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TAX DEBT MANAGEMENT IN THE CONTEXT OF DIGITAL TRANSFORMATION IN VIETNAM

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INTRODUCTION

1. The Urgency of the Research

In the process of public finance reform and modernization of state management, tax debt management plays a central role in revenue governance, determining fiscal discipline and the sustainability of revenue sources. According to modern tax management approaches, tax debt management needs to be placed within the framework of managing the entire tax obligation life cycle, shifting the focus from post-event processing to risk prevention and early intervention for newly formed debts, with digital transformation as the foundation.

Practical evidence from the 2020–2024 period shows that tax debt in Vietnam has increased and accumulated over a long period, reflecting the limitations of management models that lean towards post-event processing and a lack of integration with the overall digital transformation strategy. Therefore, researching "**Tax debt management in the context of digital transformation in Vietnam**" is an essential requirement to innovate management methods towards proactivity, efficiency, and sustainability.

2. Research Objectives and Tasks

2.1. Research Objectives

To propose a system of solutions to improve tax debt management in the context of digital transformation in Vietnam, meeting the requirements of tax management modernization and fitting the practical conditions of the tax industry.

2.2. Research Tasks

(i) Systematize the theoretical framework and international experience;

(ii) Analyze and evaluate the current status of tax debt management in Vietnam during the 2020–2024 period;

(iii) Propose a system of solutions based on data and risk management.

3. Research Objects

Object: Tax debt management in the context of digital transformation in Vietnam.

4. Research Scope

Research Content: The thesis focuses on tax debt management strictly following the operational processes of the tax authorities. It specifically excludes the management of tax debts under the jurisdiction of the customs authorities.

Spatial Scope: The research is conducted within the organizational framework of the Vietnamese tax administration system. During the 2020–2024 period, the system operated under a three-tier model: the General Department of Taxation, Provincial Tax Departments, and District Tax Offices. From 2025, the structure is adjusted to a model comprising the Provincial Tax Department (including the Tax Professional Board), Provincial/City Tax levels, and Local Tax Offices.

Temporal Scope: The thesis primarily analyzes the 2020–2024 period. From 2025 onwards, the study utilizes primary data in conjunction with an empirical research model to propose strategic solutions through 2030, with a long-term vision toward 2035.

5. Research Methodology

The dissertation is conducted based on the methodological framework of dialectical materialism and historical materialism, approaching tax debt management as a systemic management process that evolves within the interrelationships among legal institutions, state budget revenue objectives, and the context of digital transformation.

The study employs synthesis and systematization of theoretical foundations to construct the research framework; the comparative-contrast method is applied to clarify the distinctions between the traditional tax debt management model and the tax debt management model in a digital environment, as well as between practices in Vietnam and international experiences.

Secondary data are collected from legal documents, tax authority reports, and official statistical sources to analyze the current state of tax debt management during the period 2020–2024. Descriptive statistics and trend analysis methods are utilized to evaluate the scale, structure, and dynamics of tax debt.

In addition, the dissertation gathers primary data through a questionnaire survey for quantitative analysis. The research model comprises five groups of factors: legal policy, tax debt management planning, organizational implementation, inspection–supervision–debt enforcement, and coordination, communication–taxpayer support; tax debt management effectiveness serves as the dependent variable.

Survey data are processed using Cronbach's Alpha, Exploratory Factor Analysis (EFA), and multiple regression analysis to test the degree of influence exerted by the identified factors, thereby providing an empirical basis for proposing solutions to improve tax debt management in the context of digital transformation.

6. Scientific Significance, Practical Significance, and New Contributions of the Dissertation

6.1. Scientific Significance

The dissertation contributes to the systematization of the theoretical foundation of tax debt management in the context of digital transformation, approaching tax debt management as an integral component of modern tax administration that is closely linked to risk management and data exploitation. By constructing and empirically testing a research model comprising five groups of factors, the study provides additional empirical evidence on the factors influencing the effectiveness of tax debt management under Vietnamese conditions.

6.2. Practical Significance

The research results systematically reflect the current state of tax debt management in the context of digital transformation within Vietnam's tax sector. On this basis, the dissertation proposes solutions to improve tax debt management in a modern, data-driven, and risk-based direction. These proposals offer valuable references for tax authorities in the process of developing and adjusting policies.

6.3. New Contributions of the Dissertation

Based on theoretical research, practical analysis, and empirical validation, the dissertation "Tax Debt Management in the Context of Digital Transformation in Vietnam" has the following main new contributions:

First, the dissertation develops a theoretical framework for tax debt management in the context of digital transformation, adopting a modern public governance approach.

Second, the dissertation constructs an analytical framework and research model of the factors influencing the effectiveness of tax debt management under digital transformation conditions.

Third, the dissertation clarifies the digital capability gap in tax debt management, emphasizing that the core limitation lies in the capacity to exploit and utilize data.Fourth, the dissertation provides quantitative empirical evidence regarding the degree of impact of various factors on the effectiveness of tax debt management.

Fifth, the dissertation proposes an integrated system of solutions encompassing institutions, organization, technology, and data to modernize and ensure sustainable tax debt management.

7. Structure of the Dissertation

Apart from the introduction, conclusion, list of references, and appendices, the dissertation is structured into four chapters:

Chapter 1: Overview of previous studies related to the research topic.

Chapter 2: Theoretical foundations and international experiences in tax debt management in the context of digital transformation.

Chapter 3: Current status of tax debt management in the context of digital transformation in Vietnam.

Chapter 4: Perspectives and Solutions to Strengthen tax debt management in the context of digital transformation in Vietnam.

CHAPTER 1: OVERVIEW OF STUDIES RELATED TO THE RESEARCH TOPIC

1.1. STUDIES RELATED TO THE RESEARCH TOPIC

1.1.1. Research Works Related to Tax Management, Including Content on Tax Debt Management

Studies conducted during the period 2004–2025 show that tax debt management is increasingly approached as a critical component of modern tax administration, closely linked to risk management and digital transformation.

Regarding the legal framework, research on risk-based tax administration (OECD, 2004), behavioral tax compliance (OECD, 2012), and the development of quantitative compliance indicators (OECD, 2014b) laid the groundwork for integrating debt management into overall tax policy. The IMF (2016) highlights the close relationship between the quality of legislation and the rate of overdue tax debt, while more recent studies emphasize that legislation must support data-driven operations and safeguard taxpayer rights (IMF, 2025a; IMF, 2025c).

In the field of planning, studies on digital transformation strategies for tax administrations and the construction of core integrated IT systems are regarded as foundational for effective debt management (IMF, 2017a; 2017b; 2017c). Research by the OECD (2022d) and IMF (2022b) shows that automated risk classification, electronic reminders, and data-driven planning contribute to improving recovery rates.

Concerning organizational implementation and inspection–supervision, studies on compliance by design, single-point-of-contact debt management models, and financial data connectivity affirm the importance of process standardization and interconnected monitoring (OECD, 2014c; IMF, 2019a; G20/OECD, 2022).

With respect to communication and support, research on behavioral tax communication, personalized reminders, and electronic tax services demonstrates

positive effects on voluntary compliance and the reduction of new debt accumulation (OECD, 2012; IMF, 2021b; OECD, 2024a).

In Vietnam, the majority of studies remain qualitative, lacking quantitative models based on administrative data, thereby forming a research gap that the present dissertation aims to further clarify and address.

1.1.2. Studies Directly Related to Tax Debt Management in the Context of Digital Transformation

Studies conducted during the period 2009–2025 consistently indicate that the effectiveness of tax debt management in a digital environment depends on five key groups of factors: legal framework, tax debt management planning, organizational implementation, inspection–supervision–enforcement, and communication–taxpayer support.

Regarding policy and legislation, research on enhancing transparency in tax law and tracing tax obligations (OECD, 2014a; 2014b), as well as institutionalizing electronic processes in tax debt management (CIAT, 2025a; 2025b), demonstrates that tax debt management remains sustainable only when digital processes are directly integrated into the law. Studies on cross-border tax debt management in the digital economy further emphasize the need for legal harmonization and data sharing (OECD, 2020).

In the area of planning, research on building core IT systems that integrate data (IMF, 2017b) and developing debt collection plans based on risk scoring (WB, 2021) plays a foundational role; studies on automated reminders and behavioral interventions show clear effectiveness in improving timely compliance (WB & GIZ, 2023).

With respect to organizational implementation and inspection–supervision–enforcement, studies on centralized debt management models (WB, 2015; 2017), standardization of processes according to Service Level Agreements (SLA) (OECD, 2022d), and risk stratification using algorithms (OECD, 2023) contribute to enhancing

debt collection productivity; among these, the RA-GAP model provides a quantitative basis for prioritizing resources in monitoring and recovery (IMF, 2022b).

Regarding communication and taxpayer support, research on behavioral-based tax communication (OECD, 2013), electronic tax services (OECD, 2022c), and the application of artificial intelligence in debt reminders (CIAT, 2025c) demonstrates positive impacts on voluntary compliance.

In Vietnam during the period 2015–2024, although studies have emerged on risk-based tax debt management and digital transformation, the majority remain qualitative in nature, lacking quantitative validation based on administrative data. This creates a research gap that the present dissertation seeks to address and clarify.

CHAPTER 2: THEORETICAL FOUNDATIONS AND EXPERIENCES IN TAX DEBT MANAGEMENT IN THE CONTEXT OF DIGITAL TRANSFORMATION

2.1. THEORY ON TAX DEBT

2.1.1. The Concept and Role of Tax Debt

2.1.1.1. Concept

According to international organizations such as the IMF, World Bank, and OECD, tax debt is defined as tax obligations that have become due under legal provisions but have not yet been fulfilled by the taxpayer, recorded on an accrual basis. The scope of tax debt encompasses the principal tax amount, late payment interest, and related penalties. This approach emphasizes the overdue nature of tax obligations and serves as the basis for evaluating management effectiveness through indicators such as the scale of debt, debt aging, and recovery rates.

In Vietnam, the Law on Tax Administration 2019 defines tax debt as amounts payable to the state budget that are managed by tax authorities and have not been paid by the taxpayer upon expiry of the prescribed deadline, including the principal tax, late payment interest, and administrative penalties.

In the context of digital transformation, the concept of tax debt is expanded toward dynamic management. Tax debt is no longer merely regarded as an outstanding balance on the books but as a data object linked to the entire lifecycle of tax obligations. It is continuously monitored through digital information systems—from the moment of incurrence, through reminders and enforcement, to compulsory collection, suspension, or write-off. At the same time, tax debt reflects the taxpayer's level of compliance and payment capacity, serving as a critical input for risk analysis and real-time tax administration.

On this basis, tax debt in the context of digital transformation can be understood as the set of tax obligations that have become due but remain unpaid, recorded and processed on an integrated information system, classified according to recoverability, and associated with standardized data attributes to support risk-based governance and modern tax administration.

2.1.1.2. Characteristics of Tax Debt

First, tax debt possesses mandatory legal force. It arises only when a tax obligation has become due and the taxpayer has failed to fulfill it, serving as the legal basis for applying management and enforcement measures in accordance with regulations.

Second, tax debt has a multi-component structure, consisting of the principal tax amount, late payment interest, and penalties. The value of the debt tends to increase over time if not addressed promptly.

Third, tax debt must be measured simultaneously in terms of outstanding stock, inflows and outflows (generation and recovery), and debt aging in order to fully reflect the quality of management.

Fourth, the recoverability of tax debt varies depending on the legal and financial status of the taxpayer. Therefore, distinguishing between recoverable debt and hard-to-

recover debt constitutes a core requirement for the efficient allocation of management resources.

Fifth, tax debt directly reflects compliance risks and taxpayer behavior, necessitating its management within a risk-based framework rather than through uniform administrative measures.

Sixth, in a digital environment, tax debt is managed as a data entity with standardized electronic records, enabling the automation of business processes and continuous monitoring.

Seventh, tax debt is unilateral in nature and difficult to predict. It is not a loan extended by the State but a legal consequence of the failure to fulfill financial obligations on time.

2.1.1.3. Cause of Tax Debt

The causes of tax debt consist of three main groups:

From the tax authority side: untimely inter-agency coordination, limited quality of propaganda and support, occurrence of erroneous debts and virtual debts.

From the taxpayer side: low compliance awareness, tax appropriation, financial difficulties, weak cash flow management capacity.

Objective causes: economic recession, market fluctuations, natural disasters, epidemics, and other macroeconomic shocks.

2.1.1.4. Classification of Tax Debt

Tax debt is classified according to the following main criteria:

- By duration of debt: current debt (within due date) and overdue debt (classified according to specific overdue periods).
- By recoverability: recoverable debt and hard-to-recover debt.
- By processing status: ordinary debt, debt under processing, debt pending adjustment, and debt already processed.

- By taxpayer category: state-owned enterprises, non-state enterprises, foreign-invested enterprises (FDI), households, and individuals.

- By type of tax: value-added tax (VAT), corporate income tax (CIT), personal income tax (PIT), special consumption tax, import-export tax, environmental protection tax, etc.

This classification serves as the foundation for risk assessment and the selection of appropriate management measures.

2.1.2. Consequences of Tax Debt

Tax arrears impede the cash flow of the state budget, thereby disrupting the balance between revenue and expenditure and undermining the overall effectiveness of fiscal management and policy implementation.

Prolonged tax delinquency erodes tax discipline, fosters unfair competition among enterprises, and increases the administrative and enforcement costs borne by tax authorities.

For taxpayers themselves, persistent tax debt exacerbates financial strain, constrains opportunities for reinvestment, and heightens the risk of insolvency or bankruptcy.

2.1.3. Factors Influencing Tax Debt

Based on a synthesis of public finance theory and empirical studies, tax debt is identified as the outcome of multidimensional interactions among institutions, administrative capacity, and the socio-economic context. In this study, the factors influencing tax debt are generalized into five main groups.

First, the legal framework and tax policies serve as the foundational role in shaping compliance behavior through the clarity, stability, and predictability of the legal system.

Second, the administrative capacity of the tax authority—including organizational implementation, operational procedures, and risk management—determines the ability to monitor and intervene early in emerging debts.

Third, the characteristics and behavior of taxpayers directly affect tax debt through their payment capacity and compliance motivation.

Fourth, the business environment influences the ability to fulfill tax obligations through economic fluctuations and market stability.

Fifth, digital transformation in tax administration acts as an operational factor of the system, enabling enhanced transparency, data integration, and risk governance of tax debt.

The simultaneous consideration of these five groups of factors within an integrated analytical framework provides the scientific basis for constructing the research model and evaluating the impact of digital transformation on the effectiveness of tax debt management.

2.2. OVERVIEW OF TAX DEBT MANAGEMENT IN THE CONTEXT OF DIGITAL TRANSFORMATION

2.2.1. Concept and Impact of Digital Transformation

2.2.1.1. Concept of Tax Debt management

ax debt management is the process of monitoring, classifying and handling overdue tax amounts to ensure full, timely, and sufficient collection for the state budget. In the digital transformation context, tax debt management is redefined in a data-driven, risk-analysis-based, and process-automated direction — shifting from ex-post handling to prevention of new debt emergence.

2.2.1.2. Characteristics of digital tax debt management

Digitalized tax debt management exhibits the following features: integrated data, automated processes, inter-agency connectivity, electronic transparency and traceability, and risk-proportionate support and intervention.

2.2.1.3. Impact of digital transformation

Digital transformation enables real-time monitoring capacity, improves planning quality, shortens debt handling time, increases targeted enforcement effectiveness, and promotes voluntary compliance through early warnings and electronic services.

2.2.2. Subjects and Objects of Tax Debt Management

2.2.2.1. Subjects The subjects include the tax authority, which serves as the central entity; the taxpayer, who bears the obligation; and inter-agency cooperating bodies such as commercial banks, the State Treasury, business registration authorities, and public security agencies.

2.2.2.2. Objects The objects comprise tax debt amounts, tax debt data, and debt handling processes, all of which are digitized and centrally managed on an integrated information system.

2.2.3. Principles and Tools of Tax Debt Management

2.2.3.1. Principles

These include data transparency; real-time management; risk-based management; accountability; proportionality of measures; and inter-agency coordination.

2.2.3.2. Tools

Centralized database; risk analysis; automated alerts and reminders; electronic enforcement; interoperable coordination platforms.

2.2.4. Contents of Tax Debt Management

Comprises five main contents: (1) development of legal and policy framework; (2) tax debt management planning; (3) organization and implementation of debt collection; (4) inspection, supervision, and handling; (5) coordination, communication, and taxpayer support.

2.2.5. Criteria for Evaluating Tax Debt Management

Includes qualitative criteria (level of compliance consciousness, degree of taxpayer satisfaction) and quantitative criteria such as overdue debt ratio, difficult-to-collect debt ratio, average debt age, debt recovery rate, and cost of debt collection.

2.2.6. Factors Influencing Tax Debt Management

Subjective factors: data capability, risk analysis capacity, operational procedures, staff competence. Objective factors: legal framework, digital infrastructure, taxpayer behavior, and economic context.

In the context of digital transformation, tax debt management is no longer approached through a traditional model focused primarily on handling already-incurred debts, but has shifted toward a modern governance model based on data, risk management, and early intervention mechanisms. This shift alters the impact mechanisms of traditional factors while giving rise to new factors influencing the effectiveness of tax debt management.

Based on modern public financial management theory, risk-based tax administration, and studies on digital transformation in the public sector, the factors influencing tax debt management in the context of digital transformation can be generalized into five main groups. These groups of factors include:

- institutions and tax legal policies, which determine the scope of intervention and management methods;
- digital infrastructure and the level of data integration, reflecting the technological foundation supporting the monitoring of tax obligations;
- the governance and implementation capacity of the tax authority;
- the risk management system and digital operational procedures;
- along with inter-agency coordination mechanisms and the level of taxpayer compliance.

The combined impact of these factors is decisive for the effectiveness of tax debt management under digital transformation conditions.

These groups of factors exert a comprehensive influence on the effectiveness of tax debt management and serve as the scientific basis for constructing the research model and conducting quantitative analysis in the subsequent chapters.

2.2.7. Proposed Research Model

2.2.7.1. Research Model

The effectiveness of tax debt management is influenced by five factor groups: legal-policy framework; tax debt management planning; organizational implementation; inspection and supervision; coordination – communication – support.

2.2.7.2. Research Hypotheses

H1 to H5 correspond to the five factor groups, each exerting a positive directional impact on the effectiveness of tax debt management.

2.2.7.3. Measurement Scales

The model employs five independent scales and one dependent scale, comprising 38 observed variables measured on a 5-point Likert scale. The scales are validated using Cronbach's Alpha and Exploratory Factor Analysis (EFA).

2.3. INTERNATIONAL EXPERIENCES AND LESSONS FOR VIETNAM

International experience indicates a clear trend toward modern tax debt management based on data, risk stratification, automation, and inter-agency connectivity. Vietnam should selectively apply these experiences by placing data at the center, completing the legal framework for electronic enforcement, strengthening risk analysis, and personalizing management measures.

CHAPTER 3: CURRENT STATUS OF TAX DEBT MANAGEMENT IN THE CONTEXT OF DIGITAL TRANSFORMATION IN VIETNAM

3.1. FUNCTIONS, POWERS, AND ORGANIZATIONAL STRUCTURE OF THE TAX DEBT MANAGEMENT APPARATUS IN THE CONTEXT OF DIGITAL TRANSFORMATION

3.1.1. Functions and Powers of the Tax Debt Management Apparatus in the Context of Digital Transformation

In the context of digital transformation, the functions and powers of tax debt management in Vietnam are organized according to a centralized yet clearly decentralized model, ensuring uniformity of policy, data, and operational methods across the entire country.

The Ministry of Finance performs the role of policy formulation and macro-level supervision. Under the legal framework effective from July 1, 2025, the Ministry of Finance does not directly handle specific tax debt cases but focuses on institutional development, directing the application of digital technology, standardizing data, and organizing oversight across the entire tax administration system.

The General Department of Taxation is the agency responsible for unified implementation of tax legislation nationwide. In the new model, tax debt management is not organized as an independent unit but is integrated into the Tax Professional Division, which assumes full responsibility for the entire chain of operations—from monitoring, classification, extension, write-off and cancellation of debt, to the application of enforcement measures. These operations are carried out on the centralized tax management system, enabling data exploitation to support risk assessment and real-time administration.

Provincial and city-level tax departments perform tax debt management within their administrative jurisdictions, with a flexible organizational structure that does not mandate the establishment of dedicated specialized divisions. Tax debt management is defined as a cross-cutting function, closely linked to electronic data analysis for identifying priority debt groups and implementing handling measures according to the assigned level of decentralization.

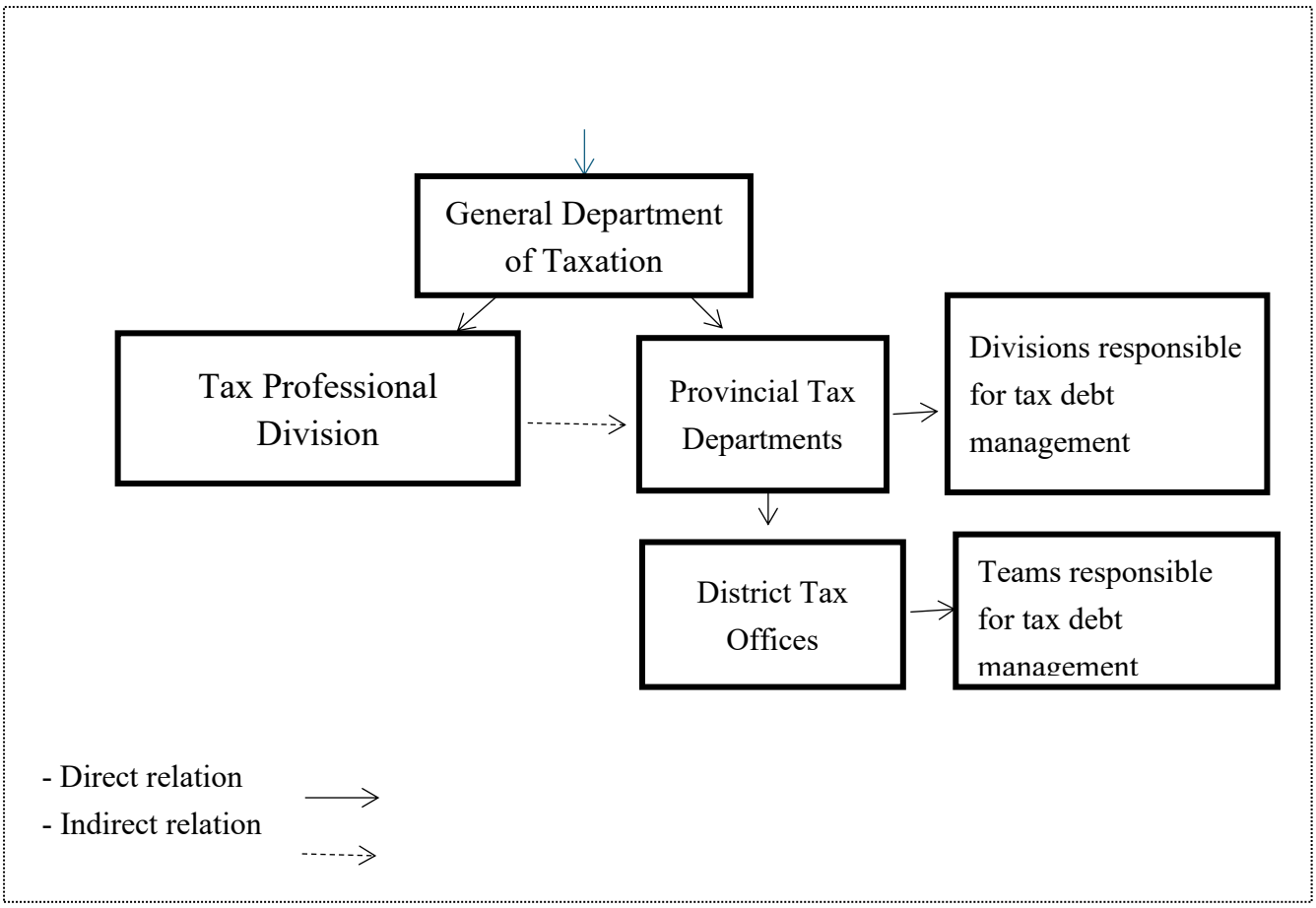
District-level (grassroots) tax offices represent the direct implementation tier, managing taxpayers within commune and ward administrative boundaries. In the context

of digitalization, the primary function of tax debt management is performed through updating, monitoring, and handling tax obligations on the electronic system, ensuring accurate data to support decision-making and direction at higher levels.

3.1.2. Organizational Structure of the Tax Debt Management Apparatus in the Context of Digital Transformation

The organizational apparatus for tax debt management in Vietnam has undergone a process of reform oriented toward greater specialization and modernization. Prior to 2006, tax debt management activities were predominantly manual, fragmented, and lacked centralized data. Following the entry into force of the Law on Tax Administration 2006, dedicated units for tax debt management and enforcement were established at local tax departments. From 2016 onward, the system underwent significant modernization with the creation of specialized units and the nationwide rollout of the centralized Tax Management System (TMS). Effective from July 1, 2025, the tax debt management apparatus has been reorganized according to an integrated model closely aligned with digital data and risk governance, consistent with the tax sector's orientation toward streamlining and digital transformation.

Figure 3.1: Organizational Structure of the Tax Debt Management Apparatus.



Sources: [8], [9]

3.2. Overview of the Current Situation of Tax Debt in the Context of Digital Transformation

3.2.1. Current Situation of Tax Debt

Table 3.1: Tax Debt Situation in Vietnam, 2020–2024

Unit: Billion dong.

Indicator	2020	2021	2022	2023	2024
Total tax debt	89.796	104.042	122.918	163.591	192.543
Change from the previous year		+14.246	+18.876	+40.673	+28.952
Growth rate (%)		15,9%	18,1%	24,87%	17,7%
Total actual state budget revenue	1.276.219	1.116.700	1.174.900	1.373.244	1.732.000
Change from the previous year		−159.519	+58.200	+198.344	+358.756

Indicator	2020	2021	2022	2023	2024
Growth rate (%)		−12,5%	5,2%	16,9%	26,1%
Ratio of total tax debt to total state budget revenue (%)	7,04%	9,32%	10,46%	11,91%	11,12%

Sources: [40] [41] [42] [44] [45]

During the period 2020–2024, total tax debt in Vietnam increased sharply from 89,796 billion VND to 192,543 billion VND, representing a rise of more than 114%, while total state budget revenue grew by only approximately 55%. The ratio of tax debt to total state budget revenue rose from 7.04% to over 11%.

This situation reveals a clear imbalance between the rapid expansion of tax obligations and the effectiveness of debt control, despite vigorous efforts to apply digital technology. Late payment interest calculated at 0.03% per day contributes to an increase in “notional” tax debt, causing the book value of debt to rise rapidly while not accurately reflecting actual recovery potential.

When examined by locality, the marked differentiation among groups of provinces indicates that the effectiveness of tax debt management depends significantly on the quality of administrative leadership, the level of digitalization, and the specific economic structure of each locality.

3.2.2. Collection of Information and Classification of Tax Debt

Digital transformation has fundamentally transformed the methods of recording and managing tax debt. The electronic tax management system (ETMS/TMS) enables classification of debt according to the following criteria:

- Debt maturity
- Legal status
- Recovery potential
- Taxpayer category and tax type

As a result, the structure of tax debt is reflected in much greater detail than before, moving beyond the merely aggregated presentation that previously prevailed.

3.2.2.1. Classification of Debt by Age

The period 2020–2024 shows the following trends:

- Debt up to 90 days increased rapidly, accounting for nearly 50% of total debt in 2024
- Debt over 90 days remained stable at approximately 20–25%
- Difficult-to-collect debt decreased in proportion but remained substantial in absolute value

These patterns reflect a shift in debt management from ex-post control toward early monitoring throughout the life cycle of debt obligations within a digital environment.

3.2.2.2. Classification of Debt by Tax Type

Tax debt is concentrated primarily in: Value Added Tax (VAT), Corporate Income Tax (CIT), Amounts related to land and natural resources and Fines and late payment interest.

3.2.2.3. Classification of Debt by Economic Entity

The non-state sector and household/individual business operators account for the largest share of total tax debt. Digital transformation has significantly reduced information gaps in these segments, leading to fuller identification of tax obligations and outstanding debts.

In contrast, state-owned enterprises and foreign direct investment (FDI) enterprises exhibit more stable debt growth, attributable to their stronger governance systems and higher financial transparency.

3.3. Current Status of Tax Debt Management in the Context of Digital Transformation

3.3.1. Current Status of the Legal Framework

The period 2019–2024 marked a strong process of perfecting the legal framework for tax debt management, with the following key milestones:

- 2019–2020: Standardization of the foundational legal framework (Law on Tax Administration No. 38/2019/QH14; Resolution No. 94/2019/QH14)
- 2020–2021: Extension and exemption/reduction of taxes to support enterprises affected by COVID-19
- 2021–2022: Nationwide rollout of electronic invoicing and management of e-commerce taxation
- 2023–2024: Integration of international standards (Pillar 2, global minimum tax)

The legal framework has progressively aligned more closely with data-driven and risk-based tax administration.

3.3.2. Current Status of the Organization and Implementation of Tax Debt Management

Table 3.13: Total State Budget Revenue Managed by the Tax Sector, 2020–2024

Unit: Billion dong.

Year	Total revenue managed by tax sector	Crude oil revenue	Domestic revenue
2020	1.276.200	35.200	1.241.000
2021	1.116.700	23.200	1.093.500
2022	1.174.900	28.200	1.146.700
2023	1.373.244	42.000	1.331.244
2024	1.732.000	58.100	1.673.900

Sources: [40] [41] [42] [44] [45]

Unit: Billion dong.

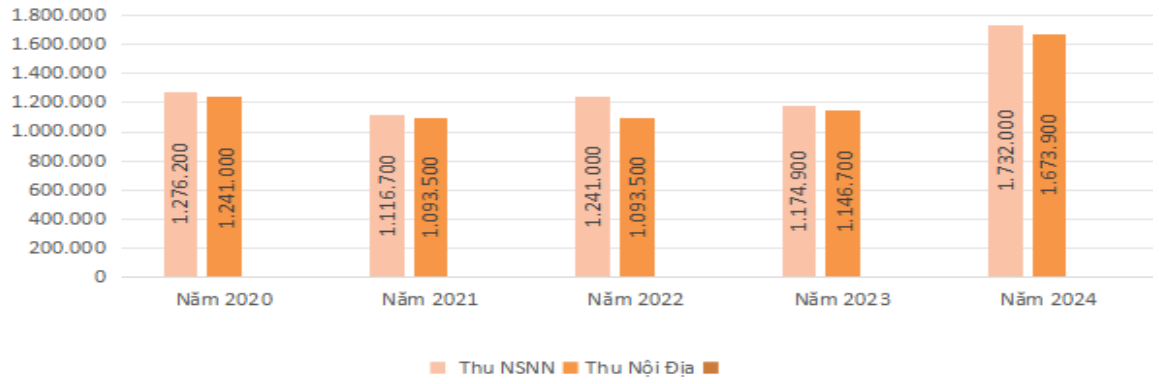


Chart 3.6: State Budget Revenue and Domestic Revenue, 2020–2024

Sources: [40] [41] [42] [44] [45]

3.3.2.1. Development of Plans and Assignment of Debt Collection Targets

Planning activities are implemented in a unified manner from the central to local levels, with specific targets assigned according to each debt category. However, in certain localities, the classification of debt remains inaccurate and the assignment of targets is delayed, adversely affecting debt recovery efficiency.

3.3.2.2. Organization of Tax Debt Collection

The period 2020–2024 witnessed significant progress in the application of technology:

- 100% adoption of electronic invoicing
- Tens of millions of electronic debt notifications issued
- Online enforcement of bank accounts and invoices
- Initial deployment of Big Data and AI applications

Debt collection amounts increased substantially, with a particularly notable rise of over 47% in 2024 compared to the previous year.

3.3.2.3. Monitoring and Urging of Debt Collection

Debt urging measures have shifted strongly from manual to electronic methods. “Soft” measures (such as debt reminders and electronic notifications) are prioritized, while “hard” measures focus on account enforcement and public disclosure of information.

Nevertheless, the relative effectiveness of debt collection remains limited due to the large scale of newly emerging debt and the long-standing accumulation of difficult-to-collect debt.

3.3.2.4. Coordination and Communication

Digital transformation has strengthened inter-agency coordination (between tax authorities, banks, public security agencies, and local governments) and modernized communication through electronic platforms, the eTax Mobile application, and public disclosure of tax debt information. These elements constitute an important factor in enhancing voluntary compliance.

3.4. Empirical Model of Tax Debt Management

The quantitative study was conducted with 568 valid responses, utilizing a 5-point Likert scale and analyzed using SPSS 27.

Reliability testing results indicate that all scales achieved high reliability (Cronbach's Alpha > 0.7). Regression analysis confirms that all five factors exert a positive impact on the effectiveness of tax debt management, with the following standardized coefficients:

- Tax debt management planning ($\beta = 0.222$) – the strongest impact
- Legal-policy framework ($\beta = 0.217$)
- Communication and taxpayer support ($\beta = 0.151$)

Organizational implementation and inspection/supervision exhibit lower but still statistically significant impacts.

The results demonstrate that the effectiveness of tax debt management depends primarily on the quality of planning and institutional arrangements, rather than on enforcement measures alone.

3.5. OVERALL ASSESSMENT

3.5.1. Achievements

Tax debt management during the period 2020–2024 has undergone a clear transformation toward modernization and digitalization. The legal framework governing tax debt management has been progressively improved, establishing a solid foundation for the implementation of risk-based management and the application of information technology across the entire chain of operations. The tax debt management apparatus has been organized in a unified manner and operates on a centralized data platform, contributing to enhanced transparency and improved capacity to control tax debt.

The synchronized deployment of electronic tax administration, electronic invoicing, and electronic enforcement has standardized data, shortened processing times, and expanded the scope of management. Debt recovery performance has improved in absolute terms, particularly during the post-COVID-19 economic recovery phase, thereby supporting the balancing of the state budget.

3.5.2. Main Limitations

Despite the many positive results achieved, the scale of tax debt continues to grow faster than the rate of increase in state budget revenue, thereby intensifying fiscal pressure. Difficult-to-collect debt persists at a high level, while late payment interest and penalties inflate the recorded debt volume without accurately reflecting actual recovery potential.

Tax debt management still relies predominantly on the criterion of time overdue, with insufficient shift toward classification based on risk and taxpayer behavior. The application of new technologies remains limited to data standardization and process automation, without fully realizing the potential for analysis, forecasting, and early warning. The effectiveness of inter-agency coordination is constrained by the absence of synchronous and mandatory data-sharing mechanisms.

3.5.3. Causes

The aforementioned limitations stem from several primary causes: the legal framework for debt resolution is not yet sufficiently decisive with respect to prolonged

debts; mechanisms for debt write-off and cancellation remain slow relative to practical needs; the data analysis and risk governance capacity of tax officials is uneven across the workforce; inter-agency data infrastructure is not yet complete; and the digital transformation process has not been sufficiently integrated with a risk-based tax debt management model.

CHƯƠNG 4: PERSPECTIVES AND SOLUTIONS TO STRENGTHEN TAX DEBT MANAGEMENT IN THE CONTEXT OF DIGITAL TRANSFORMATION IN VIETNAM

4.1. CONTEXT AND PERSPECTIVES ON TAX DEBT MANAGEMENT IN THE CONTEXT OF DIGITAL TRANSFORMATION IN VIETNAM

4.1.1. Domestic and International Context

In recent years, tax administration worldwide has undergone a significant shift under the influence of the Fourth Industrial Revolution and the rapid development of the digital economy. International organizations such as the OECD, IMF, and World Bank share the common view that tax debt management should no longer be approached as an administrative post-event handling activity, but must be placed within the framework of managing the entire lifecycle of tax obligations. Accordingly, the focus of tax debt management has shifted from handling already-incurred debts to early risk identification, timely intervention in cases of late payment, and prevention of new debt formation through data digitization and risk analysis.

Current international trends emphasize the development of intelligent tax debt management systems based on big data platforms, automation of operational processes, and the application of artificial intelligence in taxpayer classification, debt recovery forecasting, and selection of appropriate intervention measures. At the same time, many countries are strengthening data connectivity and sharing between tax authorities and banks, customs, business registration agencies, and land registration bodies to create an integrated database that supports real-time tax debt management. This approach is

gradually becoming the standard for modern tax administration, contributing to improved debt collection efficiency, reduced compliance costs, and enhanced fiscal transparency.

In Vietnam, the tax system reform process, aligned with the National Digital Transformation Strategy and the orientation toward building a Digital Government, is being implemented comprehensively. The tax sector has achieved significant results in modernizing administration through the centralized tax management system, electronic invoicing, and electronic tax services. However, practical evidence shows that the scale of tax debt continues to trend upward, with the debt structure still featuring a large proportion of long-standing and difficult-to-recover debts, while the rapid development of the digital economy increases the complexity of cash flows and tax compliance behavior.

In this context, the need to innovate tax debt management in a proactive, data-driven, and risk-based direction has become urgent, laying the foundation for perfecting the tax debt management model in the context of digital transformation in Vietnam in the coming period.

4.1.2. Perspectives on Tax Debt Management in the Context of Digital Transformation in Vietnam

Tax debt management in the context of digital transformation must be approached through a modern governance mindset, with data as the foundation, risk management as the method, and voluntary compliance as the central objective.

First, tax debt management should no longer be viewed merely as an ex-post response to late payment but as an integral component of the modern tax administration cycle, closely linked to forecasting, prevention, and control of newly emerging debt.

Second, digital transformation enables a shift from debt classification based on time overdue to classification based on risk level, taxpayer compliance behavior, and financial capacity. Accordingly, management resources must be allocated in a focused manner, prioritizing the handling of debts with high recovery potential.

Third, tax debt management must ensure the principles of transparency, fairness, and uniformity across the entire system, while minimizing manual intervention to limit negative risks and improve governance efficiency.

Fourth, tax debt management in the digital transformation context must be placed in close linkage with state budget management, corporate financial management, and fiscal risk control, thereby contributing to the reinforcement of budget discipline and macroeconomic stability.

4.2. SOLUTIONS TO STRENGTHEN TAX DEBT MANAGEMENT IN THE CONTEXT OF DIGITAL TRANSFORMATION

4.2.1. Improving the Legal and Policy Framework for Tax Debt Management

4.2.1.1. Standardizing Tax Debt Management Processes in the Digital Environment

Tax debt management processes must be designed for comprehensive digitalization, ensuring uniformity from the central to local levels. Each tax debt item must be tracked continuously from the moment of emergence until final resolution within the same data system.

The standardized process includes the following steps: automatic debt recording, risk-based debt classification, early warning, application of urging and enforcement measures, and evaluation of recovery results. Standardizing the process helps reduce operational overlaps, minimize overlooked debts, and enhance transparency in management.

4.2.1.2. Establishing a Legal Framework for Digitalized Enforcement

Tax debt enforcement must be codified in a manner appropriate to the digital environment, enabling the application of electronic measures such as automatic deduction from bank accounts, temporary suspension of electronic invoice usage, and restriction of financial transactions for non-compliant taxpayers.

Regulations on enforcement must clearly define the conditions for application, procedural sequence, and oversight mechanisms to ensure legality, transparency, and prevention of abuse of power in implementation.

4.2.1.3. Emphasizing Taxpayer Responsibility in the Digital Environment

In the digital environment, the taxpayer becomes the central actor in the tax compliance process. Linking tax obligations to digital identification, electronic transactions, and compliance history enables the enhancement of legal responsibility and the reduction of deliberate non-compliance.

Concurrently, mechanisms for support, automatic reminders, and transparent information provision must be strengthened to encourage voluntary compliance.

4.2.2. Building Tax Debt Management Plans In The Context of Digital Transformation

4.2.2.1. Establishing a Data-Driven Planning System

Tax debt management plans must be developed on the basis of a centralized database that fully reflects the tax obligation status of each taxpayer group, industry sector, and locality. Data-based planning enhances the substantive nature and feasibility of debt collection targets.

4.2.2.2. Segmenting Tax Debt Using Technology

The application of big data and artificial intelligence enables the segmentation of debt according to risk levels, including collectible debt, difficult-to-collect debt, and irrecoverable debt. This forms an important basis for selecting appropriate handling measures and optimizing management resources.

4.2.2.3. Applying Real-Time Planning

Debt collection plans must be flexibly adjusted in response to economic fluctuations and updated data, thereby reducing policy lag and limiting the emergence of prolonged bad debt.

4.2.3. Strengthening Coordination and Communication in Tax Debt Management for Taxpayers

Enhance inter-agency data sharing; intensify digital tax communication; expand electronic support channels to raise taxpayers' awareness and level of compliance.

4.2.4. Organizing Tax Debt Management in the Context of Digital Transformation

Promote automation of debt collection processes; shorten enforcement timelines; professionalize debt management staff; strengthen the role of electronic invoicing as an effective tool for monitoring and enforcement.

4.2.5. Enhancing Tax Debt Inspection and Supervision Using Digital Technology

Apply pre-inspection risk analysis; deploy real-time monitoring systems; implement automated inspections and rapid handling of violations to ensure fiscal discipline.

4.2.6. Other Solutions

These include financial solutions for digital transformation; strengthening inter-agency coordination; international cooperation; handling of special tax debt cases; and expanding societal oversight of tax obligations.

4.3. RECOMMENDATIONS

4.3.1. To the National Assembly

Perfect the legal framework for digital taxation; enhance fiscal oversight and establish a tax credit mechanism.

4.3.2. To the Government

Perfect the legal framework for tax debt management; accelerate digital transformation; control tax support policies; strengthen enforcement and decentralize local responsibilities.

4.3.3. To the Ministry of Finance

Complete operational regulations for tax debt management and strengthen inter-agency coordination.

4.3.4. To Relevant Agencies

Intensify data sharing, support law enforcement, and develop digital infrastructure to serve tax debt management.

CONCLUSION

The dissertation has systematically organized the theoretical and practical foundations of tax debt management in the context of digital transformation. It highlights the international trend of shifting from manual management toward data-driven, risk-analysis-based, and technology-enabled management (incorporating Big Data, AI, and related tools), while noting that domestic research in Vietnam still lacks an integrated conceptual framework.

Chapter 2 clarifies that tax debt management constitutes a continuous process encompassing both debt recovery and the prevention of new debt emergence. It simultaneously emphasizes the foundational conditions related to institutional arrangements, data security, and digital human resource capacity.

Chapter 3 demonstrates that Vietnam has achieved substantial progress in digitalization (through electronic tax administration and electronic invoicing), yet the effectiveness in reducing debt remains disproportionate to these efforts. This is largely due to an approach that remains focused primarily on “computerization” rather than full transformation, with deficiencies in forecasting, early warning mechanisms, and inter-agency data interoperability. The majority of outstanding debt still possesses recovery potential if addressed in a timely manner.

On this basis, Chapter 4 proposes a coherent set of solutions: standardization of digital processes, risk-based and real-time debt management, enhancement of digitalized enforcement measures, inter-agency data connectivity, completion of the legal framework, and development of human resources. These measures are oriented toward

the establishment of a modern, transparent, and fiscally sustainable model of tax debt management.

LIST OF THE AUTHOR'S PUBLISHED WORKS RELATED TO THE DISSERTATION

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