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FACTORS AFFECTING THE SATISFACTION OF BUSINESSES WITH THE SERVICE QUALITY OF THE THAI BINH PROVINCIAL TAX DEPARTMENT

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Abstract
The study titled "Factors affecting the satisfaction of businesses with the service quality of the Thai Binh Provincial Tax Department" sought to identify the factors that influence the satisfaction of businesses with utilizing tax services. Subsequently, the study aimed to propose policy recommendations to enhance the service quality of the Thai Binh Provincial Tax Department (TBTD) and increase taxpayer satisfaction. Grounded in survey data collected from 158 businesses, the research findings revealed that the factors impacting the satisfaction of businesses with the service quality of TBTD encompassed: (1) Responsiveness, (2) Administrative processes and procedures, (3) The competence of the officers, and (4) Facilities.
Keywords: Tax, satisfaction, Thai Binh, service quality, businesses
JEL codes: M40, M41, M10

1. INTRODUCTION

Taxation represents the most fundamental source of revenue for state budgets and the most crucial financial resource to implement socio-economic development and investment policies across nations globally. Moreover, taxes serve as a vital instrument for governments to achieve their macroeconomic objectives. Tax policies are formulated not merely to generate revenue for state coffers but also to contribute to the regulation, management, and promotion of production activities and entrepreneurial development. Consequently, they actively aid in addressing imbalances within market economies through appropriate adjustments.

In recent years, while fulfilling its assigned tasks, the tax agency has witnessed a continuous increase in the state budget plan. Apart from managing tax collection and fees, the tax sector has made significant strides in reforming administrative procedures and modernizing budget collection and payment processes. These reforms are geared towards creating and developing taxpayer-centric services for individuals and businesses. Furthermore, the tax industry has strengthened the application of information technology in tax collection management, thereby facilitating more favorable conditions for taxpayers to meet their obligations to the state budget, ultimately improving the effectiveness of tax operations. However, the tax agency's service quality still falls short of taxpayer expectations due to several factors such as overly complicated procedures, harassment, and difficulties posed by certain tax officials. Additionally, the responsibilities of each tax official lack clarity and effectiveness, coupled with low labor productivity. Therefore, this study was undertaken to identify factors influencing the quality of public services at the TBTD.

Through this, the study also proposes solutions to improve and enhance taxpayer satisfaction with the services provided by tax authorities in general and the TBTD in particular.

2. LITERATURE REVIEW

Buchanan (1995) argued that when the quality of public services provided by the government is subpar, the only way to increase tax morality among taxpayers is to enhance the quality of these services. Conversely, if taxpayers perceive the quality of public services as good, they will have a more favorable view and exhibit better tax compliance. Palil and Mustapha (2011) presented nine factors that determine tax compliance when applying the self-declaration and self-payment mechanism, including the likelihood of being audited, awareness of government spending, perception of fairness, penalties, financial pressures, changes in current government policies, influence from reference groups, operational efficiency of tax authorities, and tax knowledge. This research also helped tax administrators recognize the importance of tax knowledge by assisting in designing tax education programs, simplifying the tax system, and developing a broader understanding of taxpayer behavior.

Nguyen Thi Bich Thuy (2010) investigated the satisfaction of foreign-invested enterprises with the quality of tax support services at the Dong Nai tax department. This study focused on analyzing factors affecting taxpayer satisfaction through factor analysis and multivariate regression methods. The research results revealed that five factors influenced taxpayer satisfaction: empathy, reliability, responsiveness, tangible means, and service capacity. Nguyen Thi Le Thuy (2009) conducted the research "Improving state tax collection management to enhance tax compliance of businesses - a case study of Hanoi." In this study, the author analyzed, evaluated, and synthesized theoretical and practical foundations, and proposed solutions to improve tax collection management activities to enhance tax compliance for businesses in Hanoi. The study conducted a survey and research on tax compliance behavior and demonstrated the model of adjusted tax compliance levels and the characteristics of four tax compliance levels. Although the research was conducted using a qualitative method, precluding an accurate estimation of the influence of each factor on businesses' tax compliance, it successfully presented six groups of factors affecting tax compliance of businesses, including operational characteristics, psychological characteristics, industry characteristics, social factors, economic factors, and legal factors. Based on these findings, the study proposed solutions to improve the state's tax collection management activities to enhance tax compliance of businesses. Vo Duc Chin (2011) researched "Factors affecting tax compliance behavior of businesses - the case of Binh Duong province." The study employed quantitative research methods to identify factors influencing the tax compliance behavior of taxpayers. The research model proposed by the author included a group of factors about business characteristics, business industry, and social and psychological factors that affect the tax compliance of businesses. The results showed that economic factors, the tax system, psychological factors, business characteristics, and social factors of businesses all impacted the compliance behavior of taxpayers in Binh Duong province.

In recent times, numerous studies have been conducted to evaluate the factors influencing the satisfaction of businesses with service quality. Although these studies have employed different

theoretical frameworks and targeted diverse subjects, they have predominantly utilized quantitative methods to measure the impact of factors on the use of a balanced scorecard for strategic management. The scope of the aforementioned studies has been selected according to specific industries or regions, thereby limiting the applicability of their research findings and suggestions to certain contexts. To date, no research has been undertaken to evaluate the effect of businesses' satisfaction with the service quality of the TBTD. Therefore, in this article, we build upon the research findings of previous authors concerning the factors affecting the satisfaction of businesses with service quality. Based on this foundation, the article aims to provide recommendations that contribute to enhancing the tax service quality of the TBTD.

3. METHODOLOGIES AND RESEARCH MODELS

3.1. Research Methods

Within the scope of our study, the research team employed a combination of both qualitative and quantitative research methods.

The qualitative research method aided in identifying factors that influence the satisfaction of businesses with the service quality of the TBTD. Based on a literature review, the authors incorporated research methods, theoretical frameworks, and research findings related to the satisfaction of businesses with the service quality of the TBTD. The authors conducted in-depth interviews with experts to confirm the factors affecting the satisfaction of businesses with the service quality of the TBTD, thereby determining the research hypothesis and model. The results from the qualitative method facilitated the identification of the independent and dependent variables of the model, enabling an assessment of the model's appropriateness.

The quantitative method enabled the measurement of the impact of independent factors on the satisfaction of businesses with the service quality of the TBTD. This study utilized a Likert scale with five levels ranging from (1) Strongly disagree, (2) Disagree, (3) Neutral, (4) Agree, and (5) Strongly agree, to measure the satisfaction of businesses with the service quality of the TBTD. Data were collected according to the scale of the research model. A multivariable linear regression model was employed to measure the impact of the factors.

3.2. Data collection

Based on the conceptual framework, the quantitative research procedure included designing a questionnaire, identifying a research sample, data collection, and data analysis using SPSS software version 20.0. The sample consisted of 90 companies, with each enterprise receiving two questionnaires. One questionnaire was sent to managers, including the director or deputy director in charge of the accounting department, and the other questionnaire was sent to the chief accountant, deputy chief accountant, or general accountant of the company to collect respondents' opinions on the factors affecting the satisfaction of businesses with the service quality of the TBTD.

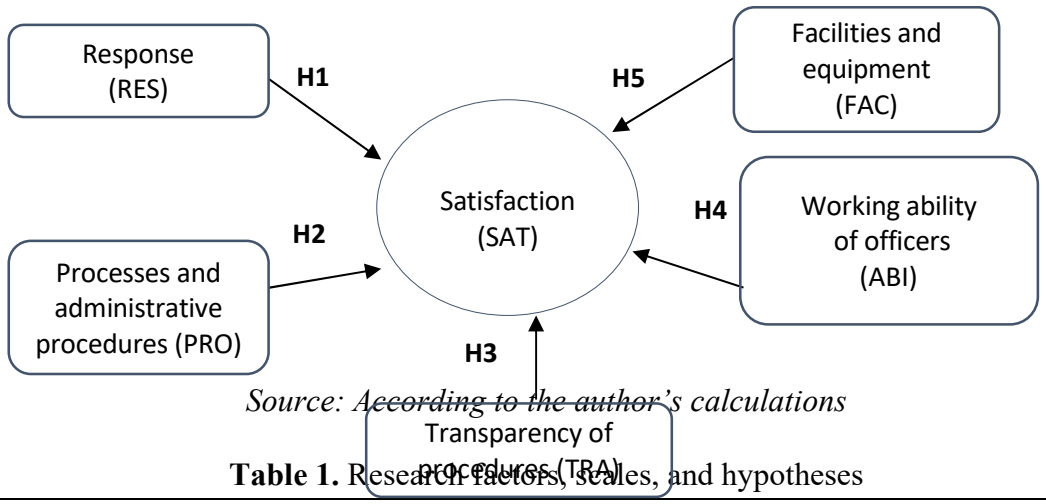
A total of 180 questionnaires were distributed, with 90 questionnaires sent to senior managers and 90 questionnaires sent to chief accountants, deputy chief accountants, and general accountants. The number of responses received was 168, achieving a response rate of 93.3%. After removing invalid responses, there were 158 valid responses, with 73 responses from senior managers and 85

responses from chief accountants, deputy heads of accounting departments, and general accountants.

3.3. Research model and hypothesis

Drawing upon an overview of relevant practical research on satisfaction with tax administrative procedures and satisfaction with tax compliance, as well as Parasuraman's research and the Serqual, Inheritance, and Selective scale, the author proposes a research model to evaluate the satisfaction of businesses with the quality of tax services provided by the TBTD as follows:

Figure 1: Research model



Source: According to the author's calculations

Table 1. Research factors, scales, and hypotheses

Factor	Code	The scale
Satisfaction (SAT)	SAT1	Businesses are satisfied with the facilities
	SAT2	Businesses are satisfied with their officers and employees
	SAT3	Businesses are satisfied with service quality
	SAT4	Businesses are satisfied with support and propaganda services
Response (RES)	RES1	Tax documents are processed quickly and smoothly
	RES2	Instructions for using declaration tools are complete and clear
	RES3	Ready to explain and guide businesses on tax procedures
	RES4	Information, propaganda, and instructions are simple, easy to understand, and easy to implement

Factor	Code	The scale
	H1: Responsiveness has an impact on business satisfaction with the service quality of the TBTD.	
Processes and administrative procedures, (PRO)	PRO1	Public procedures
	PRO2	Complete and clear process
	PRO3	Document processing time is according to regulations
	PRO4	Taxpayers do not have to travel many times to handle tax procedures
	H2: Process and administrative procedure factors affect the satisfaction of businesses with the service quality of the TBTD.	
Transparency of procedures (TRA)	TRA1	Registration, declaration, and tax calculation procedures are listed transparently
	TRA2	Time limits for processing, resolving, and returning results in a transparent manner
	TRA3	Inspecting and controlling declaration and reporting activities in a transparent
	H3: Factors related to the transparency of tax procedures affect the satisfaction of businesses with the service quality of the TBTD.	
Working ability of officers (ABI)	ABI1	Tax officers have good communication skills
	ABI2	Tax officers have the knowledge and skills to handle tasks
	ABI3	Tax officers are very knowledgeable and professional
	ABI4	Tax officials provide proper advice and guidance when taxpayers need it.
	H4: Factors related to the service capacity of tax officials affect business satisfaction with the service quality of the TBTD.	
Facilities and equipment (FAC)	FAC1	There is a spacious and convenient place to carry out procedures
	FAC2	The tax department is equipped with modern information technology
	FAC3	There is a convenient place to receive and process documents
	FAC4	Electronic declaration software is stable and easy to use.
	H5: Factors about the physical facilities of the tax department affect the satisfaction of businesses with the service quality of the TBTD	

Source: Authors'summary based on the literature review

Based on the hypotheses and variables presented above, we propose a regression equation that reflects the factors affecting the acceptance of the balanced scorecard for strategic management such as:

$$SAT_i = \beta_0 + \beta_1 RES_i + \beta_2 PRO_i + \beta_3 TRA_i + \beta_4 ABI_i + \beta_5 FAC_i + \varepsilon$$

In there:

- β_0 : Constant term
- β_i : Coefficient of explanatory variables
- ε_i : Residual

Dependent variable:

- SAT_i : Satisfaction i

Independent variables:

- RES: Response
- PRO: Processes and administrative procedures
- TRA: Transparency of procedures
- ABI: Working ability of officer
- FAC: Facilities and equipment

4. RESEARCH RESULTS AND DISCUSSION

4.1. Research results

4.1.1. The reliability of the scale

Cronbach's Alpha coefficients are used to examine the degree of correlation between observed variables in the same factors included in the research model. Table 2's results show that all variables have Cronbach's alpha coefficients> 0.6, so the scale can be used well and reliably, (Hoang & Chu, 2008). Thus, the results remain the observed variables belonging to the factor groups.

Table 2. Results of Cronbach's Alpha of variables

Observation code	Number of observed variables	Cronbach's Alpha	Minimum-maximum of the Cronbach's Alpha if Item Deleted	Number of variables eliminated
RES1 - RES 4	4	0.725	0.522 - 0.672	0
PRO1- PRO4	4	0.821	0.721- 0.810	0
TRA1- TRA3	3	0.853	0.561 - 0.742	0
ABI1- ABI4	4	0.782	0.458- 0.662	0
FAC1- FAC4	4	0.872	0.556 - 0.712	0
SAT1-SAT4	4	0.832	0.571 - 0.815	0

Source: Summary of survey results

Table 2 illustrates that Cronbach's Alpha coefficient of all variables is greater than 0.6; Factor loading coefficients of all variables are greater than 0.3, thus no observed variables are excluded from the scale. The scales are reliable enough for further analysis.

4.1.2. Exploratory Factor Analysis

EFA analysis was performed to group observed variables with linear relationships into more meaningful groups to reduce the regression model and eliminate variables with no practical significance.

The analysis results of the scale of factors affecting Taxpayer satisfaction show that the coefficient KMO = 0.716, (satisfying $0.5 \leq KMO \leq 1$) should meet the requirements, and the Barlett's test has Sig. = 0.000 <5%, (Table 3). Therefore, we can confirm that the observed variables are correlated with each other in the population.

Table 3. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.716
Bartlett's Test of Sphericity	Approx. Chi-Square	2.594,897
	DF	158
	Sig.	.000

Source: Summary of survey results

Total variance extracted is 63.756% > 50%, at Eigenvalues = 1.717> 1, (Table 4), which meets the requirements, (Gerbing & Anderson, 1988). The characteristic variables all have load factor coefficients> 0.5, so these loading factors are significant (Table 5).

Table 4. Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.989	18.995	18.995	3.989	18.995	18.995	3.087	14.701	14.700
2	3.108	14.801	33.796	3.108	14.801	33.796	2.708	12.896	27.596
3	2.601	12.383	46.179	2.601	12.383	46.179	2.602	12.388	39.984
4	1.975	9.403	55.582	1.975	9.403	55.582	2.538	12.087	52.070
5	1.717	8.174	63.756	1.717	8.174	63.756	2.454	11.685	63.756

Source: Research results

Table 5. Rotated Component Matrix

	Component				
	1	2	3	4	5
RES4	0,763				
RES2	0,755				
RES1	0,754				
RES3	0,673				
PRO1		0,784			
PRO2		0,738			
PRO3		0,731			
PRO4		0,702			
TRA3			0,733		
TRA2			0,720		
TRA1			0,691		
ABI2				0,794	
ABI4				0,753	
ABI3				0,692	
ABI1				0,658	
FAC1					0,779
FAC4					0,734
FAC3					0,679
FAC2					0,650

Source: Research results

4.1.3. Test the correlation between factors

After analyzing the data collected through factor analysis steps and Cronbach's Alpha reliability test, the author determined a research model consisting of 5 independent variables. The results of Pearson correlation coefficient analysis on SPSS are as follows:

Table 6. Correlations

		RES	PRO	TRA	ABI	FAC	SAT
SAT	Pearson Correlation	0,294	0,586	0,533	0,351	0,339	1
	Sig., (1-tailed)	0,000	0,000	0,000	0,000	0,000	

Source: Research results

Pearson correlation test is used to test linear relationships between the independent variables and the dependent variable. Table 6 shows that there is Sig. = 0.000 <5% between the independent variables RES, PRO, TRA, ABI, and FAC with the dependent variable SAT. Therefore, these independent variables are correlated with the dependent variables and will be included in the model to interpret the dependent variables.

4.1.4. Regression results

Table 7. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.728a	.624	.605	.48991	1.621

a. Predictors:, (Constant): RES, PRO, TRA, ABI, FAC

b. Dependent Variable: SAT

Source: Summary of survey results

The results of Table 7 show that the adjusted R2 value is 0.624, showing that the independent variable included in the regression affects 62,4% of the variation of the dependent variable. ANOVA test has a value of Sig. = 0.000 <5%, (Table 8) so the model is statistically significant and has at least one independent variable affecting dependent variables.

Table 8. Anova

Model		Sum of Squares	DF	Mean Square	F	Sig.
1	Regression	31.986	5	6.397	64.908	000 [b]
	Residual	20.259	152			
	Total	52.245	157			

a. Dependent Variable: SAT

b. Predictors:, (Constant), RES, PRO, TRA, ABI, FAC

Source: Summary of survey results

The regression coefficients table, (Table 9) illustrates that only four of the five independent variables included in the model impact the satisfaction of businesses with the service quality of TBTD and have statistically significant, (Sig. <5%), They are response, processes and administrative procedures, working ability of officer, facilities and equipment. The result indicates that all four variables are positively associated with the satisfaction of businesses with the service quality of TBTD. Therefore, H1, H2, H4, and H5 are accepted. Thus, H3 is also rejected.

Table 6. Regression results

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.	Collinearity Statistics

		B	Std. Error	Beta			Tolerance	VIF
1	, (Constant)	-0.865	0.281		-3.190	0.000		0.000
	RES	0.210	0.043	0.225	5.102	0.000	0.931	1.066
	PRO	0.413	0.055	0.369	7.805	0.000	0.884	1.220
	TRA	0.391	0.049	0.388	8.374	0.152	0.818	1.175
	ABI	0.162	0.027	0.279	6.276	0.000	0.994	1.085
	FAC	0.141	0.034	0.193	4.258	0.000	0.964	1.119

a. Dependent Variable: SAT

Source: Summary of survey results

According to the regression results, the the satisfaction of businesses is affected by four factors which are:

- RES: Response
- PRO: Processes and administrative procedures
- ABI: Working ability of officer
- FAC: Facilities and equipment

Table 6 presents the output from the probit regression model, including also the variance inflation factors, VIFs. As all VIFs are smaller than two, multicollinearity is unlikely to pose a problem in our study.

It can be seen the Durbin – Watson coefficient of 1.621, proves that the error part does not have first-order sequence autocorrelation, meaning that the sample data is using enough quality to continue regression analysis for the model.

The regression equation is established as follows:

SAT = - 0.865 + 0.431*PRO + 0.210*RES + 0.162*ABI + 0.141*FAC

4.2. Discussions and Conclusions

The research findings reveal that there are four factors influencing the satisfaction of businesses (SAT) with the service quality of the TBTD, and the descending order of their impact levels on SAT is as follows:

Firstly, administrative processes and procedures (PRO) emerge as the most significant factor affecting SAT (B1 = 0.431), exerting the strongest positive influence. The study indicates that when PRO increases by 1 unit, SAT increases by 0.413 units. Administrative procedures, both general and tax-specific, are among the crucial factors impacting taxpayer satisfaction. To enhance taxpayer satisfaction, it is imperative to continue streamlining unnecessary administrative procedures. Tax administrative procedures must be simplified. Increasing transparency in the management processes of tax authorities will enable taxpayers to gain a better understanding and participate in monitoring tax officials' enforcement of tax laws. Tax administration must prioritize efficiency, ensuring strict oversight of taxpayers and taxable entities. Tax authorities should enhance the quality of monitoring taxpayer compliance and strictly enforce tax law violations,

promoting fairness, and equality in business operations, and fostering a healthy competitive environment.

Secondly, responsiveness (RES) emerges as an important factor with a positive impact (B2 = 0.210). According to the study, when RES increases by 1 unit, SAT increases by 0.210 units. To improve taxpayers' satisfaction with the responsiveness factor, tax officials must clearly comprehend taxpayers' needs and challenges. With this understanding, tax officials can provide accurate advice and resolve issues promptly, aligning with taxpayers' requirements. To achieve this, the Tax Department should select and assign staff, particularly in the receiving department, possessing strong professional skills, flexible problem-solving abilities, and effective communication skills.

Thirdly, the working ability of officers also demonstrates a positive impact on SAT (B4 = 0.162). This result indicates that when the working ability of an officer increases by 1 unit, SAT increases by 0.162 units. This factor encompasses aspects related to professional expertise, knowledge, problem-solving skills, and effective communication abilities of tax officials. To enhance the professional capacity of officials, the Tax Department must first recognize taxpayers as customers and tax administrative services as service products. Subsequently, the Tax Department should regularly organize training programs to improve officials' professional expertise and communication skills.

Fourthly, facilities (FAC) represent the fourth factor with a positive impact on SAT (B5 = 0.141). According to the result, when FAC increases by 1 unit, SAT increases by 0.141 units correspondingly. Facilities are one of the crucial factors contributing to improved taxpayer satisfaction. They provide the necessary equipment and infrastructure for tax staff to operate effectively. Therefore, the Tax Department should prioritize investing in modern information technology equipment and additional computers to support taxpayers in handling their work when needed. Additionally, the Tax Department should continue to enhance and upgrade its website, incorporating tools for promptly updating new policies. Furthermore, the Tax Department should leverage available channels such as email to disseminate documents and policies promptly and regularly upgrade software to support tax declaration and reporting processes.

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