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# Enhancement of Investors' Satisfaction on Industrial Zones of Thai Nguyen Province, Vietnam

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#### **Abstract**

The industrial zones play an important role in the socio-economic development of Thai Nguyen province. The authorities of the province and Industrial zone management are very interested in the evaluation of the investors' satisfaction in the industrial zones because this is an important information channel to help the province improve its investment environment and attract investors. This study analyzed and assessed the status of investment attraction policies and infrastructure characteristics of industrial zones by collecting and analyzing secondary data. In addition, the satisfaction of investors was analyzed and evaluated through data collection methods and data processing using SPSS 20.0 software. The research result shows that investors are basically satisfied with the Industrial Zones of Thai Nguyen province, especially in terms of Reliability, Assurance and Empathy of industrial zones. Some items in the scale Tangibles, Responsiveness have not yet been assessed at the satisfaction level but are Neutral level. Based on the status analysis, the study proposes a number of solutions to improve the investor satisfaction, contributing to the improvement of the provincial investment environment.

**Keywords:** Investor; Satisfaction; Industrial zone; Thai Nguyen; Vietnam

# Introduction

Attracting the investment projects is important for the development of industrial zones. To accomplish this, the IZs should have an attractive investment environment and satisfy the requirements of investors. The investment environment of the IZs is considered to be the product, while the investor is considered as the customer [1]. Similarly, Ho and Trung [2] have also considered IZs as the product or service of the industry service whose customers are investors investing in. Customers will be satisfied, continue to use the products and introduce to others when they are satisfied about the quality of the products. Thus, enterprises will have investment tendencies in industrial zones when they are satisfied with the service quality of industrial zones [3]. From these arguments, the study on the assessment of investors about the industrial zones is necessary.

The VCCI annual survey on provincial competitiveness (PCI) of Thai Nguyen province reveals the information about the assessment of enterprises on the investment environment of province. However, this information is not enough for investors in the IZs of the province because they have not mentioned many issues in the investment environment of these industrial zones. In addition, according to the review of related studies, the author found that there are some studies on Thai Nguyen industrial zones, but only on the aspect of sustainable development [4,5], and studies on the investment attraction in Thai Nguyen [5,6], have not been studied on the aspect of investor satisfaction in the Thai Nguyen province. Therefore, this study seeks to find the novelty in assessing the current status of investor satisfaction in the industrial zones of Thai Nguyen province, based on that, suggesting some recommendations to improve the satisfaction of investors.

The organization of the next sections is as follows. Section 2 addresses the related work to investors' satisfaction. While, in Section 3, Methodologies of collection and processing of research data are introduced. Then, the result discussion and the conclusion are presented in Section 4 and 5, respectively.

### **Related Literature**

Some studies on the satisfaction of investors or enterprises have been reviewed. Ho and Trung [2] conducted a study entitled "Factors affecting the satisfaction of foreign investors in the industrial zones: quantitative models and policy implications", focusing on 3 main issues: theoretical framework of quantitative models, Singapore Industrial Park (VSIP) in Binh Duong province and policy suggestions. This study showed that there are 3 factors that really have an impact on the satisfaction of investors in the order of importance: the service ability, empathy, and assurance, and suggested some policy suggestions in order to attract foreign investors in industrial zones in Such as: enhancing the capacity of the industrial zone; The leaders of the locality and the industrial zone management authority must concern, help enterprises more; Creating good conditions to ensure the production and business activities of FDI enterprises. The other study entitled

- 1. Factors affecting FDI enterprise's satisfaction: a case study of a typical research in Da Nang [7];
- Group of factors on the management and support of the local government;
- Group of factors on the formation and development of industry clusters:
- 4. Group of quality factors of human resources; And
- Group of factors on the geographical location and natural resources.

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Based on the analysis results, this research has proposed a number of policy recommendations, such as improvement of infrastructure, improvement of the management and support of local governments, the formation of clusters of industries in the locality, solutions for the development of human resources. Ho and Trung [2] conducted a study entitled "Factors affecting the satisfaction of foreign investors in the industrial zones: quantitative models and policy implications", focusing on 3 main issues: the theoretical framework of quantitative models, results of application with typical studies in the Vietnam-Singapore Industrial Park (VSIP) in Binh Duong province and policy suggestions. This study results showed that there are 3 factors that really have an impact on the satisfaction of investors in order of importance are: the service ability, empathy, and assurance, and suggested some policy suggestions in order to attract foreign investors in industrial zones in Binh Duong such as: Enhancing the capacity of serve of industrial zone management authority; The leaders of the locality and industrial zone management authority must concern, help enterprises more; Creating good conditions to ensure production and business activities of FDI enterprises. The other study entitled "Factors affecting FDI enterprise's satisfaction: a case study of a typical research in Da Nang" identified factors and levels of their impacts as following:

- 1. Group of factors on infrastructure;
- Group of factors on the management and support of the local government;
- Group of factors on the formation and development of industry clusters:
- 4. Group of quality factors of human resources; and
- Group of factors on the geographical location and natural resources.

Based on the analysis results, this research have proposed a number of policy recommendations, such as improvement of infrastructure, improvement of the management and support of local governments, forming clusters of industries in the locality, solutions for development of human resources.

Studies on investment in Thai Nguyen almost focused on issues such as: Attracting investment, improving the investment environment as "Factors affecting Foreign Direct Investment attraction - a case study of Thai Nguyen province" [4]; The project of the Investment Environment Improvement of Thai Nguyen province in 2011-2015 [8]; "Attracting foreign investment in Thai Nguyen province - current situation and solutions" [6]; etc. These studies have proposed solutions to improve the investment environment, attract more investment in Thai Nguyen province basing on the analysis and evaluation of the status of investment attraction and investment environment rather than the analysis of the status of the investors' satisfaction.

The study of VCCI on the provincial competitive index of Thai Nguyen province showed the evaluation of enterprises about the investment and business environment of the province. The result of the study found that the increase of the PCI of Thai Nguyen which reflect the improvement of the investment and business environment of the province. In addition, the PCI sub - indices showed that the assessment of the enterprises on the aspects of Equal Competition, Business Support, Proactivity, Informal Charges and Legal Institution of the province are at average and low level. The indices of Entry Cost , Labor Training, Land Access, Transparency, Time Costs of the province are assessed at quite good level by enterprises, especially, the indices of Entry Cost are evaluated relatively high, therefore, these activities should be further promoted in the coming period. The results of the

assessment of enterprises on the investment environment through PCI reflected their satisfaction with the province's investment environment, which would provide the important information to investors when making investment decisions into Thai Nguyen province. However, for investors planning to invest in IZs of the province, the information from PCI is not enough for them to make a decision. Because there is some information which is not included in the PCI, should be informed to investors, such as: the infrastructure characteristics of the IZs, the preferential policies in the IZs, the attitudes and qualifications of staffs and managers at the Industrial Zones Management Authority, etc. Therefore, it is necessary to have another research studying on the assessment of enterprises on the industrial zones of the province, which will provide the important information to the investors in the future before investing in these industrial zones.

The industrial zones of Thai Nguyen province were mentioned mainly on the researches on the sustainable development aspects of industrial zones such as the study "The sustainable development of industrial zones in Thai Nguyen province" [3] and "Research on the sustainable development of Industrial zones in Thai Nguyen province" Trang and Ha [4] without mentioning the investment issues, the investor satisfaction.

In conclusion, after studying the related studies, the researcher found that it is possible to find the novelty in the study on the analysis of the investor satisfaction in the industrial zones of Thai Nguyen province. Some solutions to improve the investment environment would be proposed basing on the status analysis.

### **Research Methods and Instruments**

### Research methods

**Data collection method:** The study used secondary data collected from data of reports and documents in provincial departments and the Industrial Zone Management Authority. In addition, the secondary data also were collected from published materials, such as: Book, formal website, research journals etc.

The primary data collection was conducted through the use of survey questionnaires. The questionnaires were delivered to the office of enterprises in industrial zones by the researcher and her assistant, through the help of the Industrial Zone Management Authority. In the case that the surveyors didn't meet the respondents, they could leave the questionnaires for the respondents in the respondents' offices. Then, within one week, the researcher and her assistant visited again the enterprises to retrieve the answered questionnaires and answer the questions of the respondents if any.

Population, sample size and sampling technique: The target population of the study is the investors investing in the industrial zones of Thai Nguyen province

According to reports of the Industrial Zone Management authorities, the number of enterprises operating in the industrial zones of Thai Nguyen province at the time of survey is 82. The author conducted a survey on the 82 enterprises, specifically, interviewed 3 respondents in each enterprises. So the sample size of this study is 246. The study selected the respondents who meet the requirements of the following criteria: They are investors who are the capital owners in the enterprises in Thai Nguyen industrial zones and also the senior managers of their enterprises, including: Manager, Deputy Manager, Head of Department, Deputy Head of Department. These are the

people who are most capable of understanding the operational status of their enterprises and understand the issues related to the industrial zones in Thai Nguyen province in general, especially the industrial zones where they are operating. The author conducted surveying 82 enterprises operating in IZs with three respondents per enterprise. 246 survey instruments were distributed but the total number of collected survey instruments was 239. Three instruments were excluded due to the lack of information resulting to a total of 236 valid samples. Thus the number of respondents for the research is 236 which are adequate enough for the analysis of the research data.

#### Research instruments

**Survey questionaries':** In order to collect data for the study, a survey was conducted. Prepared questionnaires were delivered to target investors. The questionnaire was used as primary data collection device. It consists of two parts:

Part I: Profile of the respondents in terms of: Work experience, gender, location of the enterprise, type of enterprise's business ownership, enterprise's scale, the source of enterprise's capital.

Part II: The respondent's rating on the impact of factors on investor satisfaction. These include: Tangibles; Reliability; Responsiveness; Assurance; and Empathy.

**Scaling:** The study used the Likert 5 point scale to rate the level of investors' satisfaction about affecting factors [9].

The Likert 5 point scale has choices ranging from 1 to 5 as follows (Table 1):

Scale	Range	Evaluating level	
5	4.21-5.0	Highly satisfied	
4	3.41-4.2	Satisfied	
3	2.61-3.4	Neutral	
2	1.81-2.6 Dissatisfied		
1	1.0-1.8	Highly dissatisfied	
Source: Author 's compilation (2016)			

Table 1: The Likert 5 point scale.

Respondents were requested to rate their perception of industrial zones of Thai Nguyen province.

The research model has 5 scales and each scale has the observation variables using Likert scale (5 levels), described in detail in Table 2, in order to determine the satisfaction of investors about the industrial zones [10].

S. N o.	Variabl e code	Variable name
	TAN	Tangibles
1	TAN1	Management Authority of industrial zones is at a convenient location, has modern and spacious facilities.
2	TAN2	Dress of staff of Management Authority of industrial zones is elegant, neat

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3	TAN3	Premises and workshops are arranged in time		
4	TAN4	Hire charges of land and workshop are reasonable.		
5	TAN5	Stable electricity		
6	TAN6	Stable water		
7	TAN7	Reasonable electricity price		
8	TAN8	Reasonable water price		
9	TAN9	Convenient transportation system		
10	TAN10	Reasonable waste, wastewater fee		
11	TAN11	Good internal transport system and green space		
12	TAN12	Convenient communication system		
13	TAN13	Good drainage system		
14	TAN14	Good internal lighting system		
	REL	Reliability		
15	REL1	Management Authority of industrial zones complies with commitments with investors		
16	REL2	Management Authority of industrial zones has a clear, accurate consultation		
17	REL3	Management Authority of industrial zones guides administrative procedures clearly and consistently		
18	REL4	Management Authority of industrial zones punctually sends its feedback about administrative procedures.		
	RES	Re Responsiveness		
19	RES1	Management Authority of industrial zones is ready to assist investors		
20	RES2	Local leaders are dynamic in supporting investors		
21	RES3	Administrative procedures of Management Authority of industrial zones is simple and quick		
22	RES4	Customs procedures is simple, fast and convenient		
23	RES5	The investment incentive policies are attractive		
24	RES6	Legal documents are rapidly deployed to the investors		
25	RES7	Security and order in industrial zones are good		
26	RES8	Abundant labor		
27	RES9	Cheap labor cost		
28	RES10	Labor qualification meets our needs		
29	RES11	Banking and financial service is good		
30	RES12	Entertainment, restaurant, hotel service is satisfactory		
31	RES13	Medical service is good		
	ASS	As Assurance		
32	ASS1	Qualification and serving attitude of staffs of State investment management organizations of Thai Nguyen province are good		
33	ASS2	Qualification and serving attitude of staffs of Management Authority of industrial zones are good		

34	ASS3	Management Authority of industrial zones keeps its appointment with enterprises		
35	ASS4	State investment management organizations of Thai Nguyen province keeps its appointment with the investors		
	EMP	Empathy		
36	EMP1	Difficulties and problems of enterprises are listened and shared by Management Authority of industrial zones		
37	EMP2	Management Authority of industrial zones takes interest in and solves recommendations and requirements of enterprises		
38	EMP3	Management Authority of industrial zones often organize conferences to meet and talk with enterprises		
39	EMP4	Enterprises easily meet to exchange, discuss with leaders of Management Authority of industrial zones		
	SAT	Level of general satisfaction		
40	SAT1	In general, we feel very satisfied when investing in Thai Nguyen Industrial Zones		
41	SAT2	We will continue to invest in long-term in Thai Nguyen Industrial Zones		
42	SAT3	We will introduce industrial zones for other enterprises		
Sou	Source: Author 's compilation (2016)			

**Table 2:** Scale of factors affecting the satisfaction of investors.

Table 2 shows that there are 5 scales of independent factors (39 observation variables) and one scale of dependent factor (3 observation variables). The observation variables is included in questionnaire according to the Likert scale of 5 levels, of which "1" is Strongly disagree, "2" is disagree, "3" is Neither agree nor disagree, "4" is Agree and "5" is Strongly agree [11].

### **Results and Discussion**

# Investment incentive policies in industrial zones of Thai Nguyen province

In addition to the application of incentive policies to attract investment to the province under the Decision No. 41/2012/QD-UBND dated 11/15/2012 of People's Council of Thai Nguyen province about promulgating regulations on policies of the incentive and support for investment in the province of Thai Nguyen, the province's industrial zones have applied some other incentive policies [12].

# Investment incentive policies in industrial zones of song cong I and song cong II

In addition to the State incentives, Thai Nguyen also gives incentives for investors in Song Cong IZ under the Decision No: 3296/2000/QD-UBND of provincial People's Committee [13].

The conditions for investment incentives: Project that occupies the first 30 hectares of industrial land, exports over 50% of products; Projects of production of goods from local raw materials and Prepaid projects on 90% rent land and infrastructure use charges; The project used over 100 local labors.

If the project meets all five incentive investment conditions, it shall enjoy the following privileges: Enjoying up to 50% incentive of land rent for 4 years and free on using infrastructure for 7 years; Supporting training costs if using other local employers at VND 1,750,000/employee; Supporting relocation expenses and late tax payment for enterprises moving into IZs; Enjoying commissions if participating in investment promotion to IZs.

## Investment incentive policies in Yen Binh industrial zone

Yen Binh IZ applied Decision No. 08/2013/QD-UBND of People's Committee of Thai Nguyen dated June 12, 2013 on the issuance of investment incentives for Samsung Thai Nguyen high technological complex projects of Samsung Electronic Vietnam Thai Nguyen., project of producing microprocessors and integrated circuits of Samsung Electro - Mechanics Co., LTD and 02 high-tech projects of the two subsidiaries of Samsung Group in Yen Binh IZ, Thai Nguyen province [13].

Samsung Thai Nguyen High-tech complex project of Samsung Electronics Vietnam Thai Nguyen, project of producing microprocessors and integrated circuits of Samsung Electro - Mechanics Co., LTD and 02 high-tech projects of the two subsidiaries of Samsung Group in Yen Binh IZ, Thai Nguyen province are enjoyed investment incentives with the following contents:

On the corporate income tax: 50% reduction of corporate income tax payable in the next 03 years for 01 projects (Samsung Thai Nguyen High-tech complex project of Samsung Electronics Vietnam Thai Nguyen) since the expiry of exemption or reduction under the Income Tax Act (free for 04 years and 50% in the next 09 years of corporate income tax payable) [13].

**On the infrastructure rent support:** Supported object: The infrastructure support is made for Samsung Electronics Vietnam Thai Nguyen Co., Ltd, Samsung Electro-Mechanics Co., Ltd and 02 subsidiaries of Samsung Group invested in high-tech complex at Yen Binh industrial zone, Thai Nguyen province.

**Support mode:** Support 50% of rent for Samsung Thai Nguyen High-tech complex project of Samsung Electronics Vietnam Thai Nguyen, project of producing microprocessors and integrated circuits of Samsung Electro - Mechanics Co., LTD and 02 high-tech projects of the two subsidiaries of Samsung Group in Yen Binh IZ, Thai Nguyen (total area supported with maximum infrastructure rent is 100 ha).

**Support source:** Sources of support are collected from personal income tax; Tax income from copyright, franchise; payable corporate income tax and other taxes (if any) in the early years [14,15]. The support is only done when Samsung Thai Nguyen High-tech complex project of Samsung Electronics Vietnam Thai Nguyen, project of producing microprocessors and integrated circuits of Samsung Electro - Mechanics Co., LTD and 02 high-tech projects of the two subsidiaries of Samsung Group in Yen Binh IZ, Thai Nguyen are confirmed as high-tech enterprises and have number of real tax paid to the state budget by the Ministry of Science and Technology.

Support levels: Annual support levels are less than or maximally equal to 50% of tax amount that Samsung Electronics Vietnam Thai Nguyen, Samsung Electro - Mechanics Co., LTD and 02 subsidiaries of Samsung Group investing in high-tech complex area in the Yen Binh Industrial Zone actually paid to the annual provincial budget until the full amount of support. Specific annual support level by the provincial People's Committee submitting to the provincial People's Council

decided and ensured to comply with local budget balance and the provisions of the Law on State Budget.

### Investment incentive policies in Diem Thuy industrial zone

Diem Thuy on the list of industrial zones in Vietnam has been approved by the Prime Minister with the highest preference. In which:

**Incentives on corporate income tax:** For projects of business manufacture: The corporate income tax rate is 15%. The projects is exempted for first 3 years and diminished 50% of the corporate income tax rate for the next 7 years since having the taxable income; this tax rate is made within 12 years since the business manufacturing. Then projects have to pay 25% corporate income tax.

For projects of service business: 20% corporate income tax rate is exempted for 2 years, 50% for the next 6 years since the taxable income, this tax rate is applied in the 10 years since manufacturing business, then pays 25% corporate income tax.

For projects of development of IZ infrastructure and enterprises of export processing: tax rate of 10% is exempt for 4 years and 50% for the next 7 years since taxable income, and then pays 25% of corporate income tax.

Tax on profits abroad: Tax rate=0%

Refund the corporate income tax in case of reinvestment in accordance with law

Can transfer losses to the following year: To be deducted from taxable income, while switching loss does not exceed 5 years.

Be exempted import duty for imported goods in the following cases:

Equipment, machinery (including parts, components attached). Means of transport in the technological line; construction materials have not been produced domestically [16].

The special project to encourage investment; production project of components, spare parts, mechanical, electrical, electronic materials are exempted the import duty for 5 years after production business.

Raw materials, spare parts and materials imported for production of export goods.

Be exempted VAT for cases of imported equipment and means of transport in the technological line, which cannot be produced in the country [17].

Be protected and encouraged technology transfer.

Ensured investments: Protect intellectual property rights; ensure investment-related trade; apply uniform of charges, the price for the project in the country and abroad; ensure investment in case of law changes [17].

The method of successive substitution (implement sales paralleling with the progress of the project).

Option 1: Sell current land (has clearance, full legal records): Land price: 400,000 VND/m2/50 years.

Option 2: Hire land (with infrastructure): 1,155,000 VND/m2/50 years; VAT included.

- Progress of implementation and handover: 5 months.
- Pay 30% of the contract value upon signing the contract.
- After finishing subgrade: pay 60% of the contract value.

- After finishing infrastructure: pay 90% of the contract value
- Hand over the land use right: pay 100% of the contract value.

# Investment incentive policies in the industrial zones of South Pho Yen and Quyet Thang

Thai Nguyen Province People's Committee has supported investors trading infrastructure of industrial zones as follows: Support clearance compensation, construction of wastewater treatment system; Support rate is 10% of the total investment, but not more than VND 35 billion for each industrial zone [18].

Financial supports for training local workers to work in the industrial zone enterprises at 500,000 VND/person.

Characteristics of industrial zones of Thai Nguyen province: Among 6 industrial zones planned in Thai Nguyen province, only 4 IZs were operated, meanwhile, 2 IZs of Quyet Thang and Song Cong II have not been operated because until now they have been in the research process to assess the effectiveness of investment and measures to reduce costs as the basis for the competent authority to consider investment decisions. The compensation for ground clearance and all items in the technical infrastructure and the infrastructure of this industrial zone service has not yet been implemented [19]. The table following describes some characteristics of 4 IZs operating in Thai Nguyen province (Table 3).

	Industrial zones						
S. No.	Content	Song Cong I	South Pho Yen	Yen Bin h	Die m Thuy		
1	The premises area of production and business (The area of industrial land - Unit: hectare)	150.6 5	103.08	261. 38	128. 94		
2	Ratio of industrial land to planned land (%)	77.3	85.9	65.3	36.8 4		
3	Systems of electricity, water and internet	Sync ed	Not synced	Syn ced	Sync ed		
4	Drainage system	Sync ed	Not synced	Syn ced	Sync ed		
5	Communication system	Sync ed	Not synced	Syn ced	Sync ed		
6	Transportation system	Sync ed	Not synced	Syn ced	Sync ed		

**Table 3:** Characteristics of technical infrastructure of industrial zones of Thai Nguyen province.

Among 4 industrial zones, Yen Binh has good infrastructure, ensures well for enterprises to make production and business activities. Song Cong 1 industrial zone and Diem Thuy industrial zone have synchronized technical infrastructure which is basically suitable for the business and production activities of enterprises. However, these two industrial zones have not had got full service infrastructure for enterprises. South Pho Yen industrial zone is the industrial zone which has least attractive infrastructure among the industrial zones in the province, because lots of items in the technical infrastructure have not been synchronized [20]. According to the result of survey, the study found that many enterprises in the industrial zones are currently using the services providers outside the industrial zones because this

industrial zone lacks of services providers or don't meet the demand of enterprises on those services. However, basically enterprises are meet their demand on the services because they can access the service providers in the neighborhood areas without spending too much cost and time [21].

# Investors assessment on industrial zones of Thai Nguyen province

The statistical and descriptive analysis of the scales of the research model: To implement the statistical and descriptive analysis of 6 scales of the model of research (TAN, REL, RES, ASS, EMP and SAT), including 42 observed variables (items), the author put the collected survey data about the satisfaction of respondents according the 5-point Likert scale (from level 1 is strongly disagree to level 5 is strongly agree) into the SPSS 20.0 software. After processing these data, the study has shown the average value of the evaluation of investors about each item, specifically shown in the Table 4 [22].

No	Variabl e code	Variable name	
	TAN	Tangibles	
1	TAN1	Management Authority of IZs is at a convenient location, has modern and spacious facilities.	
2	TAN2	Dress of staff of Management Authority of IZs is elegant, neat	3.6
3	TAN3	Premises and workshops are arranged in time	3.43
4	TAN4	Hire charges of land and workshop are reasonable.	3.43
5	TAN5	Stable electricity	3.27
6	TAN6	Stable water	3.75
7	TAN7	Reasonable electricity price	3.95
8	TAN8	Reasonable water price	
9	TAN9	Convenient transportation system	
10	TAN10	Reasonable waste, wastewater fee	
11	TAN11	Good internal transport system and green space	
12	TAN12	Convenient communication system	
13	TAN13	Good drainage system	
14	TAN14	Good internal lighting system	
	REL	Reliability	
15	REL1	Management Authority of IZs complies with commitments with investors	3.67
16	REL2	Management Authority of IZs has a clear, accurate consultation	3.92
17	REL3	Management Authority of IZs guides administrative procedures clearly and consistently	
18	REL4	Management Authority of IZs punctually sends its feedback about administrative procedures.	
	RES	Responsiveness	
19	RES1	Management Authority of IZs is ready to assist investors	

20	RES2	Local leaders are dynamic in supporting investors	3.86
21	RES3	Administrative procedures of Management Authority of IZs is simple and quick	
22	RES4	Customs procedures is simple, fast and convenient	
23	RES5	The investment incentive policies are attractive	
24	RES6	Legal documents are rapidly deployed to the investors	
25	RES7	Security and order in industrial zones are good	3.19
26	RES8	Abundant labor	3.44
27	RES9	Cheap labor cost	2.98
28	RES10	Labor qualification meets our needs	2.81
29	RES11	Banking and financial service is good	3.28
30	RES12	Entertainment, restaurant, hotel service is satisfactory	3.69
31	RES13	Medical service is good	3.24
	ASS	Assurance	
32	ASS1	Qualification and serving attitude of staffs of State investment management organizations of Thai Nguyen province are good	3.81
33	ASS2	Qualification and serving attitude of staffs of Management Authority of IZs are good	
34	ASS3	Management Authority of IZs keeps its appointment with enterprises	3.6
35	ASS4	State investment management organizations of Thai Nguyen province keeps its appointment with the investors	3.49
	EMP	Empathy	
36	EMP1	Difficulties and problems of enterprises are listened and shared by Management Authority of IZs	3.74
37	EMP2	Management Authority of IZs takes interest in and solves recommendations and requirements of enterprises	
38	EMP3	Management Authority of IZs often organize conferences to meet and talk with enterprises	
39	EMP4	Enterprises easily meet to exchange, discuss with leaders of Management Authority of IZs 3.8	
	SAT	Level of general satisfaction	
40	SAT1	In general, we feel very satisfied when investing in Thai Nguyen IZs	3.89
41	SAT2	We will continue to invest in long-term in Thai Nguyen IZs	3.77
42	SAT3	We will introduce IZs for other enterprises	3.72
Source: Ouput of the primary data analysis in SPSS (2016)			

**Table 4:** The mean value of observed variables.

According to the classification level of satisfaction (Table 1) and the mean value of each item (observed variables), the study found that the level of satisfaction of investors about the items in the 5 scale (factors) were only at Neutral level or Satisfaction level. The findings are shown in the table below [23] (Table 5).

	Level of the investor satisfaction			
Scales	Neutral (2.61-3.4)	Satisfied (3.41-4.2)		
TAN	TAN5, TAN10,TAN13	TAN1, TAN2, TAN3, TAN4, TAN6, TAN7, TAN8, TAN9, TAN11, TAN12, TAN14		
REL		REL1, REL2, REL3, REL4		
RES	RES3, RES5, RES6, RES7, RES9, RES10, RES11, RES13	RES1, RES2, RES4, RES8, RES12		
ASS		ASS1, ASS2, ASS3, ASS4		
EMP		EMP1, EMP2, EMP3, EMP4		
No. of items	11	28		
Source: Output of the primary data analysis in SPSS (2016)				

**Table 5:** Level of the investor satisfaction with observed variables.

After classifying, research has shown that investors satisfy with all of the observed variables (Items) of the scale of REL, ASS and EMP (meaning the scale of Reliability, Assurance and Empathy) [24]. About the scale of TAN (Tangibles) and RES (Responsiveness), investors just satisfied with the observed variables (items) including: TAN1, TAN2, TAN3, TAN4, TAN6, TAN7, TAN8, TAN9, TAN11, TAN12, TAN14 and RES1, RES2, RES4, RES8, RES12. As for the variables TAN5, TAN10, TAN13 and RES3, RES5, RES6, RES7, RES9, RES10, RES11, RES13, investors have assessed the satisfaction at the neutral level (neither satisfied nor dissatisfied) [25]. So, the number of satisfied items accounts for 71-79% of the total. Meanwhile, the rest items just assessed at the neutral level (accounting for 28, 21%) [26].

### Conclusion

After more than 15 years of establishment and development, the industrial zones in Thai Nguyen province has made great success and contributed significantly to the socio-economic development of Thai Nguyen province. The significant progress in attracting investment in the province from 2012 to now is mainly due to the good improved investment environment of the province as well as the increase in competitiveness of the province to appeal the investors. However, the industrial zones in Thai Nguyen province has fully untapped all potential, and do not have enough good conditions to really attract investors, especially foreign investors. This is reflected in the low occupancy rate of the industrial zones. Therefore, in order to be able to find the cause of the less attractiveness to investors, the implementation of survey, analysis, evaluation of investor satisfaction about the industrial zones of Thai Nguyen province is necessary.

Based on the findings of the study, the followings may be concluded:

Being different from the previous studies on the investment attraction in Thai Nguyen province, the author conducted this study with the objective of analyzing and evaluating the investor satisfaction about the industrial zones of Thai Nguyen province and find solutions to improve their satisfaction.

The study found that the investors in industrial zones of Thai Nguyen province satisfy with 28 items accounting for 71,79% of the total (including all of the observed variables (Items) of the scale of Reliability, Assurance and Empathy, some items: TAN1, TAN2, TAN3,

TAN4, TAN6, TAN7, TAN8, TAN9, TAN11, TAN12, TAN14, RES1, RES2, RES4, RES8, RES12); and neither satisfied nor dissatisfied with 11 items accounting for 28,21% of the total (including: TAN5, TAN10, TAN13 and RES3, RES5, RES6, RES7, RES9, RES10, RES11, RES13).

#### Recommendations

Basing on the findings and conclusions of the study, the author proposed the following some recommendations:

The Industrial Zone Management Authority, People's Committee and relevant departments and agencies should continue to consistently implement its commitments to investors and promote the reform of administrative procedures.

The Industrial Zone Management Authority, People's Committee and relevant departments and agencies should thoroughly grasp the officers and staff at these offices with the perspective "considering businesses as partners and customers", so they need to try to serve these customers or businesses in the best way.

Industrial Zone Management Authority in Thai Nguyen should promote and more regularly make dialogues with enterprises, be in close coordination with the relevant authorities in the province and the central ministries to solve the problems and difficulties of enterprises in the industrial zones.

The Industrial Zone Management Authority should continue and enhance the urge and request to investors to deploy to build and develop the infrastructure system synchronously in industrial zones; Recommend the handling of withdrawing the infrastructure that are in delayed deployment or enable to be deployed; Focus all resources that can be mobilized as capital support mobilization with target from central budget, loans from the Ministry of Finance, provincial capital budget, capital advanced by the construction contractor and capital advanced by secondary investors, in order to invest in the construction of infrastructure in the industrial zones synchronously with social infrastructure outside the industrial zone which is invested to be more modern; Give priority to invest in electricity supply, water supply, wastewater, communication system and lighting system setting, internal traffic system completing and enhancing, greeneries growing; environmental sanitation, service system and welfare construction developing in order to meet the demands from investors, professionals, workers in the industrial zones.

To enhance the satisfaction of investors on the investment preferential policies of Thai Nguyen and investment preferential policies in the industrial zones in the province, as well as for the industrial zones to have more attractive policies for potential investors in the future, the Industrial Zone Management Authority should collaborate with People's Committee and Department of Planning and Investment of the province in organizing seminars for investors or making surveys to gather opinions and assessments of the investors on these policies.

The Industrial Zone Management Authority needs: To coordinate with the provincial police in directing enterprises in the industrial zones to deploy the work of launching a mass movement of national security in order to make propaganda of educating staff and employees of enterprises in the industrial zones to raise sense of vigilance to all plots and quackery of enemies, and all types of crime; To direct enterprises in the industrial zones to plan initiative safety protection of persons and property, state secrets, fire prevention, environmental protection, etc. to build secure units on order and security; to care

about creating the mass movement of national security; To coordinate with local authorities and police forces in the fight to prevent and combat crime and social evils in the industrial zones; To advocate businesses in the industrial zones to provide funding support for the work of security, order in the industrial zones.

Encouraging the formation and development of professional educational institutions, vocational training centers and upgrading existing vocational schools in the province based on the model "Schools in enterprises", which schools are coming out from enterprises and schools associated with enterprises. The schools need to develop models of combining theoretical learning with practical learning. The partners of the schools are enterprises in the industrial zones or enterprises in the province. The schools should create the links with schools of Korea, Japan, ... in order to educate, and help students to communicate, make research, practice the work that suit their major. These students will be the main source of qualified labor workers who can meet the requirements of businesses in the industrial zones in particular and Thai Nguyen province in general.

### References

- Cuong MT (2005) The method of Marketing approaching in FDI attraction. Paper presented at the forum of Vietnam Development and The university of National economics.
- Ho DP, Trung HM (2011) Factors affecting foreign investor satisfaction in industrial zones quantitative model and policy implications. J Econo Deve 254: 30-37.
- Cuong PM (2015) Sustainable development of industrial zones in Thai Nguyen province. Ho Chi Minh Institute of National politics.
- Trang VT, Ha NT (2014) A research on sustainable development of industrial zones in Thai Nguyen province. J Sci Techno 121: 121-133.
- Hung TV, Vu TA, Ha QT, Anh NT, Duy DQ (2014) Factors affecting foreign direct investment attraction-a case study of Thai Nguyen province. J Sci Technol 118: 185-190.
- Ha NTT (2010) Attracting foreign investment in Thai Nguyen provincecurrent situation and solutions. J Econo and Dev 152: 96-99.
- Loc LT, Tuyet NT (2013) Factor affecting FDI enterprises' satisfaction: a
  case study of a typical research in Da Nang. J Devand Integration 11:
  73-78
- Thai Nguyen industrial zone management authorities (2015) Report on the results of implementation of programs on developing the industries, handicrafts and trade villages in the period of 2011-2015, the direction of implementation in period of 2016 – 2020.
- Likert R (1932) A Technique for the Measurement of Attitudes. Archives of Psychology 22: 55.

- Management Board of that nguyen industrial zones (2015) Industrial zone.
- Tho ND, Trang NTM (2009) The local nature and the satisfaction of enterprises. Scientific researchs in Bussiness administration.
- People's Council of Thai Nguyen province (2012) Decision No 41/2012/QĐ-UBND dated 15/11/2012 about promulgating regulations on policies of the incentive and support for investment in the province of Thai Nguyen.
- Thai Nguyen Provincial People's Committee (2013) Promulgating the investment incentives for projects of high-tech combination of Thai Nguyen Samsung of Samsung Electronics Vietnam Thai Nguyen Co., Ltd.
- Parasuraman A, Zeithaml VA, Berry LL (1985) A conceptual model of service quality and its implications for future research. J Market 49: 41-50.
- Parasuraman A, Zeithaml VA, Berry LL(1988) SERVQUAL: A multipleitem scale for measuring consumer perception of service quality. J Retailing 64: 12-40.
- Ministry of Construction (2014) National technical regulations on construction planning. Hanoi.
- 17. Thai Nguyen Department of Statistics (2015) Report on the Economy and Social of Thai Nguyen province.
- Thai Nguyen industrial zone management authorities (2016) Report on the situation of the construction and development of Thai Nguyen industrial zones in period of 2010-2015 and orientations toward 2020.
- 19. Thai Nguyen industrial zone management authorities (2016) Plan 102/KH-BQL dated 02/02/2016 on the inspection of the implementation of the investment laws, the implementation of policies in activities of production and business, construction and environment.
- Thai Nguyen industrial zone management authorities (2016) Plan No. 280/KH-BQL dated 04/19/2016 on the legal supports for enterprises in the Industrial zones in 2016.
- 21. Thai Nguyen industrial zone management authorities (2016). Plan No. 312/KH-BQL dated 04/28/2016 on the implementation of legal works in 2016
- Thai Nguyen industrial zone management authorities (2016) Report on the situation of employers of enterprises in industrial zones in 2015.
- 23. VCCI (2015) Provincial competitive index of Thai Nguyen province.
- Vietnam's Congress (2005) Investment Law. No.59/2005/QH11. Ha Noi: Labour press.
- Vietnam's Congress (2014) Investment Law. No. 67/2014/QH13. Ha Noi: Labour press.
- Luoc VD (2015) Industrial zones in Vietnam current situation and problems. Economic Cooperation Between Vietnam and Korea, pp: 33-45