

FACTORS AFFECTING INVESTMENT ATTRACTION IN INDUSTRIAL ZONES: THAI NGUYEN PROVINCE CASE STUDY

Tran Thi Thanh Xuan^{1*}, Nguyen Tu Anh²

¹University of Transport Technology - Thai Nguyen Tel Base

²TNU – International School

ARTICLE INFO		ABSTRACT
Received:	19/4/2021	The purpose of this paper is to identify the main factors that help to attract investment capital in industrial zones in Thai Nguyen province. After reviewing theoretical issues and conducting interviews with domestic and foreign investors, the author had identified eight factors for research. There are 205 survey questionnaires sent to companies with investment capital in 7 industrial zones that had been operating in Thai Nguyen province. Survey results show that some factors were considered to be more important than others. Among these factors, technical infrastructure, labor workers, investment support policy, and investment advantage were the most important and decisive factors when investors considered choosing an investment location in Thai Nguyen province, Vietnam.
Revised:	03/6/2021	
Published:	04/6/2021	
KEYWORDS		
Industrial zones		
Investment attraction		
Influencing factors		
Solutions to investment planning		
Solutions to mobilizing investment capital		

CÁC NHÂN TỐ ẢNH HƯỞNG ĐẾN THU HÚT VỐN ĐẦU TƯ VÀO CÁC KHU CÔNG NGHIỆP: NGHIÊN CỨU TRƯỜNG HỢP TỈNH THÁI NGUYÊN

Trần Thị Thanh Xuân^{1*}, Nguyễn Tú Anh²

¹Trường Đại học Công nghệ Giao thông vận tải - Cơ sở đào tạo Thái Nguyên

²Khoa Quốc tế - ĐH Thái Nguyên

THÔNG TIN BÀI BÁO		TÓM TẮT
Ngày nhận bài:	19/4/2021	Mục tiêu của bài báo là xác định những nhân tố chủ yếu giúp thu hút vốn đầu tư vào khu công nghiệp tỉnh Thái Nguyên. Sau khi nghiên cứu tổng quan các vấn đề lý luận và thực hiện phỏng vấn các nhà đầu tư trong nước và nước ngoài, tác giả đã xác định được tám nhân tố phục vụ cho việc nghiên cứu. Đã có 205 bản câu hỏi điều tra được gửi đến các công ty có vốn đầu tư tại 7 khu công nghiệp đã và đang hoạt động tại tỉnh Thái Nguyên để khảo sát. Kết quả điều tra cho thấy một số nhân tố được đánh giá là quan trọng hơn các nhân tố khác. Trong đó, cơ sở hạ tầng kỹ thuật, công nhân lao động, chính sách hỗ trợ đầu tư và lợi thế đầu tư là những nhân tố quan trọng nhất, có ảnh hưởng mang tính quyết định khi nhà đầu tư xem xét lựa chọn địa điểm đầu tư tại tỉnh Thái Nguyên, Việt Nam.
Ngày hoàn thiện:	03/6/2021	
Ngày đăng:	04/6/2021	
TỪ KHÓA		
Khu công nghiệp		
Thu hút đầu tư		
Nhân tố ảnh hưởng		
Giải pháp hoạch định đầu tư		
Giải pháp thu hút vốn đầu tư		

DOI: <https://doi.org/10.34238/tnu-jst.4398>

* Corresponding author. Email: xuanttt@utt.edu.vn

1. Introduction

Attracting investment capital in industrial zones has been formed and strongly developed in the provinces and cities nationwide. Currently, the Government has been building and developing this model to attract investment capital. Investment, production, and business development contribute to promoting the economic development of localities in particular and the whole country in general. Along with that trend of the whole country, Thai Nguyen province had a policy to synchronously build industrial zones in the national socio-economic development master plan. By 2020, there had been 7 concentrated industrial zones: Song Cong I; Song Cong II; Yen Binh; South Pho Yen; Diem Thuy A; Diem Thuy B and Quyet Thang industrial park. The establishment and development of these industrial zones contributed to the economic restructuring, created jobs for thousands of workers, and developed supporting industries and services in the province. In addition to the advantages of natural conditions and abundant mineral resources, Thai Nguyen province is also the gateway to the capital, a training center of the country with a system of universities directly under Thai Nguyen University. Colleges and vocational schools contribute to providing high-quality human resources for enterprises and production establishments in the province. The investment capital of registered industrial zones in Thai Nguyen province reached 16,140 billion VND and 8,785 million USD, creating jobs for more than 90,000 workers [1].

Although the amount of capital invested in industrial zones in Thai Nguyen province tends to increase, it is still limited, not commensurate with the available potential of the locality. Therefore, the study of activities to attract investment capital entering industrial zones and assessing the situation of attracting investment capital in industrial zones in Thai Nguyen province, identifying factors affecting the attraction of investment capital into industrial zones is necessary. On that basis, the authors propose several solutions to increase investment attraction in the industrial zones of the province in the coming time.

Several studies refer to attracting investment capital to local industrial zones. Dinh Phi Ho [2] studied the satisfaction of investors in Industrial Zones in Vietnam with 8 groups of factors and 38 observed variables including infrastructure, living and working environment, and competitive fees, human resources, local brands, investment advantages, quality of public services, investment policy. Research results show that the factors that have the greatest impact on investor satisfaction are investment policy, infrastructure, and human resources, respectively. Nguyen Manh Toan [3] has a different view of attracting foreign direct investment in Vietnam by statistical methods, the study has concluded that technical infrastructure development is the most important factor, followed by investment incentives of the local government, as well as of the central government; i.e. low operating costs. The least important factor is the potential market. Factors that do not affect the investor selection regulations are geographic location and social infrastructure. Ha Nam Khanh Giao et al [4] point out the factors affecting investment attraction in Quang Tri province, including the decision-making process related to investment procedures, support policies from related management agencies, industrial park infrastructure, economic zones, social infrastructure, market potential, cost advantage, and productivity labor laws. Kangning Xu [5] did a research on attracting foreign direct investment capital for developing countries with the case study of Mozambique. The author used a multivariate regression model for analysis. The author said that to attract investors into a developing country like Mozambique, the factors that affect the attraction of investment capital include: (1) Geographical location and investment level, the infrastructure; (2) Size of the market; (3) National export policy; (4) National natural resources; (5) Satisfying labor resources; (6) risk of the economic and political environment of a country. Nguyen Thi Tam [6] reflecting on FDI attraction in Thai Nguyen, evaluated the results and benefits that foreign direct investment projects bring to the socio-

economic development of Thai Nguyen province to see more clearly about Thai Nguyen's current strategy to attract foreign direct investments [6].

In general, studies in Vietnam are currently related to the issue of attracting investment capital medium relatively much on analyzing the situation general capacity of the country or capacity resources of each province by the local communication through several factors such as geographical location; investment policy, and environment; the infrastructure. There are not many studies to learn internally why and what factors affect investment capital attraction in Thai Nguyen province. Therefore, this study aims to determine the factors affecting the attraction of investment capital in 7 industrial parks operating in Thai Nguyen province. Research focuses on the following factors: Technical infrastructure, workers, policy managers, investment support and investment advantages. On that basis, some solutions are proposed to improve the investment environment to attract investment capital and develop industrial parks in the coming period.

2. Methodology

2.1. Research setting and participants

Currently, the province of Thai Nguyen has formed 7 industrial zones and 23 industrial clusters [7]-[11]. In particular, the authors focus on studying industrial zones with the details as shown in table 1.

Table 1. Industrial zones in Thai Nguyen province

Industrial area	Area (ha)	Industrial area leased (ha)	Industrial land area not leased (ha)
Song Cong I	195	82	113
Song Cong II	250	182	68
Yen Binh	400	247.7	152.3
Nam Pho Yen	120	70	50
Diem Thuy A	180	131.45	48.5
Diem Thuy B	170	26	144
Quyet Thang	105	50	55

Source: Compiled from documents of Thai Nguyen Industrial Zones Authority [7]-[11]

According to the statistics, the investment capital attracted to industrial zones in Thai Nguyen province has continuously increased in recent years. Specifically, in the 2011-2020 period, the scale of investment and implemented capital to attract industrial zones is shown in table 2.

Table 2. Scale of investment capital attracted in industrial zones in Thai Nguyen province

Targets	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Project number	65	72	92	111	138	168	182	199	205	218
- DDI	60	63	67	69	73	83	94	104	112	124
- FDI	5	9	25	42	65	85	88	95	103	108
Registered capital										
- DDI (Billion dong)	6.064	6.280	9.594	6.612	10.089	11.127	14.192	15.135	15.650	16.140
- FDI (Million USD)	30.08	40.725	3.167	6.667	6.864	7.004	7.061	7.530	8.467	8.785
Realized capital										
- DDI (Billion dong)	1.700	2.168	3.458	4.667	5.285	5.824	7.540	8.423	9.051	9.735
- FDI (Million USD)	2.1	9.34	604.5	1.386	5.654	5.959	6.480	6.805	7.058	7.792
Realized capital /Registered capital										
- DDI (%)	28.03	35.52	36.04	70.58	52.38	52.34	53.12	55.65	57.83	58.08
- FDI (%)	6.98	22.93	19.08	20.78	82.37	85.07	91.77	90.37	83.35	88.69

Source: Compiled from documents of Thai Nguyen Industrial Zones Authority, [7]-[11]

As shown in table 2, in general, the number of domestic projects and FDI projects was strong, with an increase of 335% in the number of projects since 2011. Along with that, the volume of registered investment capital and investment capital implemented in industrial zones in the province tended to increase. The investment capital of DDI enterprises registered in industrial zones of the province was 6.064 billion VND in 2011, and 16.140 billion by 2020. Over the past 10 years, the volume of registered investment capital increased 3 times. The investment capital of FDI enterprises increased nearly four times. The realized investment capital of industrial zones also increased significantly. In 2011, it was 1.700 billion VND; and in 2020, it reached 9.735 billion VND. Over the past 10 years, the realized investment capital increased about 8 times.

Primary data collection: There are different methods used to identify the research sample. According to Nguyen Van Thang [12] the minimum number of samples to perform the statistical operation is 100 observations. Therefore, surveying 205 enterprises operating in Thai Nguyen province meets the minimum number of observations required to perform statistical operations. The author used a convenient sampling method to select businesses and conducted the surveys.

The questionnaire was based on the survey forms of VCCI (2019) [13] including the criteria used to assess provincial competitiveness. The content of the questionnaire was divided into two parts: Part 1: Enterprise's general information and Part 2: Enterprise's evaluation of each criterion. The Likert-type scale was used to evaluate the enterprises in terms of increasing rating from very dissatisfied to very satisfied. After the survey, all data were verified and inputted into excel software to perform the analysis.

Data analysis methods: The comparative method was used to compare the change in investment attraction of Thai Nguyen province and correlate it with other localities in the region and the whole country. Statistical methods were used to analyze and calculate the factors affecting investment capital attraction, the mean and standard deviation. In this article, SPSS 20.0 software was applied to support the data analysis process.

2.2. Methods of processing and aggregating data

After the survey results were available, the author processed the information, located the score and synthesized it into a complete database using SPSS 20.0 software. Tools for aggregating survey and survey data were excel spreadsheets. The study used the statistical disaggregation method to synthesize data and used statistical tables and statistical graphs to present the results of data synthesis.

The average value of assessment scores of leaders and businesses for the impact level of environmental factors M_i were defined as follows: If $M_i < 1.79$, the effect of factor "i" is weak; If $1.80 \leq M_i \leq 2.60$, the effect of factor "i" is poor; If $2.61 \leq M_i \leq 3.4$, the effect of the factor "i" is Average; If $3.41 \leq M_i \leq 4.2$, the influence of factor "i" is quite good; If $4.21 \leq M_i \leq 5.0$, the influence of factor "i" is good.

3. Findings and discussion

3.1. Findings

3.1.1. Sample descriptive statistics

The study area is industrial zones in Thai Nguyen province. Overall research on 205 investors operating in industrial zones, including Song Cong I Industrial Park; Song Cong II; Yen Binh Industrial Park; Nam Pho Yen industrial park; Diem Thuy A Industrial Park; Diem Thuy B Industrial Park, and Quyet Thang Industrial Park. The survey was carried out with the help of the Thai Nguyen Industrial Zones Authority; the results are presented in table 3.

According to the analytical results in table 3, with 187 valid survey forms, the number of investors operating from 5-10 years accounted for the largest proportion with 45.46%, the majority of these enterprises are small and medium enterprises. Enterprises operating for more

than 10 years, accounting for 21.39%, are those with long-term association with industrial zones in the area, mainly electronic assembly, garment and wood processing enterprises.

Table 3. Sample structure by operation time

Operation time	Number of enterprises	Proportion to overall (%)
6 months - 1 year	8	4.27
Over 1 year - 3 years	12	6.42
Over 3 years - 5 years	42	22.46
Over 5 years - 10 years	85	45.46
Over 10 years	40	21.39
Total	187	100

3.1.2. Scale and preliminary assessment of the scale

The reliability and value of the gauge were evaluated through Cronbach's Alpha's reliability coefficient (> 0.6) and the total variable correlation coefficient (> 0.33), the analytical results are summarized in Table 4.

Exploratory Factor Analysis (EFA): Through 3 times of exploratory factor analysis (analysis-EFA), the lowest factor loading is 0.5, the result of the coefficient $KMO > 0.5$, $Sig. = 0.000 < 0.01$, reduced to 10 Group of factors.

According to the EFA results table, all groups of factors have the coefficient $Sig = 0.000$ of KMO and Bartlett's Test is $Sig = 0.000$

Verifying the quality of the scale: After analyzing the factors that affect investment capital attraction, the authors test the quality of the scale using Cronbach's Alpha coefficient, which was used to evaluate the value of the scale, convergence of observed variables in the same group. Variables with total correlation coefficients less than 0.3 were disqualified and criteria were selected for the scale when it had the reliability of Cronbach's Alpha from 0.6 or more. Cronbach's Alpha's analytical results of the scales are presented in Table 5.

3.1.3. Multivariate regression analysis

The general regression model is adjusted after testing the quality of the scale and EFA analysis as follows: $V\Delta TH = f(F1, F2, F3, F4, F5, F6, F7, F8)$. Of which: $V\Delta TH$: Dependent variable, F_i : The i^{th} independent variable. The system of variable names and symbols is shown in Table 5.

Regression coefficients are not standardized

Variable F1 (General technical infrastructure: Ground rent; Policy to support industrial park land procedures; Drainage - waste treatment system; Roads; Power transmission system and communication system) with $\beta_1 = 12.486$ means that when investors evaluated the investment in general infrastructure development to increase by 1 point, the realized investment capital would increase by 12.486 units.

Variable F2 (Workforce resources: Trained workers meet requirements; a sense of discipline in labor; Connection between enterprises and training institutions) with $\beta_2 = 3.051$ means that when Investors assessed that the labor force increased by 1 point, the investment capital increased 3.051 units.

Variable F5 (Investment support policy: Administrative procedures; Staff of civil servants; Support policy: tax, customs) with $\beta_5 = 9.188$ means that when investors evaluated investment support policy 1 more point, the satisfaction level increased by 9.188 units.

Table 4. Results of factor analysis

Variables	KMO	Eigenvalues	Cumulative (%)	Component										
				1	2	3	4	5	6	7	8	9	10	11
CSHT5	0.869	2.591	43.512	0.748										
CSHT6				0.778										
CSHT4				0.552										
CSHT8				0.556										
CSHT7				0.551										
CSHT1	0.869	1.234	71.288		0.918									
CSHT3				0.923										
CSHT2				0.307										
HTXH3	0.523	1.631	55.869			0.693								
HTXH5					0.733									
HTXH2					0.742									
HTXH1					0.707									
HTXH4	0.523	1.372	67.331				0.550							
HTXH6						0.591								
NLCN1	0.520	1.202	58.927					0.568						
NLCN4							0.680							
NLCN3							0.711							
NLCN2								0.563						
NLCN6	0.520	1.179	65.860					0.826						
NLCN5							0.843							
NLCN7							0.579							
HTĐT4	0.508	1.653	44.577							0.704				
HTĐT2									0.770					
HTĐT5									0.777					
HTĐT1												0.312		
HTĐT3	0.508	1.473	55.881								0.587			
HTĐT6												0.558		

Variables	KMO	Eigenvalues	Cumulative (%)	Component										
				1	2	3	4	5	6	7	8	9	10	11
CQHT2	0.502	1.324	60.887									0.686		
CQHT4												0.600		
CQHT3												0.649		
CQHT1												0.598		
LTĐT4	0.746	1.325	70.883										0.701	
LTĐT2													0.783	
LTĐT3													0.851	
LTĐT1													0.769	
LTĐT5													0.838	
LTĐT6													0.841	
CPKD1	0.579	1.85848412	64.497											0.629
CPKD3														0.729
CPKD2														0.832
CPKD4														0.728
CPKD7														0.714
CPKD6														0.598
CPKD5														0.643

Variable F7 (Investment Advantage) with $\beta_7 = 1.121$ means that when an investor's investment advantage increased by 1 point, the level of investment satisfaction increased by 1.121 units.

Normalized regression coefficient

Normalized regression coefficients locate the influence of the independent variables. The regression coefficients can be converted with the form % as shown in table 6.

From the standardized regression coefficient in table 6, we can see the impact structure of the factors of investment capital made by investors as follows: Investment in the development of general technical infrastructure, labor workers, investment support policy and investment advantage accounted for 47.75, 11.67%, 30.97%, and 9.61% respectively. Thus, the factors affecting the attraction of investment capital to the industrial zone were arranged from high to low as follows: general technical infrastructure, investment support policy, labor workers and investment advantages.

Table 5. Summary of the quality of the scale through analysis of the reliability coefficient Cronbach's Alpha

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item - Total Correlation	Cronbach Alpha if Item Deleted
I. GENERAL TECHNICAL INFRASTRUCTURE $\alpha = 0.708$ (F1)				
CSHT1	9.012	4.023	0.901	0.541
CSHT4	8.357	3.190	0.717	0.568
CSHT5	8.241	3.810	0.528	0.651
CSHT6	8.041	3.061	0.628	0.731
CSHT2	2.528	1.815	0.529	.
CSHT3	4.069	1.491	0.676	.
II. SOCIAL INFRASTRUCTURE $\alpha = 0.772$ (F2)				
HTXH1	3.313	0.459	0.683	.
HTXH3	6.259	2.727	0.616	0.868
HTXH6	5.467	3.410	0.974	0.736
HTXH2	2.683	0.464	0.807	.
HTXH5	3.974	0.464	0.567	.
III. LABOR RESOURCES $\alpha = 0.795$ (F3)				
NLCN1	9.241	5.457	0.708	0.866
NLCN2	8.848	6.673	0.739	0.891
NLCN3	9.381	6.291	0.737	0.880
NLCN4	9.342	5.552	0.635	0.901
IV. MANAGEMENT OFFICIALS $\alpha = 0.802$ (F4)				
NLCN6	3.540	0.886	0.649	.
NLCN5	3.951	0.832	0.784	.
NLCN7	2.874	0.835	0.693	.
V. INVESTMENT SUPPORT POLICY $\alpha = 0.859$ (F5)				
HTDT1	6.654	4.648	0.773	0.716
HTDT3	6.825	3.836	0.647	0.882
HTDT5	6.818	2.864	0.577	0.563
HTDT6	5.654	3.778	0.597	0.825
VI. LOCAL GOVERNMENT SUPPORTING INVESTMENT $\alpha = 0.775$ (F6)				
CQHT1	10.325	3.039	0.528	0.791
CQHT2	9.045	2.084	0.628	0.712
CQHT3	9.182	3.266	0.529	0.818
CQHT4	8.539	3.805	0.676	0.874
VII. ADVANTAGES OF INVESTMENT $\alpha = 0.763$ (F7)				
LTDT1	7.780	5.696	0.635	0.986
LTDT2	7.830	3.750	0.877	0.695
LTDT6	7.748	3.506	0.764	0.685
LTDT4	8.798	3.712	0.692	0.745
LTDT3	7.756	3.572	0.652	0.805
VIII. COST OF USE IN BUSINESS $\alpha = 0.818$ (F8)				
CPKD2	6.886	2.303	0.834	0.614
CPKD3	7.772	3.259	0.866	0.874
CPKD4	6.651	3.226	0.711	0.832
CPKD5	6.490	2.206	0.844	0.808
CPKD7	7.467	2.162	0.756	0.432
CPKD6	6.402	2.123	0.797	0.834

Table 6. *Standardized regression coefficients*

Independent variables	Target	Absolute value	Ratio (%)
CSHT	General technical infrastructure	12.486	47.75
NLCN	Labor workers	3.051	11.67
HTĐT	Investment support policy	8.098	30.97
LTĐT	Investment advantages	2.511	9.61
Total		26.146	100

3.2. Discuss and proposed solutions

Firstly, solution for planning the development of industrial zones in Thai Nguyen province should be based on the latest document amending and supplementing the planning of industrial zones in Thai Nguyen province approved by the Prime Minister, Document No. 1865/TTg-NN dated December 30, 2020, and Document No. 1866/TTg-NN dated December 30, 2020 [7] - [10].

The People's Committee of Thai Nguyen province should direct the Industrial zones Project Management Board to carry out the procedures for investment, establishment and construction of the industrial zones according to the investment attraction capacity. The Management Board of Industrial zones guides enterprises to comply with the conditions, order and procedures specified in Decree No. 82/2018/ND-CP and the provisions of the law on investment, construction and relevant laws.

The provincial authorities need to complete the planning and management of the provincial industrial zone planning based on assessing the potentials and advantages of the province and the region. However, it must be associated with planning of land use urban area residential area, housing, service area- culture - physical training and sports area schools, vocational training centers for workers. The advantages of transportation and attractive points should be promoted to attract investment for Thai Nguyen province, which is a province with a favorable position for the development of external traffic, 50 km from Noi Bai International Airport, 200 km from the Chinese border, 80 km from Hanoi center and 200 km from Hai Phong port. Thai Nguyen is also an intersection point through the road system, railways and river-ways connected with provinces and cities in the region such as: National Highway 3 connecting Hanoi to Bac Kan, Cao Bang and Vietnam - China border gate; National Highway 1B to Lang Son; Highway 37 to Bac Giang; Da Phuc - Hai Phong river system; Railway Hanoi - Thai Nguyen.

It is necessary to properly plan and implement investment activities to develop the infrastructure of the Industrial Park in the direction of focusing priority on attracting investment in industries and fields with high science and technology content and friendly with the environment, with great added value such as information technology, mechatronics, mechanical engineering, and biotechnology to take advantage of opportunities for cooperation and development in the region.

Secondly, to invest in the development of synchronous and modern technical infrastructure in the industrial park, this requires synchronous coordination between departments, from the construction of ground rents, policies to support administrative procedures to the quality of industrial park infrastructure construction: drainage system - treatment waste management; roads inside and outside the industrial zone; power transmission system; communication network system and public works, utilities serving the industrial park. When these goals are achieved, the best and most favorable conditions will be created for investors, business investment activities of investors, as well as employees, will promote investment attraction in industrial parks.

Thirdly, Thai Nguyen province needs to focus on developing high-quality human resources for the province's industrial parks and industrial zones in the region. With the advantage of Thai Nguyen province, there is Thai Nguyen University - a regional university with a young, diverse and abundant, healthy and qualified workforce. However, according to the survey, there is no link

between the three partners: Industrial zones - Thai Nguyen University - High School. This reduces the efficiency of attracting investment in the province. Enterprises have difficulties in recruiting direct workers to work in the industry. Thai Nguyen University lacks learners and students because they worry that they won't be able to get a job after finishing their studies. If there is a connection, it will increase competition and create favorable conditions for attracting investment in the province. Moreover, it will be a driving force for stable socio-economic development.

Thai Nguyen Industrial zones Management Board has a training center and job introduction for enterprises of the industrial zones. Therefore, the Management Board will soon find a partner with financial capacity and experience to cooperate in building a worker training center in a high-quality industrial zones, besides organizing job fairs and student exchange days with careers, exchanges with businesses, seminars on using human resources to implement the strategy of developing quality human resources in terms of qualifications - skills - health for Thai Nguyen Province in general and industrial zones and industrial clusters in particular.

For businesses in general and businesses in industrial zones in Thai Nguyen province in particular, human resources have a great influence on the investment decision of that enterprise. So, for employees to feel secure working in industrial zones in the province, each enterprise needs to strictly comply with the signing of labor contracts between enterprises and employees; propagating and educating employees about the rules and regulations of the workplace. They also should have a clear salary and bonus policy to encourage employees to work long-term; and establish trade unions to facilitate the movement of culture - physical training - sports and take care of quality main meals and mid-shift meals.

Fourthly, group of solutions on investment policy: The provincial Department of Planning and Investment, the Provincial Management Board of Industrial zones need to improve and simplify administrative procedures, grant new investment licenses, grant land, grant construction permits, regulate customs procedures, inspect and examine investment projects. Along with that, they need to apply information technology to promote administrative reform to facilitate and reduce operating costs for investors in industrial zones, thereby strongly attracting investors. The Provincial People's Committee should issue a Regulation on coordination between the Management Board of Thai Nguyen Industrial zones and the provincial authorities in solving issues directly related to investment in industrial zones. Management boards of industrial zones continue to maintain regular contact with investors to promptly handle problems arising from administrative procedures. In addition, staff and civil servants need to put the task of supporting investors on the top, wholeheartedly guiding investors in the implementation of documents and procedures to shorten working time such as investment policy, investment registration certificate, construction permit, work permit and other administrative procedures.

Management boards of industrial zones should strengthen monitoring and urge project investors operating in industrial zones to promptly handle or report violations of enterprises to competent authorities, ensure the project implemented following the provisions of the law on investment, construction, land, environment, labor and relevant regulations. Thereby, they should timely support and solve problems arising from enterprises in the process of project investment so that the project develops stably and effectively.

Fifthly, the advantage of resources should be promoted in the province to attract investment in industrial parks in Thai Nguyen province [1], [13]. As a province in the center of the Northern Midlands and Mountains region, Thai Nguyen has favorable geographical, economic, and political conditions to develop industrial parks' infrastructure, attracting investment to drive socio-economic development. Industrial parks are invested with a modern synchronous technical infrastructure system capable of connecting effectively with socio-economic infrastructure outside the barrier of industrial parks, especially the ability to connect traffic inter-region with industrial zones of neighboring localities such as Bac Giang, Bac Kan, and Lang Son. This has

created a pervasive impact on attracting investment in socio-economic development with regional linkage. It is necessary to have linkage and cooperation to take advantage of local resources including high-quality labor sources at universities in the province, enterprises operating in the province, make the most of local raw materials to create favorable conditions to attract investment in industrial parks in Thai Nguyen province.

4. Conclusion and implications

Through the survey, applying the factor analysis method, the author pointed out 4 out of 8 groups of factors affecting investment capital attraction, including general technical infrastructure, source of workers, investment support policies and investment advantages. Based on their research, the authors boldly propose the above solutions to the provincial government, the management board of industrial zones and businesses operating in Thai Nguyen province to adjust the impact of factors through new policies to improve activities of attracting investment capital into the province.

The article does not avoid certain limitations, especially the limited number of businesses surveyed and answered, not covering all industries, business fields as well as business forms. These limitations are suggestions for further research, which may include research topics with large samples, covering three economic sectors: Industry and construction; agriculture, forestry, and fisheries; trade in services.

REFERENCES

- [1] Thai Nguyen Industrial zones Management Board, *Report "The situation of attracting investment, granting new business establishment licenses and the operation situation of enterprises in the province in 2019, main tasks and solutions year 2020"*, 2019.
- [2] P. H. Dinh, "Investor Satisfaction in Industrial Zones in Vietnam," *Journal of Economic Development, Ho Chi Minh City University of Economics*, no. 2, pp. 57-63, April 2010.
- [3] M. T. Nguyen, "Factors affecting the attraction of foreign direct investment into a locality in Vietnam," *Journal of Science and Technology, University of Danang*, vol. 40, no. 5, pp. 270-277, 2010.
- [4] N. K. G. Ha, Q. H. Le, and T. C. H. Nguyen, "Survey of factors to attract investment in Quang Tri province," *Scientific Journal of Dong Thap University*, no. 3, pp.19-29, June 2013.
- [5] K. Xu, "Research on attracting foreign direct investment capital for developing countries: the case study of Mozambique," *Journal of Science and Technology Development*, vol. 17, no. Q3, pp. 112-123, 2014.
- [6] T. T. Nguyen, "Reflecting FDI attraction in Thai Nguyen," *Finance Magazine*, no. 9, pp. 35-42, 2019.
- [7] Thai Nguyen Provincial Industrial Zones Authority, *Final Report*, 2020, pp. 4-6.
- [8] Thai Nguyen Provincial Industrial Zones Authority, *Report on the operation of enterprises in Thai Nguyen Industrial Park*, 2020, pp. 5-12.
- [9] Thai Nguyen Statistics Office, *Thai Nguyen Statistical Yearbook 2019*, Hanoi Statistical Publishing House, 2020
- [10] People's Committee of Thai Nguyen province, "Resolution of the Party Congress of the Northern Mountainous Provinces for the 2016-2021 term," presented in *the 8th Standing Conference of the People's Councils of the Northern Midlands and Mountainous Provinces term 2016-2021*, December 25, 2020.
- [11] D. T. Dinh, "Environmental Management in Foreign Investment Enterprises in Vietnam," *VNU Science Journal*, vol. 31, no. 5, pp. 46-55, 2015.
- [12] V. T. Nguyen, *Textbook of research practice in economics and business administration*, National Economics University Publishing house, 2014, pp. 35-42.
- [13] VCCI, *PCI Provincial Competitiveness Index*, Youth Publishing house, 2019, pp. 47, 135-150.