

ANALYZING FACTORS AFFECTING THE PUBLIC SERVICE QUALITY OF BINH DUONG TAXATION DEPARTMENT FOR FOREIGN DIRECT INVESTMENT ENTERPRISES

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ABSTRACT

This paper conducted during the period from 3/2013 until 9/2015. The research results showed that there were 600 FDI enterprises belonged to Binh Duong province. In addition, 600 FDI enterprises interviewed and answered nearly 27 questions. The researchers had analyzed KMO test, the result of KMO analysis used for multiple regression analysis. FDI enterprises are responses measured through an adapted questionnaire on a 5-point Likert scale (1. Strongly disagree; 2. Disagree; 3. Normal; 4. Agree and 5. Strongly agree) but 572 FDI enterprises processed and 28 FDI enterprises lacked of information. The hard copy and interviewed FDI enterprises by questionnaire distributed among FDI enterprises of Binh Duong province.

The regression analysis results showed that there were 6 factors, which included of factors following Mechanism for monitoring and commenting (MMC), Administrative procedures (AP), Assurance of Tax Officials (ATO), Tangibles (TA), Responsiveness (RE) and Information technology application (ITA) affecting the performance of Service quality (SQ) in Binh Duong Province with significance level of 5 %. The research results processed from SPSS 20.0 software. The parameters of the model estimated by Least - Squares Method tested for the model assumption with 5% significance level. At the same time, the result was also scientific evidence and important for researchers and policy makers who apply them for enhancing the performance of Service quality (SQ) in Binh Duong Province and to meet the enterprises' demand of Tax service quality not only the Binh Duong but also other provinces of Viet Nam.

The main objectives of this study were to:

1. The first objective was to conduct a survey to find factors that affecting the performance of Service quality (SQ) in Binh Duong Province.

2. The second objective was to analyze and test some factors that affected on the performance of Service quality (SQ) in Binh Duong Province.

Keywords: Service quality, FDI, Tax, FDI enterprises and Binh Duong province. Introduction

Foreign direct investment (FDI) enterprises have played an important role in boosting Vietnam economic growth and FDI enterprises have been an important source that directly participated in and promoted the creation of several industrial sectors with a high demand for technology and added-value products, such as machinery manufacturing, energy, computers and telephones.

Besides, FDI enterprises have also played an important part in the country's export and import activities over the past years, they said, adding the FDI sector contributed towards ensuring the supply of foreign exchange as well as the national balance of payments.

Since the Law on Foreign Investment issued in 1987, FDI capital has had great impact on Vietnam economy by mobilizing capital for development and promoting economic development. FDI enterprises have also contributed towards creating conditions for the transfer of technology, generating jobs for the local people and accelerating the country's global integration.

In addition, several products produced by foreign-invested businesses have established themselves firmly in international markets, such as telephones, electronic components and garments and textiles. FDI enterprises have helped to strengthen the linkage between foreign and domestic businesses, and assisted Viet Nam economy to integrate deeper with the global economy.

The government and authorized agencies of ten created conditions and improved the investment environment to draw more foreign investment. However, a number of participants pointed out the shortcomings of FDI businesses, such as slow transfer of technology for domestic partners, environmental pollution caused by some FDI projects or tax evasion by some businesses, causing public concern, while affecting the investment environment of Vietnam.

Quality and customer service also seem to constitute a priority for the Tax Administration system, as can be seen in the various relevant projects currently in progress. Combined with the practical requirements of the tax job, the researchers had chosen the theme: *Analyzing factors affecting the public service quality of Binh Duong Taxation Department for Foreign Direct Investment enterprises* as a paper in Business Administration.

Literature review

Service Quality: The concept of quality has evolved from "excellence" to "value", to "conformance to specification" and to "meeting and exceeding customer expectations" (Reeves & Bendnar, 1994). The first two definitions of quality are quite similar in that they both have common views on assessing and measuring the quality of both products and services, whereas the third is more appropriate for assessing only the quality of products (Pariseau & McDaniel, 1997).

Issues related to the measurement the quality of services were the subject of a large number of investigations by practitioners and academics over past 25 years due to its intangible and complex nature (Prabha et al. 2010).

Prabha et al. (2010) also found that studies on measuring the service quality of educational institutions had been the focus of increased attention during the last few years due the level of competition among the educational institutions and the increasing demand for excellence in education. Due to the relatively abstract nature of services as compared to products, measurement of service quality and its characteristics are difficult and present a complicated task for the academics and practitioners (Parasuraman et al., 1988; Carman, 1990).

However, service quality studies have been published frequently in service marketing literature and measurement of service quality and the development of an instrument for measuring has been an ongoing topic of discussion (Parasuraman et al., 1985; 1988). Service quality was also explored as to what extent a service is adequate to meet the customer's needs and wants (Lewis & Mitchell, 1990; Dotchin & Oakland, 1994).

Service quality may be conceptualized as customers or consumers overall feeling about the superiority or inferiority of the services they received from the service provider (Zeithaml et al., 1990). The most commonly referred to definition of service quality is the difference between customer expectations of what a customer will receive from a service provider and the perceptions about the services received by customer from the service provider (Parasuraman et al., 1988; Grönroos, 2001).

Quality, performance and satisfaction are considered to be the key factors and these factors are interrelated in a causal relationship or some time these three factors are used as synonymously due to the similarity in meaning (Cronin et al., 2000; Bitner and Hubert, 1994). Still there is no precise definition of service quality from an educational point of view. However, according to O'Neill and Palmer (2004), service quality in education can be defined as "the difference between what a customer's expects to receive and his/her perceptions of actual delivery" (cited in A. Ijaz, S.M. Irfan, S. Shahbaz, M. Awan, M. Sabir, 2011).

Methods of research

This research had two phases: Phase one is a preliminary study and the second phase is a formal and more comprehensive study. The study is done by qualitative method. This research method done by formal quantitative methods. Unit of analysis is a FDI enterprise. Study subjects are FDI enterprises related Tax in Binh Duong province.

After preliminary investigations, formal research is done by using quantitative methods questionnaire survey of 600 FDI enterprises in Binh Duong province. The Data tested measurement models, model and test research hypotheses.

The Data collected were tested by the reliability index excluding variables with correlation coefficients lower $\langle 0.30$ and variable coefficient Cronbach's alpha $\langle 0.60 \rangle$, factor analysis explored remove the variable low load factor $\langle 0.50$. The Data was processed by SPSS 20.0 version. Multiple linear regressions were used in this research:

 $Y = \beta_0 + \ \beta_1 {}^*X_1 + \beta_2 {}^*X_2 + \beta_3 {}^*X_3 + \beta_4 {}^*X_4 + \beta_5 {}^*X_5 + \beta_6 {}^*X_6$

X1: The Mechanism for monitoring and commenting; X2: The Administrative procedures; X3: The Assurance of Tax Officials; X4: The Tangibles; X5: The Responsiveness;X6: The Information technology application. Y: the performance of Service quality.

Research results

Overview about the Binh Duong province

Binh Duong province locating at the gateway to Ho Chi Minh City, being the economic – cultural central of the whole country; crossed by the life line highways such as Highway 13, Highway 14, Ho Chi Minh route, Trans-Asia route, etc.; ranging 10 to 15 kilometers from Tan Son Nhat International Airport and sea ports, convenient for comprehensive socio-economic development.

In recent years, with high economic growth rate, GDP increases 14.5% annually on average. The economic structure actively changes, industrial and service sectors rapidly grow and account for high proportion, in 2010, the proportion of industry - construction was 63%, service - 32.6% and forestry & agriculture - 4.4%.

Currently Binh Duong has 29 industrial parks and zones with the total area of over 8,700 hectares, in which more than 10,200 domestic and foreign enterprises under operation with the total capital investment of over US\$ 13 billion.

Binh Duong has with the advantages in natural conditions, socio-economic potential and policies from the Central Party and Government, Binh Duong will continue to develop sustainably, and become the most civilized & modern city of Vietnam and of the South East Asia region.

Socio-economic development direction of Binh Duong province to 2020

Development viewpoint: Socio-economic development master plan of Binh Duong province to 2020 aims at building Binh Duong a province with high and comprehensive economic growth rate, ensuring the relationship between economic growth and social issues management, poverty alleviation, upgrading the spiritual and material life of citizens. In 2020, Binh Duong will become industrial city.

Focus on exploring the advantages of geographic conditions, the cooperation of provinces in the Southern Key Economic Zone and Ho Chi Minh City - the development core to develop socio-economy. Being active in the global integration; upgrading the economic effectiveness linked with social development upon key investment; constructing comprehensive infrastructure system; developing industry along with urban and service development; developing socio-economy closely linked to environmental protection, national defense ensuring, local security enhancement.

Descriptive Statistics for the performance of Service quality

Questions	Ν	Mean	Std. Deviation
RE1: The tax officials are enthusiastically			
supported and addressed any tax issues for the	572	3.16	.935
enterprises			
RE2: The tax officials are not troubling, harassment	572	3.20	.939
when handling affairs	918	J.2U	.909
RE3: The tax officers are fairness, equality at work	572	3.30	.918
for all enterprises	518	0.00	.910
RE4: The enterprises do not have to spend			
additional expenses when informal working with	572	3.25	.927
tax officials			
AP1: The procedures and processes is addressing the	572	3.35	1.016
tax records are public, transparent	518	0.00	1.010
AP2: The administrative procedures are in the field	572	3.43	.978
of simple and straightforward tax	518	0.40	.910
AP3: The "one stop model" in resolving the			
administrative procedures applied in the tax offices	572	3.44	.950
operate effectively, facilitating the enterprise			

Table 1: Factors affecting the performance of Service quality

AP4: The tax management process is according to				
ISO 9001: 2008 by the tax office for processing	572	3.43	.949	
dossiers faster than expected now				
MMC1: The tax agencies have publicized telephone	572	2.96	.873	
hotline number, comment box at work	912	2.90	.015	
MMC2: The tax agencies often organize meetings,	572	2.99	.893	
direct dialogue with enterprises	512	2.99	.000	
MMC3: The tax agencies listen, absorb the	570	2.00	160	
reflection, proposals and comments from enterprises	572	3.02	.921	
MMC4: The tax authorities resolve complaints and	572	3.01	.915	
feedback of the business proposals	912	0.01	.919	
ITA1: The website of the tax offices is regularly				
updated and provides full documentation, tax	572	3.38	1.000	
guidelines				
ITA2: The tax offices applied online tax return				
filing has helped enterprises convenient and save	572	3.37	1.013	
time, costs more than the previous tax forms				
ITA3: The Data transmission is responsive to online	570	9.47	00.4	
tax declarations of enterprises	572	3.47	.904	
ITA4: The tax offices have performed application of				
information technology in supporting enterprise	572	3.35	1.013	
implement tax obligations				
ATO1: The tax officials have tactful attitude,				
civilized and courteous when communicating,	572	2.82	1.376	
behavior				
ATO2: The tax officials understand about master	570	0.05	1.580	
policy or tax professional	572	2.85	1.900	
ATO3: The tax officers are proficient processes and	570	0.00	1 4 40	
task-solving skills	572	2.80	1.440	
L	l	I		

(Source: The researchers processed by SPSS 20.0)

Table 1: continued

ATO4: The tax officers are proficient in foreign languages	572	2.89	1.364
TA1: The tax Agency headquarters condition is			
spacious and well-equipped, comfortable (desks and			
chairs, hot and cold drinking water, air	572	3.10	1.012
conditioning, clean bathrooms, parking,)			
TA2: The organization chart, tables, shelves			
document are layout, scientific arrangement and	572	3.06	.991
easy to search			
TA3: The tax agency equipment is invested modern	570	2.00	050
and upgraded	572	3.08	.950
TA4: The tax officials neatly dressed, polite and	~~~	2.07	1.000
officers wear badges when performing tasks	572	3.07	1.006
SQ1: The FDI Enterprise completely satisfied with			
the service of the Tax Department in Binh Duong	572	3.36	.573
province			
SQ2: The Quality public services at Tax Department	~~0	0.97	202
fully meet your expectations FDI Enterprises	572	2.37	.593
SQ3: In general, FDI enterprises are completely			
satisfied with public services at Tax Department in	572	2.35	.621
Binh Duong province			
Valid N (listwise)	572		

Table 1 showed that there were six factors, which included of factors following Mechanism for monitoring and commenting (MMC: MMC1, MMC2, MMC3 and MMC4). Administrative procedures is (AP: AP1, AP2, AP3 and AP4) Assurance of Tax Officials is (ATO: ATO1, ATO2, ATO3 and ATO4). Tangibles is (TA: TA1, TA2, TA3 and TA4). Responsiveness is (RE: RE1, RE2, RE3 and RE4) and Information technology application is (ITA: ITA1, ITA2, ITA3 and ITA4) that are the independent variables but the performance of Service quality (SQ: SQ1, SQ2 and SQ3) is the dependent variable.

Exploratory Factor Analysis (KMO) and Bartlett's Test for the performance of Service quality

KMO & Bartlett's test play an important role for accepting the sample adequacy. While the KMO ranges from 0 to 1, the world-over accepted index is over 0.6. For Factor Analysis recommended suitable, the Bartlett's Test of Sphericity must be less than 0.05.

Table 2

KMO and Bartlett's Test for the performance of Service quality KMO and Bartlett's Test

Kaiser-Meyer-Olkin	.799	
Developtive Treates	Approx. Chi-Square	17224.559
Bartlett's Test of	df	276
Sphericity	Sig.	.000

(Source: The researcher's collecting data and SPSS)

The results of the table 2 revealed that Kaiser-Meyer-Olkin Measure of Sampling Adequacy was statistically significant and high data reliability (KMO = $0.799 \rightarrow 0.6$). This result was very good for data analysis.

The Factor Analysis procedure has several extraction methods for constructing a solution. The principal components method of extraction begins by finding a linear combination of variables (a component) that accounts for as much variation in the original variables as possible. It then finds another component that accounts for as much of the remaining variation as possible and is uncorrelated with the previous component, continuing in this way until there are as many components as original variables. Usually, a few components will account for most of the variation, and these components can be used to replace the original variables. This method is most often used to reduce the number of variables in the data file.

Com.	Initial Eigenvalues			Extrac	tion Sums	Rotation	
				Loadings			Sums of
							Squared
							Loadings ^a
	Total	% of	Cumulative	Total	% of	Cumulative	Total
		Variance	0/ /0		Variance	0/ /0	
1	6.672	27.799	27.799	6.672	27.799	27.799	4.760
2	4.907	20.446	48.245	4.907	20.446	48.245	4.800
3	3.139	13.079	61.324	3.139	13.079	61.324	4.417
4	2.126	8.857	70.181	2.126	8.857	70.181	3.149
5	1.753	7.302	77.483	1.753	7.302	77.483	4.377
6	1.363	5.681	83.164	1.363	5.681	83.164	4.743
7	.852	3.549	86.714				
8	.496	2.065	88.778				
9	.441	1.838	90.616				
10	.359	1.495	92.111				
11	.342	1.425	93.536				
12	.315	1.313	94.849				
13	.273	1.136	95.985				
14	.170	.709	96.694				
15	.162	.674	97.367				
16	.120	.501	97.868				
17	.117	.488	98.356				
18	.106	.442	98.799				
19	.084	.348	99.147				
20	.067	.281	99.427				
21	.059	.247	99.674				
22	.053	.221	99.895				
23	.022	.093	99.988				
24	.003	.012	100.000				

Total Variance Explained

Extraction Method: Principal Component Analysis.

(Source: The researcher's collecting data and SPSS)

Table 3 showed that Cumulative percent was statistically significant and high data reliability was 83.164 % (> 60 %). As a result, the total variance explained by the solution is

smaller; however, the addition of this structure to the factor model makes these methods ideal for examining relationships between the variables.

Besides, KMO and Bartlett's Test for the performance of Service quality (SQ) showed that Kaiser-Meyer-Olkin Measure of Sampling Adequacy was statistically significant and high data reliability (KMO = 0.731 > 0.6). This result was very good for data analysis. The performance of Service quality (SQ) showed that Cumulative percent was statistically significant and high data reliability was 96.109 % (> 60 %).

		Pa	attern Mat	rix ^a		
Code			Comp	onent		
	1	2	3	4	5	6
MMC2 MMC4 MMC3 MMC1 AP2 AP1 AP3 AP4 AT01 AT04 AT04 AT03 AT02 TA4 TA2	1 .969 .944 .923	2 .964 .960 .916 .914		4 .936 .927	5	6
TA3 TA1 RE1 RE2 RE4 RE3 ITA1 ITA2 ITA3 ITA4				.839 .824	.924 .916 .812 .801	.968 .923 .798 .766

Table 4: Structure Matrix for factors of the performance of Service quality

(Source: The researcher's collecting data and SPSS)

Table 4 showed that Structure Matrix for the factors affecting the performance of Service quality above mentioned had 6 Components which included of factors following Component 1 (X₁) is Mechanism for monitoring and commenting (MMC). Component 2 (X₂) is Administrative procedures (AP). Component 3 (X₃) is Assurance of Tax Officials (ATO). Component 4 (X₄) is Tangibles (TA). Component 5 (X₅) is Responsiveness (RE) and Component 6 (X₆) is Information technology application (ITA).

Regression analysis for factors affecting the performance of Service quality

Table 5: Regression Model Summary analysis for factors affecting the performance of Service

quality Model Summary^b

Mode	R	R	Adjusted R	Std. Error of	Durbin-
1		Square	Square	the Estimate	Watson
1	.714 ^a	.510	.505	.41090	1.715

a. Predictors: (Constant), X₆, X₄, X₁, X₂, X₅, X₃

b. Dependent Variable: Y

ANOVAª

Mode	el	Sum of Squares	df	Mean	\mathbf{F}	Sig.
				Square		
	Regression	99.246	6	16.541	97.969	$.000^{\mathrm{b}}$
1	Residual	95.395	565	.169		
	Total	194.641	571			

Table 5: continued

Coefficients^a

Model	Unstandardized		Standardized	t	Sig.	Collinea	arity
	Coefficients		Coefficients			Statist	ics
	В	Std.	Beta			Toleranc	VIF
		Error				е	
(Constant)	119	.129		923	.357		
$\mathbf{X_1}$.102	.024	.150	4.273	.000	.706	1.417
\mathbf{X}_2	.120	.022	.188	5.423	.000	.725	1.378
\mathbf{X}_{3}	.140	.015	.317	9.079	.000	.712	1.405
${ m X}_4$.102	.020	.152	5.165	.000	.997	1.003
\mathbf{X}_5	.290	.025	.399	11.540	.000	.725	1.379
\mathbf{X}_{6}	.133	.025	.195	5.236	.000	.623	1.606

a. Dependent Variable: Y: the performance of Service quality

(Source: The researcher's collecting data and SPSS)

The results of the table 5 revealed that Adjusted R Square was statistically significant and high data reliability. In addition, Adjusted R Square reached 50.5 %.

Conclusion

The research results showed that all t value > 2 was statistically significant and high data reliability. Besides, the regression coefficients were positive. This showed that the effects of independent variables in the same direction with the performance of Service quality.

In this research, the results had the Variance Inflation Factor (VIF) and Tolerance shown to be the following VIF < 10. (1 < VIF < 10). This showed that there was not Multicollinearity.

We had the component 1 (X_1): The Mechanism for monitoring and commenting (MMC) affecting on the performance of Service quality with significance level of 5%.

We had the component 2 (X_2): The Administrative procedures (AP) affecting on the performance of Service quality with significance level of 5%.

We had the component 3 (X_3): The Assurance of Tax Officials (ATO) affecting on the performance of Service quality with significance level 5 %.

We had the component 4 (X₄): The Tangibles (TA) affecting on the performance of Service quality with significance level 5 %.

We had the component 5 (X_5): The Responsiveness (RE) affecting on the performance of Service quality with significance level 5 %.

We had the component 6 (X₆): The Information technology application (ITA) affecting on the performance of Service quality with significance level 5 %.

REFERENCES:

- Ackoff, Russell L. (1961). *The Design of Social Research*. Chicago: University of Chicago Press.
- 2. Adam, F., and Healy, M. (2000). A practical guide to postgraduate research in the business area. Blackball Publishing.
- 3. Akao, Y. (1990). Quality function deployment. Cambridge: Productivity press.
- Allen, T. Harrell (1978). New Methods in Social Science Research. New York: Praeger Publishers.
- 5. Ary, D., Jacobs, L., Sorensen, C. & Razavieh, A. (2009). *Introduction to research in education (8th ed.)*. Belmont, CA: Wadworth.
- Babakus, E. & Boller, G.W. (1992). An empirical assessment of SERVQUAL scale. University of Missouri, USA.
- Bailey, Kenneth D. (1978). *Methods of Social Research*. New York: John Wiley & Sons.
- 8. Barzun, Jacques & Graff, Henery, F. (1987). *The Modern Researcher*. New York: Harcourt, Brace.

- Berdie, Douglas R., and Anderson, John F. (1985). *Questionnaires: Design and US.* Metuchen N.J.
- 10. Berg, B. (2001). *Qualitative research methods for the social sciences*. Boston: Allyn and Bacon.
- Berg, Bruce L., (2009). Qualitative Research Methods for the Social Sciences. Boston MA: Pearson Education Inc.
- 12. Best, John W., & Kahn, James V. (1986). *Research in Education*. 5th Ed., New Delhi: Prentice-Hall of India.
- Blaug, Mark (2007). The Social Sciences: Economics. The New Encyclopædia Britannica.
- 14. Blomstrom, M., A. Kokko and M. Zejan (2000). *Foreign Direct Investment*. St. Martins Press, New York.
- 15. Carliner, S. (2003). *Training design basics*. American Society for training and Development. MD, USA.
- Central Institute for Economic Management (2010). Viet Nam's Economy in 2009. Hanoi. Finance Publishing House.
- 17. Central Institute for Economic Management (2011). *Viet Nam's Economy in 2010. Hanoi.* Finance Publishing House.
- Creswell, J. (2003). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. Thousand Oaks, California: Sage Publications.
- 19. Cheng, Y.C. & Tam, M. M. (1997). *Multi-Model of quality in education*. Quality Assurance in Education.
- 20. Edward E. Leamer (2008). *Specification problems in econometrics*. The New Palgrave Dictionary of Economics.
- 21. Eraut, M., Alderton, J., Cole, G., Senker, P. (1998). Development of Knowledge and Skills in Employment, University of Sussex Institute of Education. Brighton, Research Report.
- 22. Freeman, Nick J. (2001). Understanding the Decline in Foreign Investor Sentiment towards Vietnam during the 1990s. Asia Pacific Business Review, London.
- 23. Graham, Edward M. and Rugman, Alan M. (1993). The Surge in Foreign Direct Investment in the 1980s," in Kenneth A. Froot, ed. Foreign Direct Investment. Chicago: University of. Chicago Press.
- 24. Grego, E. and Schiffrin, P., (1995). *Customer-centered Reengineering: Remapping for Total Customer Value*. IRWIN Publishing.
- 25. Harvey, L. & Green, D. (1993). Assessment and Evaluation in Higher Education.
- 26. Howell, K. E. (2013). *Introduction to the Philosophy of Methodology*. London: Sage Publications.

- 27. Ichikawa, N. (1990). Foreign and Domestic Investment in Thailand: A Regional Analysis Thailand Development Research Institute Foundation. Bangkok.
- 28. Jinlong Wang (2010). *Study on Student score based on Data Mining*. Deakin University, Victoria, Australia.
- 29. Joubish, Farooq Dr. (2009). *Educational Research Department of Education*. Federal Urdu University, Karachi, Pakistan.
- 30. Keisuke Hirano (2008). *Decision theory in econometrics*. The New Palgrave Dictionary of Economics.
- 31. Kennedy, Peter (2003). A guide to econometrics. Cambridge, Mass: MIT Press.