

Factors Affecting the Satisfaction of Foreign Investors-Quantitative Analysis and Policy Implications to Strengthen the FDI Attraction in Bacninh Province of Vietnam

Nguyen Thi Thu Ha, Nguyen Thu Ha, Hoang Van Duc, and Dang Vu Thang

Abstract—In order to find the solutions strengthening FDI attraction in Bac Ninh province, this paper focuses on two main contents, include: identification and quantitative analysis of factors affecting the satisfaction of foreign investors and proposals of solutions on enhancing FDI attraction in Bac Ninh province. The data of the study were collected from 235 investors doing business in Bac Ninh province. Using the exploratory factor analysis (EFA) and multivariate linear regression analysis, results of research showed that there are five factors affecting the satisfaction of investors in order of importance: Capacity of Local Leaders, Competitive Input Cost, Advantage of Local Labor, Investment Policy and Infrastructure for Investment.

Index Terms—FDI, investor, satisfaction, factor, Bac Ninh, EFA.

I. INTRODUCTION

Bac Ninh Province is located in the Northern key economic region of Vietnam, far from Hanoi capital 30km. Bac Ninh province has some important transport routes connecting with the economic, cultural and trade centers in the North such as Hanoi capital, Hai Phong - the largest port city in the North, Noi Bai international airport, Lang Son and Mong Cai border gate (contiguous to China). Bac Ninh has advantages for socio-economic development, especially in attracting foreign direct investment thanks to its favorable geographical location and relatively uniform transportation infrastructure.

Based on comparative advantages, Bac Ninh province has made marvellous socio-economic growth. The growth rate of gross domestic product in the province (GRDP) over the period 2011-2015 has averaged 15.7 points %/year (according to comparative evaluation in 1994). In 2015, the value of GRDP reached 24,528 billion dong, ranking the 6th in the country; economic structure is being shifted in a positive direction, the value proportion of industry and service sectors has accounted for 95% of GRDP. As of August 2015, the total number of registered FDI projects has reached 747 projects with a total registered capital of 11.2

billion USD, therefore the proportion of gross product of foreign direct investment region rapidly increases from 45.6% (2011) to 70.3% (2015), export and import turnover sharply increases from 7,757 billion USD (2011) to 26 billion USD (2015), accounting for 17.7% of total national export turnover [1]-[3].

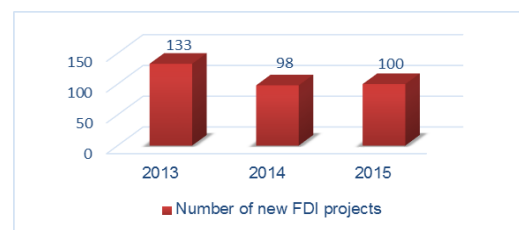


Fig. 1. Number of new FDI projects in period of 2013-2015 in Bac Ninh province.

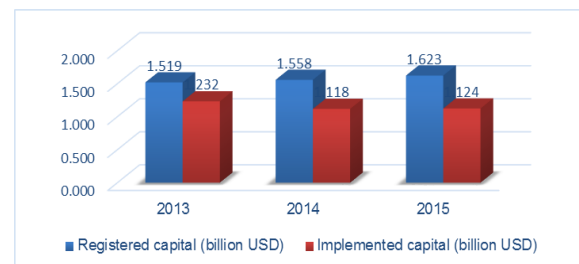


Fig. 2. The registered capital and implemented capital of FDI projects in period of 2013 – 2015 in Bac Ninh province.

As shown in two figures above, the FDI attraction in Bac Ninh Province has tended to slow down in recent years. Meanwhile, attracting foreign direct investment in the whole country has tended to increase (in 2015, the number of new investment projects increased by 26.8 points %, total registered capital increased by 12.5 points % over 2014). Besides, some foreign investors who have investment projects in Bac Ninh over past years start seeking for other localities, for example, Samsung Electronics has made other investment projects outside Bac Ninh province such as SEVT project in Thai Nguyen, or Samsung CE complex project in Ho Chi Minh City. It shows that the attraction for foreign direct investment of Bac Ninh Province is beginning to decline. The cause of this decline can be found from the perception of the investment environment in Bac Ninh province of foreign investors who are investing or promoting investment in this province.

According to Mai The Cuong [4], in order to resolve the difficulties in attracting investment into the province, the local authorities must consider investors as customers, and be aware of the needs and requirements of investors to meet their wishes. Investors' satisfaction with the locality is a

Manuscript received April 17, 2016; revised June 16, 2016.

Nguyen Thi Thu Ha is with Faculty of Economic, Thai Nguyen University of Economics and Business Administration, Thai Nguyen, Vietnam (e-mail: nthuha01@gmail.com).

Hoang Van Duc is with Department of Education and Training, Hai Phong, Vietnam (e-mail: duchv1975@gmail.com).

Nguyen Thu Ha is with the Division of Development Economics, Faculty of Economics, Thai Nguyen University of Economics and Business Administration, Vietnam.

Dang Vu Thang is with the Department of Human Resource Organization Department of Education and Training, Haiphong, Vietnam.

competitive advantage of the locality. If the locality can meet the requirements of investors, there will be a positive impact on their satisfaction leading to the decision to invest in the locality. Thus, in order to continue to effectively attract foreign direct investment, Bac Ninh province needs to meet the needs of investors. So as to do that, Bac Ninh province needs to determine the factors affecting foreign investors' satisfaction and analyze their impacts, and on that basis, propose solutions to enhance foreign investors' satisfaction.

There has been some researches done to evaluate and analyze the factors affecting foreign investors' satisfaction, such as "Factors affecting foreign investors' satisfaction in the industrial zones - quantitative models and policy implications" [5], the research "Factors affecting FDI enterprise's satisfaction: a case study of a typical research in Da Nang" [6]. Although the researches had studied the factors affecting the satisfaction of foreign investors or FDI enterprises, but so far there has been no research studying the factors affecting foreign investors' satisfaction in Bac Ninh Province.

From researching the documents and studies as summarized above, the research team finds that the research of factors affecting the satisfaction of foreign investors in Bac Ninh Province is a knowledge gap that needs to be researched. This paper will focus on the main contents including identification and analysis of the factors affecting the satisfaction of foreign investors in Bac Ninh Province and suggestions on some policy implications in order to enhance the satisfaction of foreign investors as well as increase FDI attraction in this locality.

II. LITERATURE REVIEW

Local marketing theory showed that factors affecting investors' satisfaction can be divided into three main groups: (1) Investment Infrastructure; (2) Investment modes and policies and (3) working and living environment [5].

Investors will be satisfied with local when their operations are effective there. The efficiency can be expressed in many different forms depending on objectives of the enterprises. Nevertheless, in general, an enterprise only does its business efficiently when it achieves a growth of revenue and profit. If an investor obtained his/ her objectives, the investor will tend to continue the investment and to suggest other enterprises to invest in the locality [6].

According to the research results of Corin and Taylor [7, 8], service quality is the prefix of customer satisfaction and customer satisfaction significantly affects the tendency of purchase. Thus, enterprises tend to invest into a local when they are pleased with service quality of the investment environment of the local. According to Dunning [9], an enterprise only fulfills Foreign direct investment (FDI) with full 3 conditions as bellow: (1) Enterprise must have more advantages in comparison with other enterprises, such as: scale, technology, network marketing, access to capital with low interest rates or the specific intangible assets of the enterprise. (2) The internal factors: the use of these advantages in the enterprise is more profitable than selling or renting to other enterprises; and (3) production cost in the host

countries is lower than the production in the investors' countries. Location advantages may be due to the natural resources, labor, trade barriers, policies to encourage investment and the impact of external sites which location can generate enterprises during operation. The model of Romer and Lucas (2007) showed that factors affecting investment behavior are: (1) changes in supply and demand; (2) interest rates; (3) the development level of the financial system; (4) public investment; (5) the ability of human resources; (6) the other projects in the same industry or the related industry; (7) the development of technology, the ability to acquire and apply technology; (8) the stability level of the investment environment and (9) the adequacy level of information, including information about the market, rules, procedures, and technology advances. Local marketing theory has shown that factors impacting on the satisfaction of investors can be divided into three main groups, as bellow: (1) infrastructure for investment; (2) the investment policy; and (3) the working and living environment [5].

There are a lot of studies on satisfaction but most of them about the customer satisfaction, tourist satisfaction or patient satisfaction, and rarely about the investor satisfaction. There are a few studies just research on the factors affecting the satisfaction of the foreign direct investors or FDI enterprises rather than investors in general. Some of related studies are summarized as followed: Dr. Le Tuan Loc has shown 8 factors affecting the satisfaction of FDI enterprises in DaNang [10]; Phi Dinh Ho has developed Exploratory Factor Analysis model and regression analysis in order to quantify the factors that influence the satisfaction of foreign investors in the Vietnam-Singapore industrial zones in Binh Duong province [5].

With the objectives of studying the factors affecting the satisfaction of foreign investors in Bac Ninh province, and after studying from the previous related researches, the authors found that there are no specific studies about this field in this province, especially about the quantitative analysis of influencing factors. Base on the research objectives and the related literatures, the research team found that identifying factors affecting the satisfaction of foreign investors, fulfill quantitative analysis of the impact of these factors and proposing some policies to enhance FDI attraction into Bac Ninh province is necessary.

III. RESEARCH METHODOLOGY

A. Research Questions and Hypotheses

The study aims to seek answers to the following questions:

- 1) What factors affecting the satisfaction of foreign investors in Bac Ninh province as perceived by the investors in terms of: Infrastructure for investment; Investment policy; Quality of public services; Human resource; Living and Working environment; competitive input costs; the advantage of invested industry; Local brand?
- 2) How do these factors influence the satisfaction of the foreign investors in Bac Ninh province?
- 3) What should be proposed for the enhancement of foreign direct investment inflows into Bac Ninh province?

One of the objectives of this research is to analyse quantitatively the impact of affecting factors on the satisfaction of foreign investors. To study the above objective, the following hypothesis are set:

- 1) H_{01} : There is no significant linear correlation between the Infrastructure for Investment and the Satisfaction of the foreign investors;
- 2) H_{02} : There is no significant linear correlation between the Investment Policy and the Satisfaction of the foreign investors;
- 3) H_{03} : There is no significant linear correlation between the Quality of Public Services and the Satisfaction of the foreign investors;
- 4) H_{04} : There is no significant linear correlation between the Human Resource and the Satisfaction of the foreign investors;
- 5) H_{05} : There is no significant linear correlation between the Living and Working Environment and the Satisfaction of the foreign investors;
- 6) H_{06} : There is no significant linear correlation between the Competitive Input Cost and the Satisfaction of the foreign investors;
- 7) H_{07} : There is no significant linear correlation between the Advantage of Invested Industry and the Satisfaction of the foreign investors;
- 8) H_{08} : There is no significant linear correlation between Local Brands and the Satisfaction of the foreign investors.

B. Analysis Framework

As stated in the literature review part, theories of Corin and Taylor [7, 8] found that the quality of service is a determinant on the satisfaction of customers, and satisfaction of customers influence significantly on purchasing tendency. Dunning [9], Romer, Lucas (2007) and Local marketing theory found factors affecting investment behaviors or the satisfaction of investors. Base on inheriting these theories and according to the situation of Viet Nam, we discussed with expert groups on investment of Bac Ninh province about the measurement scale and the observed variables using the Likert measurement scale (5 level) in order to identify the prime factors affecting the satisfaction of foreign investors.

* *Explaining the independent factors and the dependent factor:*

Infrastructure for investments (IFI): Convenient transportation about time as well as cost; Electricity, water supply and sewerage system are sufficient; Quick and convenient communications, Premises meet requirements in terms of size and location; Banking systems meet the requirements of foreign investors.

Investment policy (IPO): Policy systems are transparent and quickly deployed to enterprises, especially those related to tax policy; Local leaders operate economic and support enterprises dynamically; the investment incentive policies are attractive.

Working and Living environment (WLE): Investors are interested in the satisfaction about the educational system, the living environment, places for cultural activities of community, entertainment and friendliness of the local people.

Advantages of invested industry (AII): Convenience of the main raw materials for production, getting competitive advantage when enterprise is near the suppliers and main distributors, accessing the local consumption market and competing with the main rivals.

Quality of public services (QPS): The cumbersome of administrative procedures; administrative assistance for enterprises when needed; providing information on investment promotion, trade, import and export.

Local Brands (LBR): Investment is implemented by feeling, according to the introduction or want to be successful like other enterprises, the impression of brand, according to the attraction of the brand.

Human Resources (HRE): The quality of vocational training, employee's skills, ability to acquire technology, discipline, difficulties in communication and recruiting highly qualified human resources.

Competitive Input costs (CIC): Cost of renting land, cost of land clearance, cost of raw materials, cheap labor, electricity and water costs are reasonable, transport and communication services.

Satisfaction of investors (SAT): Revenue and profit of the enterprises rose /will rise, continuing a long-term business investment, introduce other companies to invest, high satisfaction about the investment in the local region.

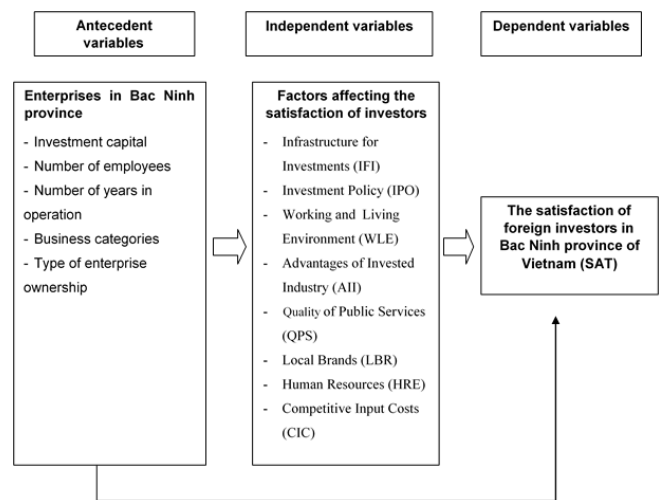


Fig. 3. The conceptual framework of the study.

C. Research Methods and Data Analysis

This research was conducted through two stages:

Stage 1: Qualitative research in order to build and develop the systems of concepts / measurement scales and research variables, from which create a questionnaire survey.

Stage 2: Through the support of SPSS software for Windows 16.0, the process of quantitative research has been done through two steps:

- 1) Step 1: Using EFA method to test affecting factors and identify the factors according to the evaluation of investors. Through this step, the reliable measurement scale system of affecting factors is constructed.
- 2) Step 2: Using regression analysis to identify significantly affecting factors and the role of each factor.

D. The Scope of the Study and the Method of Collecting Information and Data

Sample size depends on analysis method, whereas this study use EFA tool with 44 observation variables. The minimum sample size for EFA is 50, preferably 100 and the ratio of observation / measurement variable is 5/1 [11], every measurement variable needs at least 5 observations. Based on the number of variables in the study, the sample size is at least 220. The research team has conducted survey 235 FDI enterprises in the object of study in Bac Ninh province. Sample size is 235 investors (conduct surveying 235 enterprises, in which, interview 1 managers in each enterprises). The process of survey management was conducted through questionnaire survey designed according to 9 measurement scales with the Likert measurement scale (5-level). The research team conducted a trial survey on 15 enterprises in the research objects. Through the result of this survey, the scales are adjusted and the questionnaire survey is completed to more suitable with local practice. Then the research team conducted a formal investigation in the study area.

IV. EMPIRICAL FINDINGS

A. Exploratory Factor Analysis (EFA)

Identifying factors: Measurement scales and observed variables that used to analyse exploratory factors include 9 measurement scales with 44 observed variables .

1) Quality test of measurement scales

After testing the Cronbach alpha, we identified the excluded variables which include: AII4, All variables of scale QPS and scale LBR. Whereas, the research model remains 7 measurement scales which have the good quality with 35 specific variables: IFI1, IFI2, IFI3, IFI4, IFI5, IFI6, IPO1, IPO2, IPO3, IPO4, IPO5, WLE1, WLE2, WLE3, WLE4, WLE5, WLE6, AII1, AII2, AII3, HRE1, HRE2, HRE3, HRE4, HRE5, HRE6, CIC1, CIC2, CIC3, CIC4, SAT1, SAT2, SAT3, SAT4, SAT5.

2) Performing exploratory factor analysis

a) Testing the suitability of EFA

TABLE I: KMO AND BARTLETT'S TEST

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			.750
Bartlett's Test of Sphericity	Approx. Chi-Square		3319.643
	Df		378
	Sig.		.000

KMO = 0.75 satisfying the condition: $0.5 < \text{KMO} < 1$. Therefore, exploratory factor analysis is appropriate to the actual data.

b) Correlation test of the observed variables in the representative measure scales

In Table I, Bartlett's Test has Sig . < 0.05 , this means that observed variables are linearly correlated with representative factors

c) Testing impact level of the observed variables to factors

Column Cumulative shows that the value of variance extracted is 69.523%. This means that 69.523 % of the change of factors was explained by the observed variables (components of the factors).

TABLE II: 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	6.218	22.206	22.206	5.218	22.206	22.206	3.100	11.071	11.071
2	3.239	11.569	33.775	3.239	11.569	33.775	2.901	10.359	21.430
3	2.560	9.144	42.919	2.560	9.144	42.919	2.886	10.305	31.735
4	1.973	7.047	49.965	1.973	7.047	49.965	2.573	9.188	40.923
5	1.535	5.481	55.447	1.535	5.481	55.447	2.276	8.130	49.053
6	1.398	4.993	60.440	1.398	4.993	60.440	2.201	7.860	56.913
7	1.343	4.798	65.238	1.343	4.798	65.238	1.872	6.686	63.599
8	1.200	4.285	69.523	1.200	4.285	69.523	1.659	5.924	69.523
9	.896								

d) Results of the EFA model

The results of exploratory factor analysis are shown in the Rotated component Matrix. This result showed that all variables have loading factor coefficients greater than 0.55. There are 8 representative factors affecting to the satisfaction of foreign investors with variables of factors which are rearranged differently from the original theoretical model.

Component 1 which includes variables: CIC1, CIC2, CIC3, CIC4 is named F_CIC. Component 2 includes variables: IFI1, IFI2, IFI3, WLE1. According to the initial model, variable WLE1 was in the WLE factor, but after EFA, it has been arranged with IFI variables . This component is named F_IFI. Component 3 which includes variables: IPO4, WLE2, WLE3, WLE5, WLE6 was named F_WLE. Component 4 which includes variables: HRE1, HRE2, HRE3, HRE4 was named F_HRE. Component 5 which includes variables: IFI4, IFI5, IPO5 was named F_IPO. Component 6 which includes variables: AII1, AII2, AII3 was named F_AII. Component 7 which includes variables: WLE4, HRE5, HRE6 was named F_ALL (Advantage of local labors). Component 8 which includes variables: IPO1, IPO2 was named F_CLL (capacity of local leadership). Thus, through testing the quality of measurement scale and tests of EFA model, we identified 9 measurement scales with 32 specific variables. The results were summed as following:

TABLE III: ADJUSTED MODEL AFTER TESTING CRONBACH ALPHA AND ANALYSING EXPLORATORY FACTORS

No	Measurement scale	Variables	Explanation of scale
1	F_CIC	CIC1, CIC2, CIC3, CIC4	Competitive input cost
2	F_IFI	IFI1, IFI2, IFI3, WLE1	Infrastructure for Investment
3	F_WLE	IPO4, WLE2, WLE3, WLE5, WLE6	Living and working environment
4	F_HRE	HRE1, HRE2, HRE3, HRE4	Human resources
5	F_IPO	IFI4, IFI5, IPO5	Investment Policy
6	F_AII	AII1, AII2, AII3	Advantage invested industry
7	F_ALL	WLE4, HRE5, HRE6	Advantage of local labors

8	F_CLL	IPO1, IPO2	Capacity of local leadership
9	F_SAT	SAT1, SAT2, SAT3, SAT4, SAT5	The satisfaction of investors
Total	9	32	

B. Multivariate Regression Analysis

Generalized regression model which is adjusted after analyzing exploratory factors is:

$$F_SAT = f (F_CIC, F_IFI, F_WLE, F_HRE, F_IPO, F_AII, F_ALL, F_CLL)$$

Examining each factor and finding out which factors affecting directly the satisfaction of foreign investors is implemented by the linear regression equation following:

$$F_SAT = b_0 + b_1 * F_CIC + b_2 * F_IFI + b_3 * F_WLE + b_4 * F_HRE + b_5 * F_IPO + b_6 * F_AII + b_7 * F_ALL + b_8 * F_CLL + e_i$$

The variables included in the regression analysis was determined by calculating score of the factors (Factor score).

a) Testing of regression coefficient

TABLE IV: COEFFICIENTS

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta				Tolerance	VIF
(Constant)	.735	.211			3.487	.001		
F_CIC	.151	.036	.236		4.227	.000	.671	1.491
F_WLE	.067	.035	.095		1.925	.055	.865	1.156
F_IFI	.096	.044	.120		2.201	.029	.700	1.428
F_HRE	.055	.033	.082		1.656	.099	.845	1.183
F_AII	.038	.036	.052		1.051	.294	.839	1.191
F_IPO	.127	.040	.161		3.179	.002	.814	1.229
F_ALL	.145	.037	.210		3.865	.000	.708	1.412
F_CLL	.200	.044	.237		4.578	.000	.781	1.280

Dependent Variable: F_SAT

Table IV indicates that there are five variables have statistical significance with reliability greater than 95% (Sig. <0.05), including: F_CIC, F_IFI, F_IPO, F_ALL, F_CLL. The testing the suitability of the model such as multicollinearity phenomenon, autocorrelation phenomenon found that there is no violation at all.

TABLE V: MODEL SUMMARY

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.719	.516	.500	.28059

In Table V, Adjusted R Square is 0.500, shows that 50.0% of the change in satisfaction of foreign investors is explained by the independent variables.

- Testing the suitability level of model

TABLE VI: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	19.413	8	2.427	30.822	.000
Residual	18.187	231	.079		
Total	37.600	239			

Shown in the Table VI, Sig. <0.01, thus, it can be concluded that the model in accordance with the actual data. In other words, the independent variables are correlated linearly with the dependent variable and the confidence level is 99%. In summary, through inspection of regression model, variables

which have statistically significant include: F_CIC, F_IFI, F_IPO, F_ALL, F_CLL.

* Discussing the regression result

(1) Regression coefficients which are not standardized

Variable F_CIC: F_CIC's coefficient is 0.151 and positively related to variable F_SAT. When the evaluation of foreign investor about competitive input cost increases by 1 point, their satisfaction will increase by 0.151 points (corresponding to the correlation coefficients which is not standardized is 0.151)

Variable F_IFI: has coefficient 0.096 and positively related to variable F_SAT. When the evaluation of foreign investor about Infrastructure for Investment increases by 1 point, their satisfaction will increase by 0.096 points (corresponding to the correlation coefficients which is not standardized is 0.096)

Variable F_IPO: has coefficient 0.127 and positively related to variable F_SAT. When the evaluation of foreign investor about investment policy increased by 1 point, their satisfaction will increase by 0.127 points (corresponding to the correlation coefficients which is not standardized is 0.127).

Variable F_ALL: has coefficient 0.145 and positively related to variable F_SAT. When the evaluation of foreign investor about advantage of local labor increased by 1 point, their satisfaction will increase by 0.145 points (corresponding to the correlation coefficients which is not standardized is 0.145)

Variable F_CLL: has coefficient 0.2 and positively related to variable F_SAT. When the evaluation of foreign investor about Capacity of local leaders increased by 1 point, their satisfaction will increase by 0.2 points (corresponding to the correlation coefficients which is not standardized is 0.2)

(2) Standardized regression coefficients

This coefficient expresses influential percentage of independent variables. Regression coefficients which is not standardized can be modified in percentage form as followings:

TABLE VII: THE IMPORTANCE OF FACTORS

Independent variables	Absolute Value	%
F_CIC	0.151	21
F_IFI	0.096	13.35
F_IPO	0.127	17.66
F_ALL	0.145	20.17
F_CLL	0.200	27.82
Total	0.719	100

Variable F_CIC contributed 21%, variable F_IFI contributed 13.35%, variable F_IPO contributed 17.66%, variable F_ALL contributed 20.17% and variable F_CLL contributed 27.82%. Thus, the result of the regression analysis indicates that there are 5 factors affecting to the satisfaction of foreign investors in order of importance are: Capacity of local leaders, Competitive input cost, Advantage of local labor, Investment Policy and Infrastructure for Investment.

V. CONCLUSIONS AND POLICY IMPLICATIONS

A. Policy Implications

From the achieved research results, the following policies should be considered to improve the investment environment to attract investment in Bac Ninh province.

1) *Constructing infrastructure for investment synchronously and effectively*

The infrastructure for investment is reflected in: (1) The electricity supply system satisfies the demand, (2) The water supply and sewerage system are sufficient, (3) Convenient communications, (4) Convenient transportation, (5) Premises meets requirements, (6) Banking system meets requirements. The construction of infrastructure must be conducted synchronously in accordance with approved design and planning in order to avoid the situation that the construction projects of investors, companies of trading and exploiting are prolonged or not performing as approved, thus affecting the of sustainable and long- term development of this province.

In addition, the government should support provincial authorities, investors in building infrastructure of the province. The government should prioritize investments in key projects of local or regional, contribute to social and economic development of local and should have policies on capital support, tax and land fund incentives for social projects such as building houses for low-income labours.

2) *Improving the investment policy regime*

The Investment policy regime is reflected in: (1) Incentive policies to attract investment, (2) Tax Policies are transparent; (3) Legal documents are quickly deployed to enterprises. Therefore, Bac Ninh province should implement the following policies: (i) Continue to implement incentive investment policies, create the transparency and equity in the incentive policies. (ii) Complete the tax system to ensure that the tax policies play an positive role in promoting the investment in Bac Ninh province; (iii) Support enterprises in solving administrative procedures according to the law in order to save time and costs for enterprises; (iv) Promulgate coordinated regulations between provincial authorities in building and improving the investment environment of Bac Ninh province.

3) *Improving the capacity of local leadership*

Bac Ninh province needs to continue developing leaders who are moral, assertive, extremely professional, have the strategic vision and the ability to forecast the situation. In addition, it is necessary to thoroughly eliminate the ignorant and authoritative staffs. Regularly organizes training courses to enhance the leadership capacity for managers as well as administrative leaders at each level of the province. The province should have policies to attract talents and use them reasonably to strengthen their management capacity.

4) *Developing the human resource in Bac Ninh province*

The human resource is reflected in: (1) The number of labor is abundant, (2) Disciplined labor; (3) The ability to acquire and apply the technology of labors; (4) Easily hiring skilled managers at local regions, (5) The enterprise does not have difficulty with barriers of language. Thus, Bac Ninh province needs to focus on the following issues to develop the

human resources: (1) Develop the appropriate educational system from secondary school to vocational school and college; develop the system of vocational schools and universities towards integration and training associating with needs of enterprises in the province, especially needs about labor in the industrial zones to provide the province as well as industrial zones with both skilled labor forces and excellent managers, who are capable of handling techniques and technologies in production. (ii) Besides, Bac Ninh province should have favorable immigration policies, create the good living and working environment to attract both unskilled and skilled, high technical labor from the other provinces to supplement supply on the labor market. Focus to open learning Korean and Chinese language courses for workers in the industrial zones in order to meet the needs of investors from Korea, Taiwan and China.

5) *Creating advantages of invested industries*

Bac Ninh province needs to conduct the survey, orient to form industry clusters in industrial zones. In industrial areas, it is necessary to identify prioritized industry branches for development to facilitate for the cost cutting for enterprises. Besides, Bac Ninh province have to implement policies to promote the development of the support industry for electronic industry to meet the demand about products and services for the electronic industry (the focal industry branch of Bac Ninh province). Authorities at all levels should play the role as "supporter" for the establishment of support enterprises, simultaneously support existing enterprises to innovate technology, enhance competitiveness, makes input costs more competitive.

B. Conclusions

Bac Ninh province is always at the forefront of the country's FDI attraction; as of August 2015, the province attracted 747 foreign direct investment projects from 28 countries and territories with a total implemented capital of 5,882.9 million USD. However, the growth rate of FDI attraction in Bac Ninh province in recent years has tended to slow down; the total number of new investment projects in 2014 decreased 33 points % in comparison with 2013; the implemented capital in 2014 decreased by 9.2 points % in comparison with 2013. Thus, strengthening the investment attraction in Bac Ninh province is an urgent issue and needed to be solved for the sustainable development in the future of this province. Evaluating the satisfaction level and measuring the affecting factors to satisfaction of the foreign investors will help decision makers and local authorities make the effective policies in the management and investment attraction into the province. Therefore, this study was implemented to solve the problem mentioned above.

Research has built the model measuring factors affecting the satisfaction of foreign investors with 9 factor groups and 44 observed variables. Results of practical applications in Bac Ninh province show that there are 5 factors affecting the satisfaction of investors in order of importance are: Capacity of local leaders, Competitive input cost, Advantage of local labor, Investment Policy and Infrastructure for Investment. Therefore, in order to attract investment into Bac Ninh province, the provincial authorities should apply the positive

solutions impacting to above factors, such as: Constructing infrastructure synchronously and effectively; Complete the investment policy regime; Enhance leadership capacity of leadership; Develop the human resources and Ensure input cost competitive. With these scientific results, this study can be consulted and applied in Bac Ninh province as well as in other provinces with similar conditions in order to attract more investment in future.

REFERENCES

- [1] Statistical Yearbook of 2015 of Bac Ninh, Department of Statistics of Bac Ninh province, Statistical Publishing House, Hanoi. Vietnam, 2016.
- [2] T. Q. Nam. (2016). Bac Ninh province 's Economy – Achievements and Challenges Online journal of political theories. [Online]. Available: <http://lyluanchinhtri.vn/home/index.php/thuc-tien/item/1242-kinh-te-bac-ninh-thanh-tuu-va-thach-t-huc.html>
- [3] T. Q. Phuong and P. V. Hung, "Investment economics," *National Economics Publishing House*, Vietnam, 2013.
- [4] M. T. Cuong, "The method of Marketing approaching in FDI attraction," *The Forum of Vietnam Development and The University of National Economics*, p. 5, 2005.
- [5] D. P. Ho, "Quantitative research method and practical research in agriculture – Development economic," *The East Publish House*, pp. 356-346, 2011.
- [6] P. Kotler, D. H. Haider, and I. Rein, *Marketing Places*, New York: The Free Press, 1993.
- [7] J. J. Cronin and S. A. Taylor, "An empirical assessment of Ervpef scale," *Journal of Marketing*, 1992.
- [8] J. J. Cronin and S. A. Taylor, "Measuring service quality: A reexamination and extension," *Journal of Marketing*, vol. 6, pp. 55-68, 1992.
- [9] J. H. Dunning, "Trade, location and economic activity and the multinational enterprise: A search for a eclectic approach," London, 1977.
- [10] J. F. M. Hair *et al.*, *Multivariate Data Analysis*, Upper Saddle River NJ: Prentice-Hall, 2006.
- [11] L. T. Loc and N. T. Tuyet, "Factor affecting FDI enterprises' satisfaction: A case study of a typical research in Da Nang," *Journal of Development and Integration*, vol. 11, no. 21, pp. 73-78, 2013.
- [12] J. M. Juran, *Juran's Quality Control Handbook*, The Fourth edition, New York: McGraw-Hill, 1988.
- [13] C. Gronroos, "A service quality model and its marketing implications," *European Journal of Marketing*, vol. 18, no. 4, pp. 36-44, 1984.
- [14] D. N. Gujarati, *Basic Econometrics*, USA: McGraw-Hill, Inc.
- [15] V. F. Armand, *Total Quality Control*, the third edition, New York, NY: McGraw-Hill, Inc, 2005.
- [16] H. D. Hung *et al.*, "Local marketing of Ho Chi Minh city," *Sai Gon Culture Publishing House*, pp. 171-172, 2005.
- [17] J. M. Juran, *Juran's Quality Control Handbook*, The Fourth edition, New York: McGraw-Hill, 1988.
- [18] P. Kotler, D. H. Haider, and I. Rein, *Marketing Places*, New York: The Free Press, 1993.
- [19] Lapierre *et al.*, "Use of service quality gap theory to differentiate between food service outlets," *The Service Industries Journal*, vol. 16, no. 3, 1996.
- [20] R. A. Likert, "A technique for the mensurement of attitudes," *Archives of Psychology*, vol. 140, pp. 5-53, 1932.
- [21] M. Sharma, H. Kaur, and P. Jain, "A study on factor influencing satisfaction of investors towards mutual funds industry using servqual model: An empirical study," *International Journal of Migration and Border Studies*, vol. 2, no. 4, 2012.
- [22] N. D. Tho and N. T. M. Trang, *The Local Nature and the Satisfaction of Enterprises*, Scientific researchs in Bussiness Administration, Statistics Publishing House, Ha Noi. 390pp.73-151, 2009.
- [23] R. L. Oliver, *Satisfaction: A Behavioral Perspective on the Customer*, McGraw – Hill, New York, NY, 1997.
- [24] Parasuraman *et al.*, "A conceptual model of service quality and its implications for future research," *Journal of Marketing*, vol. 49, no. 3, pp. 41-50, 1985.
- [25] Parasuraman *et al.*, "SERVQUAL: A multiple – Item scale for measuring consumer perception of service quality," *Journal of Retailing*, vol. 64, no. 1, pp. 12–40, 1988.
- [26] *Vietnam's Congress*, Investment Law, Labour Publishing House, Ha Noi. Vietnam.



Nguyen Thi Thu Ha has a MSc in agriculture economics from Thai Nguyen University of Economics and Business Administration, Vietnam in 2010 and currently she is studying the PhD program of public administration in the Central Philippines University, Philippine. She is deputy-head of Division of Development Economics, Faculty of Economics, Thai Nguyen University of Economics and Business Administration, Vietnam. She has published numerous research articles in conferences and journals. Currently her research interests are analysis of factors affecting the satisfaction, investment attraction, improvement of investment environment and gender equity.



investment attraction.

Nguyen Thu Ha has a MSc in development economics from National Economics University, Hanoi, Vietnam in 2014. She is a lecturer of the division of Development Economics, Faculty of Economics, Thai Nguyen University of Economics and Business Administration, Vietnam. She has published some research articles in conferences and journals. Currently her research interests are economic growth and



management and education quality.

Hoang Van Duc has a MSc in information technology from Vietnam National University, Hanoi, Vietnam in 2007 and currently he is studying the PhD program of public administration in the Central Philippines University, Philippine. He is deputy-head of Department of Examinations and Quality Test, Department of Education and Training, Haiphong, Vietnam. Currently his research interests are analysis of factors affecting the satisfaction, education



administration of human resource.

Dang Vu Thang has a MSc in education management from the university of Education, National university, Hanoi, Vietnam in 2008 and currently he is studying the PhD program of public administration in the Central Philippine University, Philippines. He is deputy-head of Department of Human resource organization, Department of Education and Training, Haiphong, Vietnam. Currently his research interests are education management, education quality and