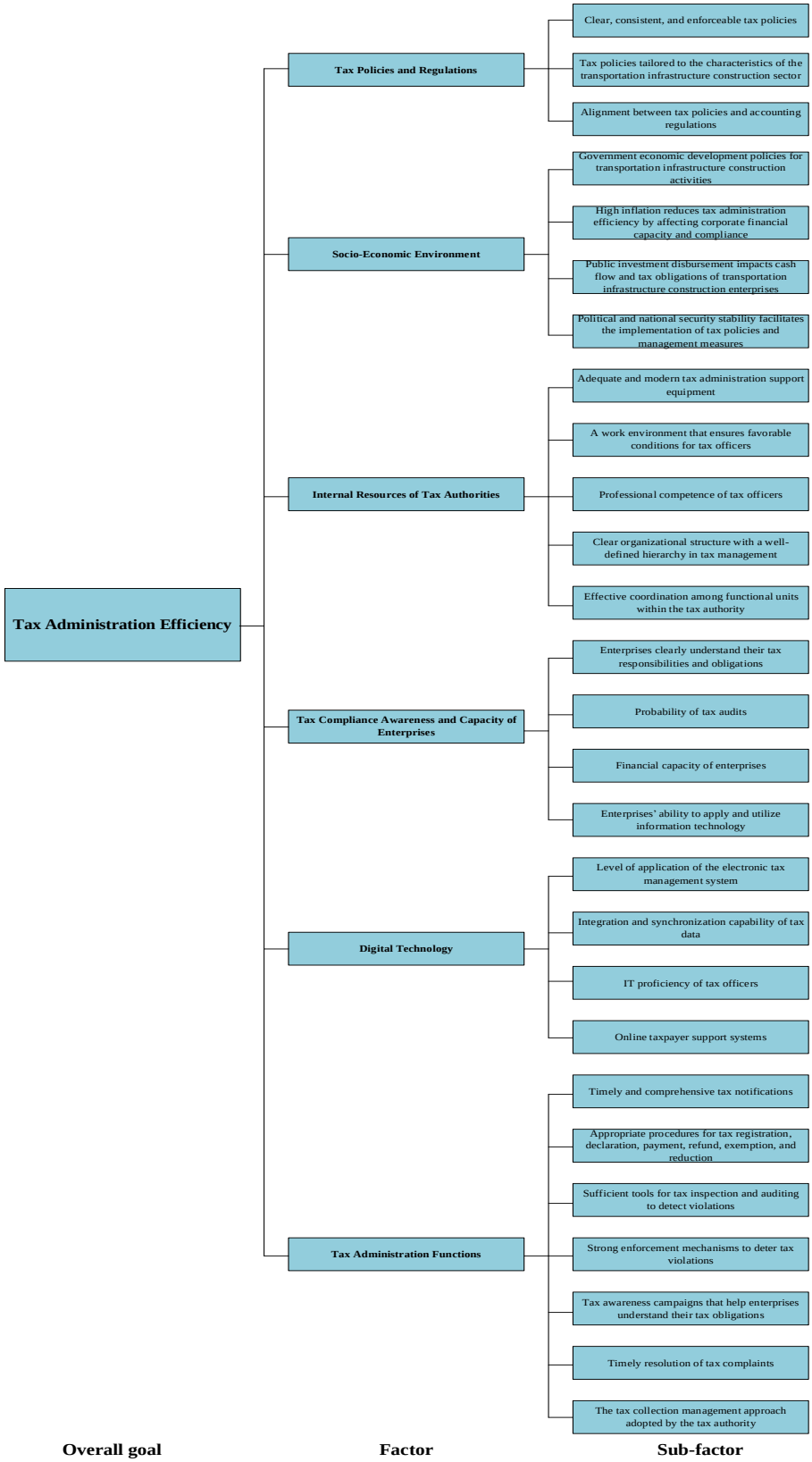

Figure 2: The hierarchy of factors and sub-factors affecting tax administration efficiency

Following the completion of the Delphi process, a total of 27 validated sub-factors, organized under six principal factor groups, were finalized for further prioritization using the Analytic Hierarchy Process (AHP). To operationalize

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Research Article

this phase, a structured AHP questionnaire was developed, incorporating pairwise comparisons to assess the relative importance of the identified sub-factors.

The survey was administered to a target group of 143 tax practitioners operating within the transportation infrastructure construction sector in Hanoi, Vietnam. This group included both officers from local tax branches (e.g., district and ward-level tax departments) and tax personnel directly responsible for fulfilling tax obligations within transportation construction enterprises. The respondents were selected based on their active involvement in tax-related decision-making and compliance implementation, ensuring that the responses reflected practical insights grounded in real-world tax administration processes.

Data collection was conducted through direct interviews over a three-week period during the latter half of March 2025. This approach facilitated clarification of complex comparisons and ensured a high response rate with reliable data quality. Upon completion, each respondent's AHP responses were evaluated for logical consistency by calculating the Consistency Ratio (CR), in accordance with Saaty's (1980) methodology. Only responses with a CR value of 0.10 or lower were considered acceptable for inclusion in the final analysis, thereby ensuring methodological rigor.

Out of the total 143 distributed questionnaires, 110 were retained for analysis based on this consistency criterion. The final AHP results, derived from these 110 valid responses, are presented in Tables 2 and 3, as well as Figures 3 and 4. These results offer a detailed account of the relative weights and rankings of both the main factors and the sub-factors influencing tax administration efficiency in the construction sector.

Table 2: Weights and Priority Ranks of Factors Affecting Tax Administration Efficiency

Code	Factor	Weight	Rank
F1	Tax Policies and Regulations	0.3654	1
F2	Socio-Economic Environment	0.1287	3
F3	Internal Resources of Tax Authorities	0.0990	5
F4	Tax Compliance Awareness and Capacity of Enterprises	0.0513	6
F5	Digital Technology	0.1171	4
F6	Tax Administration Functions	0.2385	2

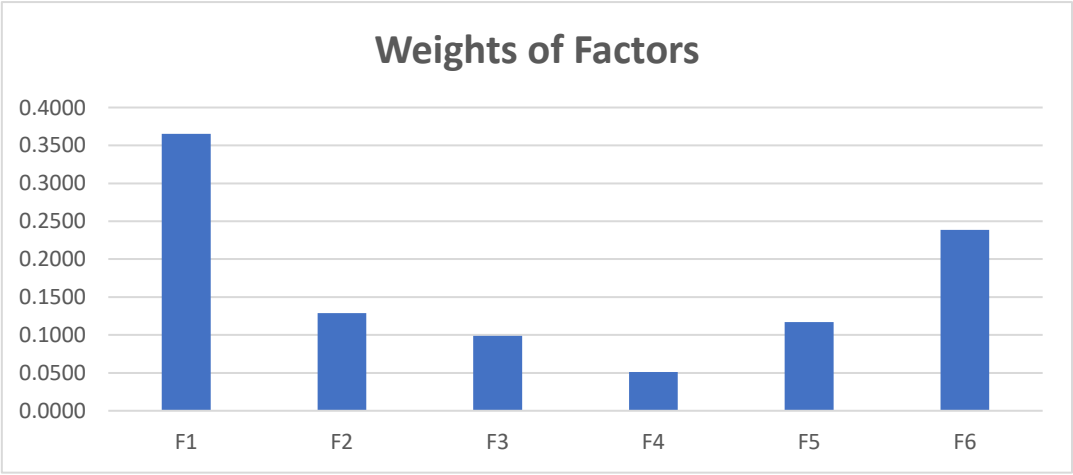

Figure 3: Computed Weights of Factors Based on AHP Analysis

The results of the AHP analysis reveal a clear hierarchy among the six principal factors influencing tax administration efficiency in the construction sector. Tax Policies and Regulations (F1) emerged as the most influential factor,

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https://www.jisem-journal.com/

Research Article

receiving the highest weight of 0.3654. This underscores the central role of a clear, consistent, and enforceable regulatory framework in shaping the effectiveness of tax administration. Ranked second is Tax Administration Functions (F6) with a weight of 0.2385, highlighting the importance of operational procedures such as timely notifications, audit mechanisms, and complaint resolution in promoting administrative efficiency. Socio-Economic Environment (F2) holds the third position (0.1287), indicating that broader contextual factors—such as inflation, public investment, and political stability—play a meaningful, though secondary, role in tax governance. In contrast, Digital Technology (F5) and Internal Resources of Tax Authorities (F3) received moderate weights (0.1171 and 0.0990, respectively), suggesting that while technology and institutional capacity are necessary enablers, they may not exert as strong a direct influence as policy design and administrative functions. Notably, Tax Compliance Awareness and Capacity of Enterprises (F4) ranks lowest (0.0513), implying that enterprise-side compliance behaviors, although relevant, are perhaps more dependent on the effectiveness of the external institutional and regulatory environment. These findings collectively emphasize the primacy of governance and policy structures in enhancing tax administration outcomes.

Table 3: Weights and Priority Ranks of Sub-Factors Affecting Tax Administration Efficiency

Code	Sub-Factor	Weight	Normalized weight	Rank
F11	Clear, consistent, and enforceable tax policies	0.4810	0.1757	1
F12	Tax policies tailored to the characteristics of the transportation infrastructure construction sector	0.2582	0.0944	3
F13	Alignment between tax policies and accounting regulations	0.2607	0.0953	2
F21	Government economic development policies for transportation infrastructure construction activities	0.2144	0.0276	13
F22	High inflation reduces tax administration efficiency by affecting corporate financial capacity and compliance	0.1756	0.0226	16
F23	Public investment disbursement impacts cash flow and tax obligations of transportation infrastructure construction enterprises	0.3513	0.0452	7
F24	Political and national security stability facilitates the implementation of tax policies and management measures	0.2586	0.0333	10
F31	Adequate and modern tax administration support equipment	0.2272	0.0225	17
F32	A work environment that ensures favorable conditions for tax officers	0.1332	0.0132	20
F33	Professional competence of tax officers	0.3103	0.0307	12
F34	Clear organizational structure with a well-defined hierarchy in tax management	0.1996	0.0198	18
F35	Effective coordination among functional units within the tax authority	0.1297	0.0128	22
F41	Enterprises clearly understand their tax responsibilities and obligations	0.5119	0.0263	14
F42	Probability of tax audits	0.1578	0.0081	26
F43	Financial capacity of enterprises	0.2522	0.0129	21
F44	Enterprises' ability to apply and utilize information technology	0.0781	0.0040	27
F51	Level of application of the electronic tax management system	0.2834	0.0332	11

Journal of Information Systems Engineering and Management
2025, 10(47s)
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https://www.jisem-journal.com/

Research Article

Code	Sub-Factor	Weight	Normalized weight	Rank
F52	Integration and synchronization capability of tax data	0.4153	0.0486	5
F53	IT proficiency of tax officers	0.1078	0.0126	23
F54	Online taxpayer support systems	0.1934	0.0226	15
F61	Timely and comprehensive tax notifications	0.0594	0.0142	19
F62	Appropriate procedures for tax registration, declaration, payment, refund, exemption, and reduction	0.1867	0.0445	8
F63	Sufficient tools for tax inspection and auditing to detect violations	0.1953	0.0466	6
F64	Strong enforcement mechanisms to deter tax violations	0.1431	0.0341	9
F65	Tax awareness campaigns that help enterprises understand their tax obligations	0.0504	0.0120	24
F66	Timely resolution of tax complaints	0.0442	0.0106	25
F67	The tax collection management approach adopted by the tax authority	0.3208	0.0765	4

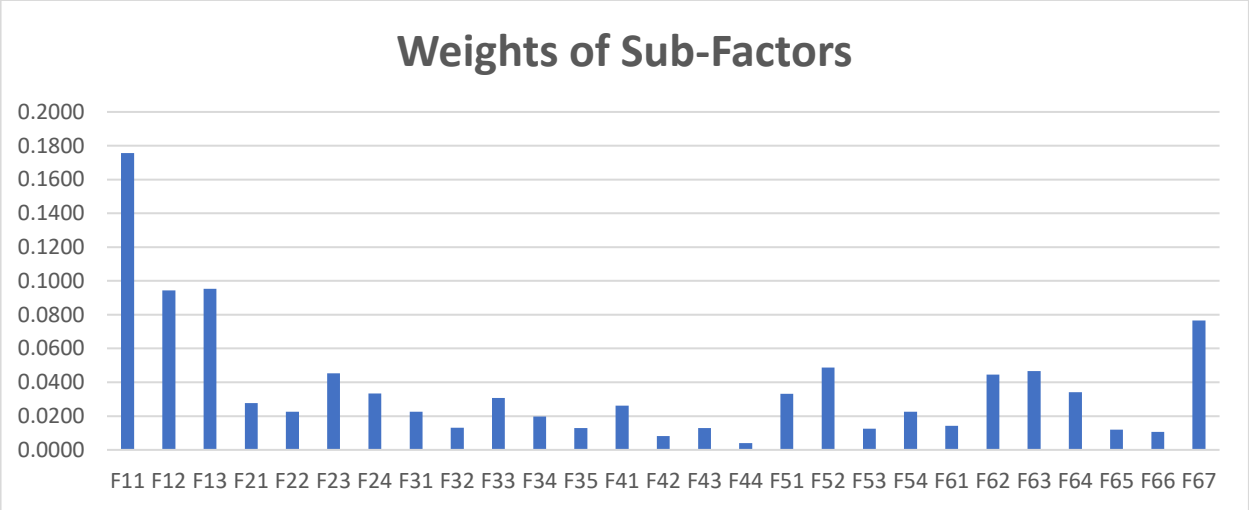

Figure 4: Computed Weights of Sub-factors Based on AHP Analysis

The AHP sub-factor analysis provides nuanced insights into the elements most critical to enhancing tax administration efficiency in the construction sector. Notably, Clear, consistent, and enforceable tax policies (F11) received the highest normalized weight (0.1757), emphasizing the foundational role of regulatory clarity and coherence in facilitating compliance and administrative effectiveness. Closely following are Alignment between tax policies and accounting regulations (F13) and Tax policies tailored to the characteristics of the transportation infrastructure construction sector (F12), ranked second and third, respectively. These findings underscore the importance of policy customization and systemic integration for sectors with complex financial and operational structures.

Among the top-ranked sub-factors, the tax collection management approach adopted by the tax authority (F67) and Integration and synchronization capability of tax data (F52) stand out, reflecting the increasing relevance of management innovation and digital infrastructure in modern tax governance. In contrast, several enterprise-related factors—such as Enterprises' ability to apply and utilize information technology (F44), Probability of tax audits (F42), and Timely resolution of tax complaints (F66)—ranked among the lowest. This suggests that internal enterprise

capacity, while important, may have a more limited direct influence compared to institutional, technological, and policy-driven dimensions.

The relatively low weights assigned to factors such as Work environment for tax officers (F32) and Effective coordination among tax authority units (F35) indicate potential areas for future administrative improvements, although they may not currently be perceived as primary levers of efficiency. Overall, the rankings reflect a strong orientation toward structural, procedural, and technological determinants of tax efficiency, reaffirming the significance of governance quality and sector-specific policy responsiveness.

The present study's findings are largely consistent with existing literature that emphasizes the centrality of regulatory clarity and administrative functionality in effective tax governance. Similar to the current result, which ranks "Tax Policies and Regulations" as the most influential factor, previous studies also identify the legal and policy framework as a cornerstone of tax administration efficiency (Bird & Zolt, 2008; James & Alley, 2002b). In particular, the top-ranked sub-factor— “Clear, consistent, and enforceable tax policies”—echoes findings by Abiola and Asiweh (2012), who underscored the importance of policy transparency and coherence in reducing administrative ambiguity and facilitating compliance.

The prominence of “Tax Administration Functions” in this study also mirrors findings from Bird (2015) and Devos (2013), who stressed the importance of operational capacity, including audit tools, notification systems, and dispute resolution, in shaping tax compliance outcomes. However, the relatively lower ranking of internal enterprise factors, such as the financial or technological capacity of firms, contrasts with some earlier studies focusing on SME compliance behavior in the construction sector (Mahomed, 2013; Matarirano et al., 2019b), which argued that firm-level constraints substantially affect tax compliance costs.

A notable deviation from past research lies in the moderate weight assigned to "Digital Technology." While recent studies have positioned digitalization as a transformational force in tax administration (Bassey et al., 2022; Okunogbe & Pouliquen, 2022), this study suggests that its role, although important, is still secondary to regulatory and functional dimensions. This may reflect context-specific challenges in digital infrastructure adoption or variations in taxpayer readiness, particularly among transportation infrastructure firms in Vietnam.

Furthermore, the Delphi-AHP integration in this study aligns methodologically with similar works that applied multi-criteria decision-making in public sector evaluations (Kadkhodazadeh et al., 2025; Karam et al., 2021). However, few prior studies have focused specifically on the tax administration of construction enterprises using this hybrid approach, thus positioning the current research as a novel contribution to both methodological and applied tax literature.

In sum, while reinforcing established knowledge on the primacy of tax regulation and administrative efficacy, the present study offers sector-specific and context-sensitive insights that highlight areas of convergence and divergence with prior empirical evidence.

CONCLUSION AND RECOMMENDATIONS

This study set out to identify and prioritize the key factors influencing the efficiency of tax administration for transportation infrastructure construction enterprises in Hanoi, Vietnam. In a sector characterized by complex financial arrangements, long project cycles, and stringent regulatory requirements, improving tax administration efficiency is essential to ensuring compliance and maximizing government revenue.

Using a combined Delphi-AHP approach, the study systematically engaged a panel of experts to reach consensus on the most critical factors and sub-factors affecting tax administration. The Delphi method facilitated the refinement of an initial set of criteria through multiple rounds of expert feedback, resulting in the identification of six main factors and twenty-seven sub-factors. Subsequently, the Analytic Hierarchy Process (AHP) was employed to assess the relative importance of these factors through pairwise comparisons.

The results reveal that "Tax Policies and Regulations" is the most influential factor group, followed by "Tax Administration Functions" and the "Socio-Economic Environment." At the sub-factor level, the clarity and consistency of tax policies (F11), alignment between tax and accounting regulations (F13), and the adopted tax

collection management approach (F67) emerged as top priorities. These findings underscore the central role of regulatory clarity, administrative coherence, and effective implementation in enhancing tax administration efficiency.

This research contributes to the existing literature by offering a structured and context-specific framework for evaluating tax administration efficiency in a sector where tax governance remains underexplored. Furthermore, it demonstrates the practical value of integrating qualitative expert consensus with quantitative prioritization tools in public sector decision-making. Based on the findings, the study proposes several recommendations for tax authorities and policymakers:

– Enhance the clarity and consistency of tax regulations, ensuring they are tailored to the specific characteristics of the construction sector. Special attention should be given to aligning tax and accounting frameworks to minimize confusion and reduce administrative burdens for enterprises.

– Strengthen the operational capacity of tax authorities by investing in modern administrative equipment, improving the work environment for tax officers, and enhancing professional training programs to ensure a high level of technical competency.

– Improve administrative functions, particularly with regard to timely tax notifications, robust audit and enforcement mechanisms, and efficient procedures for registration, declaration, and refund. These improvements will help reduce compliance costs and build trust in the tax system.

– Advance digital transformation in tax management by expanding the use of electronic tax platforms, ensuring system interoperability, and improving IT proficiency among tax officers and taxpayers. A user-friendly digital support system can significantly enhance taxpayer engagement and compliance.

– Promote tax awareness and compliance culture among enterprises through targeted campaigns, education programs, and transparent communication strategies.

– Monitor the broader socio-economic environment, including inflation trends, public investment patterns, and political stability, as these elements indirectly impact tax behavior and administration outcomes.

While the study offers valuable insights, several limitations should be acknowledged. First, the research is geographically limited to Hanoi, and findings may not fully reflect conditions in other regions of Vietnam or in other sectors of the economy. Second, the reliance on expert judgment, although mitigated through Delphi and AHP techniques, may still introduce subjectivity.

Future studies could expand the scope to include a comparative analysis across multiple provinces or sectors, incorporate longitudinal data to assess dynamic changes in tax administration performance, or explore the role of emerging technologies—such as AI and blockchain—in enhancing tax governance.

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