SUNTEXT REVIEWS

SunText Review of Economics & Business
ISSN: 2766-4775

Open Access
Research Article
Volume 1:1

The Factors Affecting the Organization and Management of Economic Zones in Vietnam

Tran Ngoc Son*

Ph.D student at TBU in Zlin, Czech Republic

***Corresponding author:** Tran Ngoc Son, Ph.D student at TBU in Zlin, Czech Republic; E-mail: tran_ngoc [at] utb [dot] cz

Received date: 26 August 2020; **Accepted date:** 02 September 2020; **Published date:** 07 September 2020

Citation: Tran Ngoc Son (2020). The Factors Affecting the Organization and Management of Economic Zones in Vietnam. SunText Rev Econ Bus 1(1): 107.

DOI: https://doi.org/10.51737/2766-4775.2020.007

Abstract

In Vietnam, the Economic zone is a driving force for growth in the emerging economy. An economic zone is included as an area with a separate economic space with an investment and business environment that is particularly favourable to investors, has defined geographical boundaries, is established under the conditions, and order and procedures specified. Besides, the organization and management are decisive issues for this new model. However, at present, to identify the factors affecting the organization and management of the model of economic zones in Vietnam has not been studied properly by domestic and foreign authors. New studies in this paper using SPSS data analysis method will describe the relationships between the independent variables, the organizational model and management of economic zones in Vietnam and 05 dependent variables: People, Policies, Project, Position, Potent ion use multiple linear regression models to help research, organization and management of economic zones in Vietnam better.

Keywords: Economic zone; People; Policies; Project; Position; Potential; Cronbach's alpha; EFA; KMO; Regression

Introduction

Current situation of economic zones in Vietnam

In the Decree No. 82/2018/ND dated May 22, 2018 of the Prime Minister of Vietnam, stipulates that: An economic zone (EZ) is an area with defined geographical boundaries, including many functional areas, established to realizing the objectives of attracting investment, developing socio-economic, and protecting national defence and security. The EZ in this study is a coastal EZ. Coastal EZ means an EZ formed in the coastal area and in the vicinity of the coastal area. On the basis of the provisions of Decree No. 29/2008/ND-CP, a coastal EZ is an area with a separate economic space with a business investment environment especially favourable for investors. Defined geographical boundary attached to a deep-water seaport (or airport). Coastal EZ are organized into functional areas including: non-tariff zones, tax-suspension zones, export processing zones, industrial zones, entertainment zones, tourist resorts, urban areas, residential areas, administrative areas. Key and other functional areas suitable to the characteristics of each EZ:

- The Government performs the unified state management of coastal EZ nationwide on the basis of assigning specific tasks and powers of each ministry, branch, provincial People's Committee and EZ Management Board health.
- To direct the formulation and implementation of development planning's and plans and to promulgate policies and legal documents on EZ.
- Corporate income tax incentives: According to Decree No. 218/2013/ND-CP, projects investing in a coastal EZ are entitled to 10% corporate income tax rate for 15 years, tax exemption for 04 years and 50% reduction in the next 9 years.
- Import tax incentives and personal income tax incentives: according to Decree No. 29/2008/ND-CP, Vietnamese people and foreigners working in coastal EZ are reduced by 50%. Personal income tax for people with taxable income.
- The land use term of an investment project in a coastal EZs is 70 years.

About the establishment planning: since the first coastal EZ, Chu Lai Open Economic Zone, was established in 2003, up to 2020, in Vietnam, 18 EZs have been established and 16 EZs in operation, including: 2 EZs in the Red River Delta region: Van Don (Quang Ninh province) and Dinh Vu - Cat Hai (Hai Phong city); Economic zones in the Central Coast region are Nghi Son (Thanh Hoa province), Southeast Nghe An (Nghe An province), Vung Ang (Ha Tinh province), Hon La (Quang Binh province), Chan May-Lang Co (Thua Thien Hue province), Chu Lai (Quang Nam province), Dung Quat (Quang Ngai province), Nhon Hoi (Binh Dinh province), Van Phong (Khanh Hoa province), Nam Phu Yen (Phu Yen province) and Southeast Quang Tri (Quang Tri province); 03 EZs in the South are Phu Quoc Island EZ and Nam An Thoi Island Cluster (Kien Giang Province), Dinh An (Tra Vinh Province), Nam Can (Ca Mau) Total land and sea surface area of 16 EZs are nearly 815 thousand hectares.

Factors influencing the organization and management of EZ in Vietnam

Over the past 20 years in Vietnam, the development of coastal EZ covering 18/28 coastal provinces and cities is mainly. The organization and management of EZ have not yet relied on the scientific basis of theories of industrial territory. Awareness of factors affecting the organization and management of EZ is inadequate. Since then, there is no most common model to organize and manage. The factors that this article will mention is that considering the relationship as to form EZ (dependent variables), it is necessary to have factors (independent variables) such as People, Policies, Project, Position, Potential. This relationship is shown through survey and data analysis method using SPSS 26 Premium tool will clarify. The author of the paper has identified factors through theories of Industrial Territories and the Vietnamese government's views on the EZ and through the experiences of countries around the world such as China, South Korea, and Singapore, Indonesia, United Arab Emirates (Figure 1).

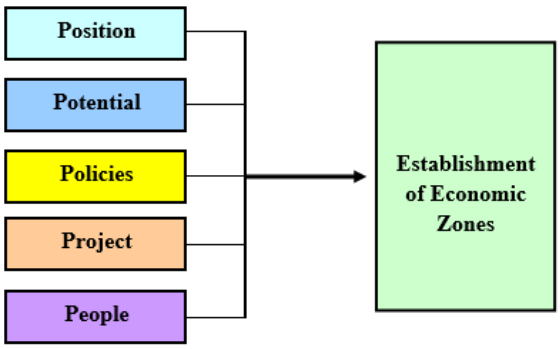

Figure 1: *The factors affecting the organization and management of economic zones in Vietnam.*

Materials and Methods

The research applies and combines many methods, in which the final decision method is to analyse the discovery factor EFA, analyse the multiple regression model to assess the influence of the factors on the organization. And management of economic zones in Vietnam. To use the above methods, the author used SPSS 26 Premium tool to analyze the data. There are many conventions on sample size, such as that the sample size must be in accordance with the formula: $n \geq 8m + 50$ (n is the sample size, m is the number of toxic variables model). Suggested that when using regression analysis, the sample size needs at least 200 observations. Meanwhile, Hair, Anderson, assumed that the minimum sample size should be 50, preferably 100, and the observed / observed ratio is 5/1, meaning that for each variable Observation requires a minimum of 5 observations. Accordingly, this study has a research model with 28 questions, so the minimum sample size is 28 x 5 = 140. To achieve a minimum of 140 observations, the author sent 250 questionnaires to the representative. 216 survey forms have been received, of which 06 questionnaires were rejected due to their invalid validity. Therefore, the number of remaining observations for analysis is 210 votes [1-3].

Results

Descriptive statistics of factors in the research model

With data of 210 observations. The average value of the observed variables (belonging to groups of independent variables) ranged from 2.65 to 4.18, this reflects that the customers all think that the factors included in the study are evaluated concentrated in the "3: Normal" and "4: Agree" levels (Table 1).

Test the scale Cronbach's alpha

Cronbach's Alpha coefficients are a statistical test used to examine the rigor and correlation of observed variables. This relates to two aspects: the correlation between the variables themselves and the correlation of the scores of each variable with the scores of all variables for each respondent. This method allows the analyst to eliminate the inconsistent variables and limit the trash in the research model because otherwise we cannot know the exact variation and error of the variables. Accordingly, only variables with Corrected Item - Total Correlation coefficient greater than 0.3 and Cronbach's Alpha coefficient of 0.6 or more are considered acceptable and suitable for analysis in the next steps [4].

Citation: Tran Ngoc Son (2020). The Factors Affecting the Organization and Management of Economic Zones in Vietnam. SunText Rev Econ Bus 1(1): 107.

People (PEO)

Cronbach's Alpha	Number of observations
710	4

Cronbach's Alpha scale test (1st time)

Observed variables	Average scale if variable type	Scale variance if variable type	Total variable correlation	Cronbach's Alpha if variable type
PEO1	11.24	7,656	0.600	0.587
PEO2	11.11	7,528	0.583	0.594
PEO3	11.22	7,438	0.548	0.614
PEO4	11.87	8,863	0.290	0.772

We see:

- Cronbach's Alpha is greater than 0.6.
- The observed variable PEO4 has the total variable correlation coefficient is less than 0.3, so we eliminate this variable.
- The variables related damage rest with coefficients relatively important variables total are greater than 0.3.

Test Cronbach's Alpha scale (2nd time)

Cronbach's Alpha	Number of observations
772	3

Observed variables	Average scale if variable type	Scale variance if variable type	Total variable correlation	Cronbach's Alpha if variable type
PEO1	7.96	4,491	0.632	0.667
PEO2	7.83	4,484	0.586	0.715
PEO3	7.94	4.188	0.604	0.698

We see:

- Cronbach's Alpha is greater than 0.6.
- POL5 observed variable has the total variable correlation coefficient is less than 0.3, so we remove this variable.
- The variables related damage rest with coefficients relatively important variables total are greater than 0.3

Policies (POL)

Check Cronbach's Alpha scale (1st time)

Cronbach's Alpha	Number of observations
801	5

Observed variables	Average scale if variable type	Scale variance if variable type	Total variable correlation	Cronbach's Alpha if variable type
POL1	14.90	15,660	0.636	0.746
POL2	14.97	14,985	0.678	0.731
POL3	14.90	16,684	0.564	0.769
POL4	14.81	15,045	0.791	0.699
POL5	16.32	19,005	0.296	0.847

We see:

- Cronbach's Alpha is greater than 0.6.
- POL5 observed variable has the total variable correlation coefficient is less than 0.3, so we remove this variable.
- The variables related damage rest with coefficients relatively important variables total are greater than 0.3

Test Cronbach's Alpha scale (2nd time)

Cronbach's Alpha	Number of observations
.847	4

Observed variables	Average scale if variable type	Scale variance if variable type	Total variable correlation	Cronbach's Alpha if variable type
POL1	12.25	11,728	0.595	0.845
POL2	12.32	10,515	0.726	0.788
POL3	12.25	11,852	0.625	0.831
POL4	12.16	10,841	0.808	0.756

We see:

- Cronbach's Alpha is greater than 0.6.
- The variables relating police are there coefficient relatively important variables total are greater than 0.3.
- Because of this, the variation observed is put in to distribution volume in steps to follow.

Position (POS)

Cronbach's Alpha	Number of observations
.859	5

Observed variables	Average scale if variable type	Scale variance if variable type	Total variable correlation	Cronbach's Alpha if variable type
POS1	16.47	13,131	0.741	0.813
POS2	16.61	13,033	0.605	0.851
POS3	16.44	13,740	0.617	0.844
POS4	16.49	13,524	0.673	0.830
POS5	16.45	13,053	0.756	0.809

We see:

- Cronbach's Alpha is greater than 0.6.
- The variables relating police are there coefficient relatively important variables total are greater than 0.3.
- Because of this, the variation observed is put in to distribution volume in steps to follow

Project (PRO)

Cronbach's Alpha	Number of observations
.897	5

Observed variables	Average scale if variable type	Scale variance if variable type	Total variable correlation	Cronbach's Alpha if variable type
PRO1	15.79	15,825	0.813	0.859
PRO2	15.75	16.218	0.752	0.872
PRO3	15.85	17,074	0.645	0.895
PRO4	15.90	15,468	0.719	0.882
PRO5	15.80	15,788	0.808	0.860

We see:

- Cronbach's Alpha is greater than 0.6.
- The variables relating police are there coefficient relatively important variables total are greater than 0.3.
- Because of this, the variation observed is put in to distribution volume in steps to follow.

Potential (POT)

Cronbach's Alpha	Number of observations
0.747	6

Observed variables	Average scale if variable type	Scale variance if variable type	Total variable correlation	Cronbach's Alpha if variable type
POT1	17.89	23.208	0.361	0.744
POT2	18.27	22,744	0.385	0.738

tation: Tran Ngoc Son (2020). The Factors Affecting the Organization and Management of Economic Zones in Vietnam. SunText Rev Econ Bus 1(1): 7.

POT3	17.84	20,854	0.557	0.691
POT4	17.67	22,185	0.440	0.724
POT5	17.85	20,117	0.623	0.671
POT6	17.81	20,917	0.557	0.691

We see:

- Cronbach's Alpha is greater than 0.6.
- The variables relating police are there coefficient relatively important variables total are greater than 0.3.
- Because of this, the variation observed is put in to distribution volume in steps to follow.

MODEL of organization and management of economic zones in Vietnam (OZ)

Cronbach's Alpha	Number of observations
0.626	3

Observed variables	Average scale if variable type	Scale variance if variable type	Total variable correlation	Cronbach's Alpha if variable type
OZ1	8.37	1,066	0.444	0.525
OZ2	7.83	1,368	0.431	0.538
OZ3	8.39	1,272	0.443	0.518

We see:

- Cronbach's Alpha is greater than 0.6.
- The variables related damage rest with coefficients relatively important variables total are greater than 0.3.
- Because of this, the variation observed is put in to distribution volume in steps to follow.

Explore factor analysis EFA

- After analysing the reliability of the scale, the next step to determine the set of variables needed for the research problem, we continue to use the exploratory factor analysis method to consider the convergence level. Of the observed variables for each component and the distinguishing value between the factors. After factor analysis, only groups of factors that satisfy the conditions can participate in the regression part of the next analysis.

The important statistical parameters in factor analysis include

- KMO (Kaiser - Meyer - Olkin measure of sampling adequacy) index is an indicator used to consider the adequacy of factor analysis. The KMO index must be large enough (> 0.5), then factor analysis is appropriate, and if it is less than 0.5, factor analysis is likely not suitable for the data.
- Eigenvalue index represents the amount of variation explained by the factor. Only factors with Eigenvalue greater than 1 are retained in the analytical model, factors with Eigenvalue less than 1 will be excluded from the model. Variance Explained Criteria: the total extracted variance must be greater than 50%. Factor loadings is a single correlation coefficient between variables and factors. The larger this coefficient indicates the more closely related the variables and factors are related. With a sample of about 200, the accepted factor load factor is greater than 0.55, variables with factor load coefficients less than 0.55 will be excluded from the model. Bartlett test to test the correlation between observed variables and the population, the analysis only has significance when sig. have a value less than 5% [1].

	Observed variables	**Factor**						
		1	2	3	4	5		

	PRO1	.887						**Result**	**Compare**
	PRO5	.886							
	PRO2	.828							
	PRO4	.802							
	PRO3	.748							
	POS5		.856						
	POS1		.849						
	POS4		.802						
	POS3		.746						
	POS2		.731						
	POL4			.905					
	POL2			.851					
	POL3			.779					
	POL1			.765					
	POT5				.782				
	POT3				**.748**				
	POT6				**.693**				
	POT4				**.588**				
	POT2				**.573**				
	POT1								
	PEO1					**.831**			
	PEO2					**.821**			

	PEO3					**.813**		

Factors to evaluate		
KMO coefficient	0 .755	0.5 <0 .755 <1
Sig value. in the Bartlett test	0.000	0.000 < 5%
Citation variance	63,135 %	63.135 %> 50%
Eigenvalue value	1,943	1.943 > 1

The results of the discovery factor analysis have extracted 05 components. Statistical indicators ensure the conformity. However, b ien related damage can POT1 coefficient load factor (factor loadings) is less than 0.55, so we type this observed variable to analyse the discovery factor EFA (2nd time).

Results of factor analysis to explore independent variables (the second time)

	Observed variables	**Factor**						**Compare**
		1	2	3	4	5		
	PRO1	.888						
	PRO5	.887						
	PRO2	.829						
	PRO4	.805						
	PRO3	.747					**Result**	
	POS5		.858					
	POS1		.850					
	POS4		801					
	POS3		.745					
	POS2		.730					
	POL4			.906				
	POL2		.851					

	POL3			.779				
	POL1			.765				
	POT5				.802			
	POT3				.779			
	POT6				.715			
	POT2				.594			
	POT4				.553			
	PEO1					.830		
	PEO2					.820		
	PEO3					.814		
Factors to evaluate								
KMO coefficient							0 .756	0.5 <0 .756 <1
Sig value. in the Bartlett test							0.000	0.000 < 5%
Citation variance							65,115 %	65.115 %> 50%
Eigenvalue value							1,881	1.881 > 1

The results of the discovery factor analysis extracted 05 components. The statistical indicators to ensure conformity, c evil observers variable coefficient load factor (factor loadings) is greater than 0. 55. Do it, exploring factor analysis is said to be compatible with the data collected.

The results of factor analysis to discover the dependent variable EFA

Factors to evaluate	Result	Compare
KMO coefficient	0 .650	0.5 <0 .650 <1
Sig value. in the Bartlett test	0.000	0.000 < 5%
Citation variance	57.521 %	57.521 %> 50%
Eigenvalue value	1,726	1.726 > 1

	Factor
	first
OZ1	0.763
OZ3	0.761
OZ2	0.751

The results of the discovery factor analysis extracted 01 component. The statistical indicators to ensure conformity, c evil observers variable coefficient load factor (factor loadings) is greater than 0.55. Do it, exploring factor analysis is said to be compatible with the data collected.

Cronbach's Alpha scale test (adjusted)

Potential (POT)

Cronbach's Alpha	Number of observations
0.744	5

Observed variables	Average scale if variable type	Scale variance if variable type	Total variable correlation	Cronbach's Alpha if variable type
POT2	14.70	16,921	0.387	0.743
POT3	14.26	15,170	0.576	0.673
POT4	14.09	16,963	0.390	0.742
POT5	14.28	14,670	0.630	0.652
POT6	14.24	15,292	0.569	0.676

We see:

- Cronbach's Alpha is greater than 0.6.
- The variables relating police are there coefficient relatively important variables total are greater than 0.3.
- Because of this, the variation observed is put in to distribution volume in steps to follow.

Regression Analysis

Regression analysis will determine the relationship between the dependent variable and the independent variables. Regression analysis model will describe the form of the relationship and thereby help us predict the level of the dependent variable when knowing in advance the values of the independent variables.

When running the regression, it is necessary to pay attention to the following parameters [6-9]:

Beta coefficients: Standardized regression coefficients allow direct comparison between coefficients based on their explanatory relationship with the dependent variable.

Coefficient R^2: Evaluating the volatility of the dependent variable explained by the predictor or independent variable. This factor can vary from 0 to 1.

ANOVA test: To check the suitability of the model with the original data set. If the significance level of the test is <0.05, we can conclude that the regression model is consistent with the data set.

Based on the adjusted model after the discovery factor analysis, we have a multiple linear regression model as follows:

$$OZ = \beta 0 + \beta 1 * PRO + \beta 2 * POS + \beta 3 * POL + \beta 4 * POT + \beta 5 * PEO + \varepsilon$$

		Regression coefficient is not standardized		Standardized regression coefficients	t	Sig.	Multi-collinear statistics	
		B	Standard error	Beta			Tolerance coefficient	VIF
	Constant	-.008	.174		-.046	0.964		
	PRO	.149	.019	.288	7,732	.000	.902	1,109
	POS	.307	.021	.540	14,874	.000	.953	1,049
	POL	.243	.017	.520	14,498	.000	.976	1,025
	POT	.093	.020	.175	4,683	.000	.898	1,114
	PEO	.234	.018	.455	12,747	.000	.984	1,016

Based on the table above we see:

Testing the suitability of the model

- Testing the multicollinearity phenomenon: The variance magnification factor (VIF) of all independent variables is less than 10, so the multicollinearity phenomenon in the model is assessed as not serious [6, 11-15].
- The results of ANOVA test with significance level sig = 0.000 showed that the built multiple linear regression model was consistent with the data set and used [16-18].

Evaluate the level of explanation by the independent variables in the model

R^2 coefficient (R Square) = 0 .744, which means that 74.4 % variation in financial results will be explained by the factors that are independent variables that were selected in the model. Research model results show that all independent variables have statistically significant effects (due to Sig. <5%).

So, the normalized regression equation (see column Beta):

$$OZ = 0.288 * PRO + 0.540 * POS + 0.520 * POL + 0.175 * POT + 0.455 * PEO$$

The degree of impact of the independent variables on the dependent variable in the order of strong to weak is as follows (based on Beta coefficient) [19-21]:

POS (Beta = 0.540) -> POL (Beta = 0.520) -> PEO (Beta = 0.455) -> PRO (Beta = 0.288) -> POT (Beta = 0.175)

Discussion

Based on the standardized regression coefficients of the statistically significant variables (column Beta), the larger the regression coefficient, the stronger the impact on the dependent variable will be. From the regression equation, we see that to organize and manage economic zones in Vietnam, the Position factor is the most important factor. It means that in order to form an economic zone in Vietnam, we first consider which Position is of primary concern, near seaports, airports, and convenient transportation systems. Benefit or not. Next, consider the Policies of the Government and localities that attract investment in the Economic Zone or not. There are People operating well. Are national and international key Projects being attracted. And finally there is the promotion of Potential advantages on the spot

or not. These are the criteria for organizing and managing economic zones in Vietnam [23,24].

Conclusion

In summary, through research on the basis of survey and analysis of data using SPSS tools and the results give us a standardized regression equation can confirm that in Vietnam or in the world countries are trending forming a concentrated industrial space to create the spread of an affected neighbourhood for mutual development. A concentrated industrial space that in Vietnam is often called an economic zone or other countries called a special economic zone formed for development management is affected by factors in order such as: Position 1, Policies 2, People 3, Project 4, and Potential 5 that managers need to pay attention to organize and manage. How these five factors have a causal relationship will be studied in the author's later paper.

Acknowledgements

During the research process, the author would like to thank enterprises of 16 economic zones in Vietnam, Economic Zone Policy Makers in Vietnam, Managers of Economic Zones in Vietnam, Experts specializing in research on the economic zone in Vietnam have facilitated the survey by questionnaires, in-depth interviews and provided data in primary and secondary formats with sufficient evidence for research.

References

1. Hair FJ, Aderson ER, Tatham LR, Black CW. Multivate data analysis, Fifth edition, New Jersey, Prentice Hail Int Inc. 1980.
2. Aggarwal A. Impact of economics zone on employment, poverty and Human development. Indian council research international economic relations. 2007.
3. Chikati S. Challenges and future of special economic zones in India: A perspective. Int J Marketing, Financial Services Management Res. 2007; 2: 86-92.
4. Smith A, Cannan E, Stigler GJ. An inquiry into the nature and causes of the wealth of nations. Paperback Facsimile. 1776; 1.
5. Amado DJ. Free Industrial Zones: Law and industrial development in the new international division of labor. J Int Law. 1989; 11.
6. Trong H, Ngoc CNM. Analyze research data with SPSS, Hong Duc Publishing. 2008; 1.
7. Alam KF, Stafford LWT. Tax Incentives and investment policy: A survey report on the United Kingdom manufacturing industry. Managerial Decision Economics. 1985; 6.
8. Al-Tamimi HAH, Kalli AAB. Financial literacy and investment decisions of UAE investors. J Risk Finance. 2009; 10: 500-516.
9. Amitendu P, Bhattacharjee S. Special economic zones in India: Myths and realities. Anthem Press. 2008.
10. Antonides G, Van Der NL. Individual expectations, risk perception and preferences in relation to investment decision-making. J Economic Psychol. 1990; 11: 227-245.
11. Barro RJ, Martin SX. Technological diffusion, convergence, and growth. J Economic Growth. 1997; 2: 1-26.
12. Dunning JH. The eclectic paradigm of international production: a restatement and some possible extensions. J Int Business Studies. 1988; 19: 1-3.
13. Dunning JH. Trade, location of economic activity and the MNE: A search for approach in the international allocation of economic activity. Holmes Meier Publisher. New York. 1997.
14. FIAS. Special economic zones performance, lessons learned, and implications for zone development. World Bank Publisher. Washington. 2008.
15. Gilmore A, Donnell OA, Carson D, Cummins D. Factors influencing foreign direct investment and international joint ventures: A comparative study of Northern Ireland and Bahrain. Int Marketing Review. 2003; 20: 195-215.
16. Hodgkinson L. Taxation and Corporate Investment. Chartered Institute of Management Accountants. London. 1989.
17. KPMG. Special economic zones. Poland. 2012.
18. Huyen LH. Causes and effects of foreign direct investment: basis for policy redirection in Thanh hoe province in Vietnam. 2012.
19. Lechner C, Dowling M. Firm networks: External relationships as sources for the growth and competitive of entrepreneurial firms. Entrepreneurship regional Development. 2003; 15: 1-2.
20. Van NM, Thanh N. Factors affecting decisions on investment in industrial parks. Economics development Review. 2010; 210: 38-45
21. Nelson RR. Technology, institutions, and economic growth. Harvard University Press. Cambridge. 2005.
22. Newton RR, Rudestam KE. Your statistical consultant: Answer to your data analysis question. Sage research methods. 2013.
23. Thai NQ. The issue of developing modern open economic zones in Vietnam's coastal area. Hanoi National Economics University Publishing House. 2010.
24. Thien TD. Making a special economic zone by global thinking, International scientific conference on Special Economic Zone Development. 2014.