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## CONDITIONS FOR ESTABLISHING CROSS-BORDER ECONOMIC ZONES IN THE NORTH OF VIETNAM

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The formation and development of border economic zones (BEZ) and cross-border economic zones (CBEZ) is not only an opportunity for the border regions, but also an engine for developing the supply chain and the production network as a result of border connectivity. The paper focuses on analyzing the conditions for the CBEZ in the border areas in the North of Vietnam, including Cao Bang, Lao Cai, Lang Son and Quang Ninh. There is a big difference in readiness for the establishment of the CBEZ among the four studied sites. However, connectivity needs the most improvement on all the sites, which includes both infrastructure connectivity and policy harmonization.

**Keywords:** cross-border economic zone, North Vietnam, border economic cooperation

JEL Classification: F150, F200

### INTRODUCTION

In the context of globalization, cross-border economic cooperation has been gaining in importance and has developed into many forms over the last decades. The objectives of this cooperation are to utilize the advantages of connectivity in the border areas for economic development. In Greater Mekong Sub-region (GMS), the Asian Development Bank (ADB) and the national governments are engaged in the process of promoting connectivity through building transport and economic corridors. Vietnam is a key

player in this process. The country has the land border exceeding 4500 km in length with China, Laos and Cambodia, with a large number of international and national border gates, border economic zones and border markets.

Border economic zones (BEZ) or cross-border economic zones (CBEZ) are the initiatives supported by the ADB and the national governments in the GMS region in order to fully utilize the advantages of connectivity and resolve the shortcomings of the present cross-border economic cooperation. In this paper, the focus is on analyzing the conditions for the CBEZ in the border areas in the north of Vietnam, including Cao Bang, Lao Cai, Lang Son and Quang Ninh provinces. A CBEZ model based on

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previous studies, especially on those carried out by D. Lalkaka, Q. Nguyen and Y. Xiaohui (2011), M. Lord and P. Tangtrongjita (2014), is being developed. The surveys are then conducted so as to understand the local policy-makers' and practitioners' perceptions of the importance of each component of the proposed CBEZ model and to assess the conditions for the establishment of CBEZs in each province. We expect that each province will have different conditions; the province with a higher level of economic development might be characterized by better conditions; however, the provinces with the connectivity potentials might also demonstrate good conditions for establishing the CBEZ.

The paper is organized into five parts. Following the Introduction, Section two reviews the background of the BEZ and the CBEZ concepts and models. In Section three, the methodology and the data are described. Section four presents the analysis of the results of the conditions in order to develop the CBEZ in the selected border areas, while in Section five the conclusions of the paper are given.

## RESEARCH BACKGROUND

Recent globalization and the economic cooperation trend in the world have accelerated the interdependent relationships among countries at many levels, in which regionalization has led to the development of the relations of border cooperation of the neighboring countries (Krainara & Routray, 2015). This tendency has made scholars increasingly interested in studying cross-border economic cooperation (Fullerton, 2003), including both border and cross-border economic zones (CBEZ). It can be seen that no specific concept of the CBEZ has been presented in a unified manner because it exists in many different forms and has many different names, including Special Economic Zone (SEZ); Export Processing Zone (EPZ); Border Trade Area (BTA); Special Administrative Area (SAA); Special Border Areas (SBA), Special Border Economic Zones (SBEZ), or Cross-Border Economic Zone (CBEZ) (MMN and AMC, 2013). SEZ is often designed in order to promote free trade principles and loosen

regulations on capital flows and market liberalization. The EPZ is similar to or a part of SEZ, but focuses on producing goods for export. The term BTA refers to the border project areas in order to promote cross-border trade. The SAA involves the projects in which local authorities are given more power in deciding the issues related to obtaining business licenses or investment opportunities. The SBA is the term used by the ABD, and has the same meaning as SBEZ or the BTA (MMN & AMC, 2013). This originated from the various goals of the establishment of the zones, as well as each country's different characteristics in terms of its respective history, level of economic development and management mechanism, etc.

The concept of SBEZ put forward by some authors, such as C. Krainara (2008), M. Lord and P. Tangtrongjita (2014), and C. Krainara and J. K. Routray (2015), or is very close to the current vision of the cross-border economic zone. According to C. Krainara (2008) and C. Krainara and J. K. Routray (2015), SBEZ has often been known as Maquiladoras or the export zone along the Mexican and the US borders since 1965. The purpose of these zones is to make use of cheap labor in Mexico and the geographical proximity to large markets, as well as regional production networks in the United States (Weiler & Zerlentes, 2003). This concept is becoming more popular in Asia as these areas help establish in reality economic interdependence among countries with different development levels. When studying the development of the Malaysia-Thailand SBEZ in the Indonesia-Malaysia-Thailand development triangle, M. Lord and P. Tangtrongjita (2014) also introduced the concept of SBEZ. According to these authors, SBEZ is "a network of activities that seeks to promote cross-border trade and investment and encourage the economic and social development of an area along the border between countries". In addition, D. Lalkaka *et al.*, (2011) argued that the characteristics of a CBEZ are very close to that of a "cross-border bonded area". There is the basis to start with a relatively simple model and in a small geographical area, which will gradually develop into a more flexible and larger scale model (Wallack, Zhaohui & Nguyen, 2011). According to D. Lalkaka *et al.* (2011), a CBEZ is said to include six main elements:

- advanced border gate points;
- modern infrastructure linkage;
- trade areas;
- enterprises area;
- preferential policies, and
- common management mechanisms.

The authors did not provide a specific definition of the CBEZ but only mentioned and described the above six components.

In terms of CBEZ models, according to T. Payan (2014), it is necessary to consider the characteristics of the border areas that could be divided into nine groups, including history, culture, a natural resource, demographic trends, institutionalization, the economic development level, the domestic environment of each country, the global context and differences in respective technical levels. Based on these factors, a number of different CBEZ models are proposed for each different area. There are some proposed by the authors such as D. Lalkaka *et al* (2011), and M. Lord and P. Tangtrongjita (2014), which are considered to be very close to how we imagine this zone.

The model proposed by D. Lalkaka *et al* (2011) composes of six components, including: border gate points with advanced technology (including one-stop customs inspection, the harmonization of border documents and the establishment of the electronic data exchange platform, modern bonded areas); the modern infrastructure connecting CBEZs with domestic markets (including highways, railways, waterways and telecommunications and the electricity infrastructure); commercial areas (border markets, duty-free shopping areas, logistic and trade facilitation services; financial service zones); enterprises areas (including appropriate industrial and technology zones, and business incubators with business-support services); preferential policies (public investment policies in developing CBEZs, decentralization policies for CBEZ management, tariff reduction or exemption policies; value-added taxes; the export tax exemption; fee reduction for renting

land, increasing the ability to return profits to foreign businesses); the common management mechanism between two countries, in which the zones on each border side must coordinate and complement each other so that businesses could be equally attracted to both areas.

The model proposed by M. Lord and P. Tangtrongjita (2014) has many similarities to that of D. Lalkaka *et al* (2011). These authors propose that a SBEZ should consist of the six main components:

- the SEZ potential - the companies often enjoy special preferential policies and operate in non-tariff or low-tariff environments with unified management mechanisms and quick procedures;
- the cross-border value chain: SBEZ provides an opportunity to improve the capacity of the companies involved in regional value chains;
- transportation and logistics: this is an important component of SBEZ because the trade costs associated with transporting goods and people along the corridor are an important issue for companies to decide whether to locate themselves in the border area or not;
- the legal and regulatory framework: in order to attract businesses to the border area, the government must simplify the regulatory system associated with the establishment of SBEZ, including the investment approval process, the granting of work permits to foreigners, the abolishment of regulations on import and export licensing, the provision of specialized services, such as commercial and professional services, the application of private or public-private partnerships in order to develop SBEZ, abolish regulations on export content, develop labor and environmental regulations;
- the socio-economic development strategy for the area: the difference between SBEZ and SEZ is the strategic integration of the zone with the development strategy of the surrounding border area. In the long run, the sustainability of SBEZ will be assessed based on the relevance of SBEZ for the regional development strategy; and

- SMEs development: the government will have strategies to support the development of SMEs through preferential policies, knowledge transfer, direct funding from large enterprises; business development services include a high-capacity enterprise mechanism, the development of hi-tech industrial development zones; the establishment of the enterprise development center; linking to Indonesia: the link with Indonesia may include:
  - the import of raw materials and the export of manufactured goods by regional companies;
  - investing in large-scale value chains by Indonesian companies;
  - the provision of skilled and unskilled workers for SBEZ and building supporting industrial zones;
  - training through internships in SBEZ companies or supporting industrial parks outside the zone.

In summary, it can be seen that there are currently several proposed models of CBEZ, but no agreement upon a standard model has been reached yet. When analyzing CBEZ models, many aspects need to be taken into account in order to build the foundation of CBEZs in order to meet the objectives and expectations of the border regions and the countries concerned. In this study, these characteristics and components will be considered in order to develop a suitable CBEZ model in the context of Vietnam and China, which is described in the next part of this paper.

Our research was conducted on the case of the Vietnamese-Chinese border, where there are over 30 pairs of the provinces and the cities in between the two countries that have established close relationships. From 2010 to 2017, the Vietnamese-Chinese import and export turnover of goods reached USD 43.69 billion, thus accounting for 57% of Vietnam's total turnover with the other neighboring countries. The two governments have been developing the idea of building a cross-border economic zone since 2006; however, the components and the model of such a new model of border economic cooperation has not been agreed upon so far.

## METHODOLOGY

### The Proposed CBEZ Model

In order to assess the conditions for establishing CBEZ in the four selected provinces in the north of Vietnam, a CBEZ model based on previous studies, especially on those carried out by D. Lalkaka *et al* (2011), M. Lord and P. Tangtrongjita (2014), and further in A. T. Nguyen and T. T. M. Nguyen (2017), was developed. Moreover, as CBEZ has not been established in reality, the CBEZ components based on several empirical research studies on BEZ, SEZ, SBA, EPZ, etc. throughout the world, especially those in Asia, were developed. These components and indicators were subjected to consultations with experts in the field of border economic cooperation, logistics, trade and investments facilitation.

In this research study, CBEZ includes eight components in each country, namely as follows:

- the advanced border gate;
- modern infrastructure connectivity;
- the trade area;
- the enterprise area;
- the logistics service area;
- preferential policies;
- bilateral cooperation and the management mechanism; and
- the participation of enterprises in the regional value chain and network.

The indicators for each component in our proposed model are presented in Table 1.

### Data

The secondary data and information about each studied site were collated and obtained, respectively, from various sources, including provincial reports, the database of the General Statistical Office of Vietnam and the reports of Vietnam's Ministry of

**Table 1** The components for CBEZ

Component	Indicator	Code
Advanced border gate (AB)	Bonded warehouse	AB1
	A single stop (including the customs, the border, the quarantine and inspection)	AB2
	The electronic customs system	AB3
	The electronic payment of the border-trade-related duties and fees	AB4
	The harmonization of border documents among domestic management agencies	AB5
	The harmonization of border documents between Vietnamese management agencies and the neighboring management agencies	AB6
	The harmonization of the procedures between Vietnam and the neighboring country at the border gate	AB7
	The alignment of the working days and hours between Vietnam and the neighboring country at the border gate	AB8
Modern infrastructure connectivity (MC)	Roads development and a linkage between the border provinces and domestic economic centers	MC1
	Roads development and a linkage between border provinces and domestic seaports	MC 2
	Railways development and a linkage between border provinces and domestic economic centers	MC 3
	Railways development and a linkage between border provinces and domestic seaports	MC4
	The completion of the internal traffic system in the border-gate area	MC5
	The development of and a linkage between Vietnam's road routes and the economic centers of the neighboring country	MC6
	The development of and a linkage between Vietnam's road routes and the seaports of the neighboring country	MC7
	The development of and a linkage between Vietnam's railroad system and the economic centers of the neighboring country	MC8
	The development of and a linkage between Vietnam's railroad system and the seaports of the neighboring country	MC9
Trade area (TA)	The development of border markets	TA1
	The development of banking and financial services	TA2
	The development of duty-free shopping areas	TA3
	The development of the international fair and exhibition areas	TA4
	The development of the cross-border tourism area	TA5
Enterprise area (EA)	The development of export processing zones	TA1
	The development of industrial zones	EA2
	The development of high-tech zones	EA3
	The development of business incubators (focusing on supporting startups)	EA4
	The development of business supporting services (venture capital; seed funding; business consulting, accounting services...)	EA5

Component	Indicator	Code
Logistics service area (LA)	The customs services, complete services for importation and exportation, services regarding the application for import and export licenses at the border gates.	LA1
	Transportation services, the transportation agent, goods loading and unloading at border gates.	LA2
	Warehousing services at border gates (gathering, storing, adjusting, preserving and transferring goods to other trucks, doing customs procedures)	LA3
	The warehouse system meeting requirements in terms of the area and capacity of imported and exported goods at border gates.	LA4
	Integrated logistics services at border gates (transportation, warehousing, goods loading and unloading, the customs services, licensing, C/O application, cargo insurance, import and export documents)	LA5
	Information exchange among logistics service providers and the authorities at border gates.	LA6
Preferential policies (PP)	A reduction in or exemption from the corporate income tax and the personal income tax in priority industries	PP1
	A reduction in or exemption from tariffs and VAT on some selected goods exchanged in the cross-border economic zone	PP2
	Preferential policies related to immigration	PP3
	Preferential policies related to the land and infrastructure use	PP4
	Investment promotion and protection policies	PP5
	Preferential policies related to finance and credit	PP6
	Preferential policies for small and medium-sized enterprises	PP7
Bilateral cooperation and the management mechanism (BC)	A similarity between the trade policies of Vietnam and the neighboring country	BC1
	A similarity between the investment policies of Vietnam and the neighboring country	BC2
	A similarity between the labor movement policies of Vietnam and the neighboring country	BC3
	A similarity between the tourism policies of Vietnam and the neighboring country	BC4
	The establishment of the cross-border agency in order to manage the cross-border economic zone	BC5
	Bilateral cooperation in synchronized supervision and management in immigration inspection	BC6
	Bilateral cooperation in synchronized supervision and management in border security inspection	BC7
	Bilateral cooperation in synchronized supervision and management in the customs activities	BC8
	Bilateral cooperation in synchronized supervision and management in the quarantine activities	BC9
	Bilateral cooperation in synchronized supervision and management in payment activities	BC10
	Bilateral information exchange and the electronic database on the customs activities	BC11
The participation of enterprises in the regional value chain and network (EP)	A linkage between local enterprises and domestic suppliers	EP1
	A linkage between local enterprises and foreign suppliers	EP2
	A linkage between local enterprises and domestic consumers/distributors	EP3
	A linkage between local enterprises and foreign consumers/distributors	EP4
	The cooperation of local enterprises with other enterprises in the same industry/field	EP5

Trade for the period 2015-2017. The primary data were collected through surveying enterprises, provincial and ministerial leaders, and senior experts.

### *Survey of Enterprises*

The main objectives of the survey imply the understanding of the current status of each province in formulating CBEZs. The surveys were conducted in four northern border provinces of Vietnam, including Lang Son, Cao Bang, Lao Cai and Quang Ninh. These provinces were selected as the pilot provinces for the development of the key border economic zones (BEZs) in Vietnam in the period 2016-2020. Moreover, they share the borders with China and have a relatively favorable geographical location and a potentially high transport connectivity with the markets of the neighboring countries and regions.

For the purpose of this study, the primary data were collected through a structured and pre-test questionnaire, which consisted of the general information about the firm, difficulties and favorable conditions when operating in the border zones, a perception about the importance of each component in the CBEZ proposed model, the assessment of the current status of CBEZ development in the given provinces, and the recommendations.<sup>1</sup>

The participants in the survey were the randomly selected enterprises operating in BEZs in the four studied provinces. A total of 600 questionnaires were distributed, and there were 560 usable responses in total, of which 144 responses came from Cao Bang, 120 from Lang Son, 146 from Lao Cai, and 150 from Quang Ninh (Table 2). Limited companies and those operating in the services sector accounted for a large proportion of the surveyed enterprises. More specifically, 319 enterprises are registered as limited, thus accounting for 56.94% of the total enterprises. There are 296 enterprises operating in the services sectors, which accounts for 52.86% of the total number.

### *Survey of Provincial and Ministerial Leaders, and Senior Experts*

The survey of provincial and ministerial leaders, and senior experts was aimed at asking the respondents about their perception of the role of each component of the proposed CEBZ model, and the recommendations for Vietnam. Besides, the provincial leaders were also required to assess the current situation in their provinces with respect to the establishment of CBEZs.

A total of 120 provincial and ministerial leaders were surveyed. A total of 100 provincial leaders were from the agencies involved in managing or operating

**Table 2** The sample description

Enterprises profile	Indicator	Quantity	Proportion (%)
Location	Cao Bang	144	25.71
	Lang Son	120	21.43
	Lao Cai	146	26.07
	Quang Ninh	150	26.79
Type	Private company	59	10.54
	Ltd. company	319	56.94
	Joint stock company	164	29.28
	Partnership company	7	1.25
	Others	11	1.96
Sector	Agriculture	96	17.14
	Industry	132	23.57
	Construction	157	28.03
	Services	296	52.86

CBEZs, such as People's Committees, the Management Committee of BEZs, the Department of Planning and Investment, the Department of Industry and Trade, the Department of Transport, the Department of Foreign Affairs, the Department of Labor, Invalids and Social Affairs, the Border Defense Force, and the Customs Department. Besides, a total of 20 leaders from the ministries involved in making policies of and controlling CBEZs, including the Ministry of Planning and Investment, the Ministry of Industry and Trade, and the Ministry of Foreign Affairs were surveyed. A total of 30 senior experts participating in the survey were from research institutes and universities in Vietnam.

### *Computing the Scores for the Components of the Proposed CBEZ Models*

The scores for each component were computed based on the respondents' assessment of the current status

in each province when the formulation of CBEZs is concerned. The respondents were required to evaluate the current status of each observed variable based on a 5-point Likert scale, ranging from Very bad (1) to Very good (5). The point of each component was then computed as a simple average of all the observed variables belonging to the analyzed component, demonstrating the respondent's assessment of the conditions in each province with respect to the preparation for the establishment of CBEZ. The Excel was adopted for the purpose of analyzing the primary data and computing the scores.

## RESULTS AND DISCUSSION

Table 3 shows our survey results in the four provinces in the north of Vietnam.

**Table 3** The detailed scores of the four provinces

Indicator	Score			
	Cao Bang	Lang Son	Lao Cai	Quang Ninh
Advanced border gates	3.64	3.66	3.61	3.64
AB1	3.51	3.46	3.94	3.12
AB2	3.66	3.76	3.53	3.14
AB3	3.63	4.15	4.52	3.89
AB4	3.49	3.49	3.42	3.92
AB5	3.65	3.55	2.95	3.42
AB6	3.60	3.53	2.92	3.42
AB7	3.78	3.67	3.15	3.52
AB8	3.82	3.69	4.45	4.34
Modern infrastructure connectivity	2.45	3.30	3.80	3.75
MC1	3.54	3.38	4.63	4.69
MC2	3.57	3.39	4.52	4.67
MC3	1.07	3.32	4.21	2.96
MC4	1.07	3.49	4.02	2.87
MC5	3.74	3.63	3.43	4.72
MC6	3.37	3.23	4.37	3.89
MC7	3.55	3.08	2.86	4.25
MC8	1.07	3.18	3.31	2.92
MC9	1.07	3.00	2.81	2.81
Trade area	3.66	3.42	3.15	3.04

Indicator	Score			
	Cao Bang	Lang Son	Lao Cai	Quang Ninh
TA1	3.73	3.47	3.87	2.82
TA2	3.66	3.26	3.95	3.4
TA3	3.58	3.38	3.02	2.56
TA4	3.62	3.56	3.55	3.01
TA5	3.70	3.41	1.37	3.42
Enterprise area	3.52	2.93	2.62	3.47
EA1	3.53	3.19	1.43	3.79
EA2	3.54	3.05	4.12	3.82
EA3	3.47	2.66	1.33	3.04
EA4	3.54	2.79	2.67	3.15
EA5	3.53	2.97	3.56	3.56
Logistics area	3.67	3.50	3.45	3.51
LA1	3.72	3.50	3.26	3.92
LA2	3.76	3.42	4.46	3.42
LA3	3.84	3.63	3.86	3.47
LA4	3.47	3.69	2.86	3.36
LA5	3.62	3.29	2.91	3.95
LA6	3.60	3.45	3.32	2.92
Preferential policies	3.66	3.42	3.47	3.68
PP1	3.70	3.45	3.45	4.33
PP2	3.61	3.54	3.56	3.21
PP3	3.74	3.58	4.21	3.91
PP4	3.72	3.46	4.34	3.95
PP5	3.55	3.28	2.13	3.68
PP6	3.61	3.34	3.52	3.87
PP7	3.70	3.26	3.08	2.83
Bilateral cooperation and the management mechanism	3.10	3.60	2.58	3.55
BC1	2.59	3.47	2.48	3.92
BC2	2.71	3.58	3.22	3.85
BC3	2.49	3.41	2.03	3.85
BC4	2.12	3.65	3.78	3.76
BC5	2.13	3.53	1.18	3.01
BC6	3.79	3.68	2.96	3.35
BC7	3.78	3.76	3.53	3.41
BC8	3.91	3.68	2.51	3.34
BC9	3.62	3.68	1.88	3.42
BC10	3.52	3.53	1.56	3.61
BC11	3.42	3.58	3.29	3.53
The participation of enterprises in the regional value chain and network	3.29	3.63	2.76	2.97
EP1	3.15	3.61	2.92	3.02
EP2	3.21	3.53	2.35	2.93
EP3	3.34	3.71	2.85	2.97
EP4	3.31	3.63	2.34	2.86
EP5	3.45	3.68	3.34	3.02

Source: Authors

## Cao Bang Province

Cao Bang shares the 333 km border with the Guangxi Zhuang Autonomous Region of China, with a lot of pairs of the border gate and clearance points, of which, the Province has two border gates with Baise, which is considered as a trade gateway of China's southwestern region and which the Chinese government planned to develop as an agricultural trade hub between China and ASEAN (K. C. Nguyen, 2017). Despite the recent relatively high economic growth rate, Cao Bang is still facing plenty of challenges in its economic development. The Province has a low income per capita and is substantially dependent on the state budget for its economic development (Cao Bang People's Committee, 2018). Therefore, the establishment of CBEZ is expected to bring about new opportunities for the Province with respect to the development of its economy, especially trade and investment (Provincial Party Committee of Cao Bang, 2016).

According to the survey results, Cao Bang has prepared best the logistics service area, with the score of 3.67, only to be followed by the preferential policies and the trade area, with the score of 3.66 each. The respondents assessed that Cao Bang had done relatively well with the advanced border gates. Cao Bang's lowest preparation relates to the modern infrastructure connectivity (Nguyen & Vu, 2019).

The logistics service area was assessed as the most advanced component in Cao Bang. Among the indicators, the warehouse services, the custom services, and the transportation and handling services ranked the highest. However, the logistics services at the border gates are generally still insufficient to meet enterprises' demand and they are operated at a high cost. The information exchange and the warehouse infrastructure ranked the lowest. The information on the market is limited, and the dissemination of the economic development policies is not paid adequate attention to.

The preferential policies ranked as the second developed activity, with the score of 3.66. The surveyed enterprises said that they had received different incentives when operating in the current

Cao Bang BEZ, such as those related to the labor movement, the land rent, the corporate tax, the value-added tax and credit. However, there is still a lack of the incentives made specifically for the enterprises operating in CBEZ, and the incentives specifically made by Cao Bang Province.

The trade area achieved a score of 3.66, according to which the respondents gave the highest score to the border markets and cross-border tourism development. Cao Bang has completed the construction of the shopping center of the Tra Linh BEZ, and has prioritized for the development of the trade supporting services. One of the striking achievements of Cao Bang is its active cooperation with Guangxi for the purpose of developing the cross-border tourism area and the agreed plan to mutually exploit the Ban Gioc waterfalls. Even though tourism is an advantage of Cao Bang, the number of tourists to Cao Bang is still low because of the limited variety of tourism products and the poor infrastructure and transportation. The challenges for Cao Bang in developing the trade area also lie in the weak performance of the banking and financial services, the low efficiency of duty-free shops and international exhibition centers.

The survey results showed that enterprises were relatively satisfied with the operation of the advanced border gates in Cao Bang. The Province's Customs Department has been implementing the VNACCS/VCIS since 2005, thus substantially facilitating the reduction in the time of the duration of and the procedure for trade activities. The harmonization of the working hours and the procedure between Vietnam and China was also ranked as highly satisfactory by the surveyed enterprises. The lowest point in this component was electronic payment and bonded warehouse.

The enterprises area in Cao Bang was assessed as underdeveloped and achieved a score of 3.52, demonstrating the lowest preparation in the development of high-tech industrial zones. The participation of enterprises operating in Cao Bang in the regional value chain ranked low, revealing a very weak linkage between enterprises and their suppliers. One reason for this low participation lies in the fact

that enterprises in Cao Bang are mainly small and medium-sized, with a low capacity in the capital, technology and human resources.

The common management mechanism is yet another challenge for Cao Bang when speaking about the development of CBEZ. Cao Bang and Guangxi have developed numerous cooperation in the customs, the labor movement and the border security inspections. The two provinces have signed some framework agreements in order to promote trade, investment, transportation, tourism, agriculture and education. However, because the Tra Linh-Long Bang CEBZ has not officially been approved at government level yet, no legal framework for Cao Bang and Guangxi to develop a joint agency and the policies to govern the future CBEZ has been adopted yet. Another difficulty is the fact that Cao Bang has substantially been relying on China's policies and has been trying to keep up with Guangxi's policy changes and development focus, thus leading towards an unsustainable economic development orientation for Cao Bang.

The final assessed component with the lowest score was the modern infrastructure connectivity. The potential to connect Cao Bang, Vietnam, with Guangxi and Baise City, China, in particular, and the ASEAN market, in general, is among the key determinants stimulating Vietnam to establish the Tra Linh-Long Bang CBEZ. In spite of the above potential, the infrastructure connectivity of Cao Bang Province with a score of 2.45 is least prepared in comparison with the other components. Although Cao Bang is expected to become a transshipment point, at present, the only transport channel between Cao Bang and the domestic market is the road, and most of them are bad roads. As a consequence, the infrastructure connectivity of Cao Bang Province is underdeveloped and assessed by the respondents as the one of the lowest quality in comparison with the other CBEZ provinces in Vietnam.

### Lang Son Province

Lang Son is an essential gateway connecting China and ASEAN. It has 12 mainland border gates, including two international border gates with China.

(Lang Son People's Committee, 2018). Lang Son has a low income per capita and has mostly been dependent on the state budget for its economic development.

According to the "Memorandum of Understanding on Building a Chinese-Vietnamese Cross-Border Economic Zone" signed in 2007 by Lang Son Province (Vietnam) and Guangxi (China), the Dong Dang (Vietnam)-Pingxiang (China) cross-border economic zone occupies an area of 17 km<sup>2</sup> (8.5 km<sup>2</sup> on each side). However, the overall project on building a cross-border economic cooperation zone between Vietnam and China has not been approved by the two governments, so this zone does not officially work.

Based on the survey, the advanced border gates was assessed as the most advanced component in Lang Son, achieving a score of 3.66. In this group, the electronic customs system is in the best condition. The Lang Son Customs has been at the forefront of the implementation of the e-customs procedures since 2010.

The participation of enterprises operating in Lang Son in the regional value chain ranked as the second developed component, achieving a score of 3.63. There is a reasonable linkage between local enterprises and domestic consumers/distributors in Lang Son. However, the level of the linkage between local enterprises and foreign businesses is not sufficient. Vietnamese traders were mainly spontaneous, small and fragmented, lacking similar associations, leading to unfair competition and being inferior to the counterparty's trade association. The business plans of Vietnamese enterprises were affected by the Chinese demand during the day.

The common management mechanism ranked as the third developed component, with a score of 3.6. Lang Son has implemented well the conditions of bilateral cooperation in synchronized supervision and management in border security inspection, bilateral cooperation in synchronized control and management in the customs and the quarantine activities.

The respondents are relatively satisfied with the operation of the logistics services area. Lang Son has met relatively well the requirements of the

warehousing services at border gates because it has a cargo transshipment zone in the Dong Dang-Lang Son border gate economic zone. However, the integrated logistics services at the border gate were responded to well by the respondents.

With regards to the trade area component, Lang Son now meets the requirements for duty-free shopping areas and the international fair and exhibition areas, but still has an inadequate response to the development of banking and financial services. In the future, this will be significantly improved as the State Bank of Vietnam issued a Circular 19/2018/TT-NHNN in 2018 in order to improve the border payment policies and promote trade activities between Vietnam and China.

For the preferential policies, enterprises in Lang Son obtained tax and land incentives. However, the preferential policies for small and medium-sized enterprises and incentives for protection and investment are almost absent.

The modern infrastructure connectivity is a component assessed as underdeveloped. It has not been well responded to by Lang Son, especially not so with respect to the internal traffic system in the border gate area. Lang Son is a mountainous province without a favorable ground for investments in construction and comparative advantages for economic development.

The enterprises area in Lang Son was assessed as underdeveloped and received a low score of 2.93. There are no business incubators and no high-tech zones in the border gate economic zone in Lang Son. It is, therefore, a big challenge for Lang Son Province to develop CBEZ in the future.

## Lao Cai Province

Lao Cai and Yunnan share the border in the length of 203 km. Lao Cai is located in the Kunming-Lao Cai-Hanoi-Hai Phong economic corridor and the GMS's North-South Corridor; therefore, it plays the role of a transshipment point between China and ASEAN. Lao Cai's economic growth rate has been maintained

at the level of over 10% in recent years. The trade turnover of Lao Cai follows an increasing trend; however, investment in the Province is still limited despite the high potentials in many industries (T. G. Nguyen, 2017; Lao Cai People's Committee, 2018).

The survey results show that the modern infrastructure connectivity and the advanced border gates are the best components in Lao Cai, achieving the scores of 3.80 and 3.61, respectively. Lao Cai has done relatively well with the preferential policies and the logistics service area. Meanwhile, the enterprises area and the bilateral cooperation and the management mechanism are the components demonstrating the lowest readiness for the establishment of CBEZ in Lao Cai.

The modern infrastructure connectivity is the most advanced component in Lao Cai. The Lao Cai-Hanoi Highway directly connects Lao Cai with one of the biggest domestic economic centers - Hanoi, and the domestic seaports of Hai Phong and Quang Ninh. This highway, together with the Hekou-Kunming Highway, has helped goods from and through Lao Cai to easily access the economic centers of China-Kunming and the southwest markets. Beside the road routes, the Lao Cai-Hanoi railways have facilitated the movement of people and goods between Vietnam and China. However, due to the inconsistency of the rail gauge, the transport has not been smooth between the two sides. At the same time, the Province's internal transport and traffic system at the border gate is poorly developed.

The advanced border gates ranked as the second developed component. Lao Cai implements the VNACCS/VCIS automatic clearance system. The authorities at the border gates of China and Vietnam have agreed upon the working hours at the border gate; and, if necessary, they have coordinated so as to extend the clearance time until 10 pm. The bonded warehouses and the single stop were also rated relatively high. However, a lack of the harmonization of border documents among domestic management agencies and between the Vietnamese and Chinese management agencies has caused many difficulties to Vietnam's enterprises.

The survey results also indicate the fact that enterprises are relatively satisfied with the preferential policies, especially the policies related to the land and infrastructure use and immigration. However, enterprises show low satisfaction with the investment promotion and protection policies, mainly due to a lack of stability and long-term policies. The respondents also expect greater support from the government's preferential policies for SMEs.

The logistics service area partly met the enterprises' expectations. The essential logistics services, such as transportation, goods loading and unloading, and warehousing services are highly appreciated. In the meantime, integrated services still need to be improved. In particular, the current warehouse system did not meet demand in terms of the area and the capacity of imported and exported goods at the border gates.

The trade area is not an advantage of Lao Cai. Despite the potential for tourism, Lao Cai and Yunnan have not established any cross-border tourism area yet, which lowers the average score of the trade area component.

Both enterprises-related components, namely including the participation of enterprises in the regional value chain and network and the enterprises area, are the limitations of Lao Cai. Lao Cai has established no high-tech zones and no export processing zones yet. Also, the linkage among Vietnamese enterprises, as well as that between Vietnamese and Chinese enterprises, is fragmented, leading to a lack of regional value chains needed to take advantage of each other's comparative advantages.

Finally, the bilateral cooperation and the management mechanism is the biggest challenge for Lao Cai in establishing CBEZ. There has been a minor similarity in the trade policy, the labor movement, the quarantine coordination and payment between the two countries. Therefore, the bilateral policy harmonization is amongst the top concerns when establishing CBEZ in Lao Cai Province. It is also necessary the establishment of a cross-border agency needed to manage the cross-border economic zone be considered.

## Quang Ninh Province

Quang Ninh has a strategic position in Northeastern Vietnam, which has a particularly important position in terms of the economy, politics and national security. It is located in the economic triangle of Hanoi-Hai Phong-Quang Ninh and in the area connecting China and ASEAN. It is also a vital traffic gateway, with various convenient border gates and seaport systems. In recent years, Quang Ninh has also been assessed as a locality with fast and dynamic socio-economic development demonstrating outstanding achievements (Quang Ninh People's Committee, 2018). The border economic cooperation between Quang Ninh and Guangxi provinces has increasingly been strengthened. Quang Ninh has always been actively involved in the roadmap planning so as to develop economic zones across the Vietnamese-Chinese border (Quang Ninh Economic Zone Management Board, 2019).

The survey results show that Quang Ninh is most ready to establish the CBEZ concerning the modern infrastructure connectivity component with a score of 3.75, only to be followed by the preferential policies and the advanced border gate, which achieved a score of 3.68 and 3.62, respectively. However, enterprises in Quang Ninh still have a weak linkage with suppliers, customers and other stakeholders in the regional value chain.

The modern infrastructure connectivity is the component assessed as the most developed. Roads are highly developed, which ensures smooth connection from the border area to the economic centers of the Province, of the border provinces and the domestic seaports with the seaports of China.

The preferential policies ranked as the second developed component, with the score of 3.68. At present, investment projects in Mong Cai BEZ are applied by adhering to the current legal mechanisms and policies for border economic zones. The respondents stated they were relatively satisfied with the incentives related to the corporate income tax and personal income tax, immigration, and the infrastructure use. However, the Province does not have preferential policies and support for SMEs.

The survey results showed that the respondents were relatively satisfied with the operation of the advanced border gates in the selected province, with the highest scores in the harmonization of the working hours. However, the status of the “bonded warehouse” ranked the lowest. Additionally, the participants in the survey also ranked the single stop services in Quang Ninh low, which is due to a lack of consistency and uniformity among the ministries and the agencies in the implementation process. Moreover, the specialized inspection is mainly carried out by applying manual methods without widely applying the risk management method, compliance and IT methods.

Regarding the common management mechanism, it still ranks low (the score being 3.55). Although the two sides have many policies pertaining to cooperation in trade, investment, tourism and labor migration, the surveyed enterprises stated that the border, immigration and import-export policies of Vietnam and those of China are sometimes unified, especially at sub-border gates.

The logistics services area is a challenge for Quang Ninh Province in developing CBEZ in the future, as it achieved quite a low score. Quang Ninh is expected to become a logistics center for regional economic development and a bridge connecting the ASEAN with the Chinese market; however, enterprises are still dissatisfied because logistics services companies are still small, with weak competitiveness. The logistics infrastructure has been paid attention to, but has not been synchronized. There is still a small degree of information exchange among logistics services providers and the authorities at border gates.

The enterprises area in Quang Ninh is assessed as underdeveloped and was given a score of 3.47, with the lowest preparation seen in the development of high-tech industrial zones. The development of business incubators and business support services is still at a low level, with a score of 3.15 and 3.56, respectively.

The trade area in Quang Ninh achieved a low score of 3.04. The lowest score in this group is the duty-free shopping area. There are no big shopping malls, but only five duty-free shops quite fragmented and

with small categories of products. Border markets have not been performing effectively since they are mostly located in the mountainous area, with a sparse population. National and international fairs and exhibitions in the Province and the border gate area are often small-scale.

The component assessed with the lowest score is the participation of enterprises operating in Quang Ninh in the regional value chain. Most businesses in the Province and those operating in the Mong Cai border economic zone are of small and medium scale, lacking qualifications, the capacity and experience. Therefore, their knowledge and awareness of participation in regional networks are still limited. Cooperation activities with foreign partners are still mainly carried out in traditional ways, not according to international practices.

### **Overall Assessment of Readiness for BEZ Establishment in the North of Vietnam**

The survey results show that there is a big difference in readiness for CBEZ establishment among the four study sites. In Cao Bang Province, the logistic service area is the best-prepared component, only to be followed by the preferential policies and the trade area. Cao Bang’s lowest preparation is observed in the modern infrastructure connectivity and the bilateral cooperation and the management mechanism with the neighboring country in the development of CBEZ. Lang Son Province is readiest when speaking about the development of an advanced border gate, and provincial enterprises have developed a suitable linkage with domestic consumers and distributors. The biggest challenges Lang Son Province is faced with lie in the modern infrastructure connectivity and the enterprise area. Differently from the provinces of Cao Bang and Lang Son, the remaining two provinces, including Quang Ninh and Lao Cai, have the best preparation with respect to the development of the modern infrastructure connectivity, which is only followed by the advanced border gates and the preferential policies. However, the readiness of Quang Ninh province concerning the component of the trade area, and the component of the participation of enterprises in the value chain is the lowest, while

Lao Cai demonstrates the lowest preparation in the components of the enterprise area and the common management mechanism with the neighboring country in developing CBEZ.

Besides, there are two notable common features among the studied provinces in the context of their preparing for the formulation of CBEZ. Firstly, among the eight components, enterprises in all four provinces are relatively satisfied with the way how advanced border gates operate. This component is assessed as the readiest in the Province of Lang Son, as the second developed in the Province of Lao Cai, and as the third and the fourth developed in the provinces of Quang Ninh and Cao Bang, respectively. Secondly, except for the Province of Lang Son, the preferential policies given to the enterprises operating in BEZ are highly assessed in the remaining three provinces.

## CONCLUSION

The conditions for establishing CBEZ/BEZ range from the economic to the social and security perspectives. In this research, CBEZ includes eight key components, namely as follows:

- the advanced border gate;
- the modern infrastructure connectivity;
- the trade area;
- the enterprise area;
- the logistics service area;
- the preferential policies;
- the bilateral cooperation and the management mechanism; and
- the participation of enterprises in the regional value chain and network.

This model includes the components of CBEZ developed in the studies conducted by D. Lalkaka *et al* (2011), M. Lord and P. Tangtrongjita (2014), and the practices of the border economic cooperation between Vietnam and China, thus providing quite comprehensive conditions for establishing CBEZ. The model, therefore, can be used to assess the

pre-conditions of any CBEZ. However, some other conditions should also be taken into account in order to improve this model, and those other conditions encompass the security conditions and linkages with the main markets. The number of the studied provinces could also be increased in the future so as to see a more comprehensive picture of the CBEZ conditions.

As expected, the analysis shows that there is a big difference in readiness for CBEZ establishment among the four studied sites. Although trade is entirely developed in all of the studied sites, the conditions for the development of CBEZ with all of its functions are still lacking. Lao Cai and Quang Ninh demonstrate a higher score in the infrastructure readiness and the overall scores, whereas Cao Bang still shows a weak connectivity with the domestic market. These findings are in accordance with those in the assessment made by D. Lalkaka *et al* (2011), in which the provinces of Lao Cai and Quang Ninh are selected as the pilot areas for CBEZ. These two provinces also demonstrate higher economic development compared to the provinces of Lang Son and Cao Bang. Cao Bang, however, has a great potential in connecting with the Chinese market. The value chains and the networks in all of the four provinces studied should be formed in order to establish a fully functioning CBEZ. The component needing the biggest improvement is the component of bilateral cooperation and the management mechanism with the neighboring country in the development of CBEZ. Therefore, efforts for joint strategies and policies harmonization need to be made so as to promote the formation and development of CBEZ.

## ENDNOTE

- 1 The reliability of the questionnaire's scale was checked by using Cronbach's Alpha. The results showed that Cronbach's Alpha values of all the 8 components of the proposed CBEZ model and the Corrected Item - the total correlation of all the individual items of the 8 components were satisfactory. Therefore, we kept all the 8 components and the individual items in order to compute the scores for the four studied provinces

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## REFERENCES

- Cao Bang People's Committee. (2018). *Report on the social and economic performance of the year 2017 and orientation for the year 2018*. Cao Bang: Cao Bang People's Committee.
- Fullerton, T. M. (2003). Recent trends in border economics. *The Social Science Journal*, 40(4), 583-592. doi.org/10.1016/S0362-3319(03)00070-3
- Krainara, C. (2008). *Cross-border trade and commerce in Thailand: Policy implications for establishing special border economic zones*. Asian Institute of Technology.
- Krainara, C., & Routray, J. K. (2015). Cross-Border Trades and Commerce between Thailand and Neighboring Countries: Policy Implications for Establishing Special Border Economic Zones. *Journal of Borderlands Studies*, 30(3), 345-363.
- Lang Son People's Committee. (2018). *Report on the social and economic performance of the year 2017 and orientation for the year 2018*. Lang Son: Lang Son People's Committee.
- Lalkaka, D., Nguyen, Q., & Xiaohui, Y. (2011). Lộ trình Khu Kinh tế xuyên biên giới. Dự án Hỗ trợ kỹ thuật TA 7356-REG: Phát triển các khu kinh tế xuyên biên giới giữa Trung Quốc và Việt Nam.
- Lao Cai People's Committee. (2018). *Report on the social and economic performance of the year 2017 and orientation for the year 2018*. Lao Cai: Lao Cai People's Committee.
- Lord, M., & Tangtrongjita, P. (2014). *Scoping Study for the Special Border Economic Zone (SBEZ) in the Indonesia-Malaysia-Thailand Growth Triangle (IMT-GT)*. Indonesia-Malaysia-Thailand Growth triangle
- Mekong Migration On Network (MMN) And Asian Migrant Centre (AMC). (2013). *Migration In The Greater Mekong Subregion Resource Book In-depth Study: Border Economic Zones and Migration, 4th edition*. Chiang Mai, Chiang Mai University.
- Nguyen, A. T., & Nguyen, T. T. M. (2017). Mô hình khu hợp tác kinh tế biên giới và một số gợi mở. *Tạp chí những vấn đề Kinh tế chính trị thế giới*, 6.
- Nguyen, A. T., & Vu T. H. (2019). Factors needed to establish cross border economic zones: Some assessments for Cao Bang. *VNU Journal of Science: Economics and Business*, 35(1), 1-13. doi.org/10.25073/2588-1108/vnueab.4208
- Nguyen, K. C. (2017 October). *Establishing and Developing Border Economic Zones of Cao Bang province with a focus on formulating Tra Linh (Vietnam) - Long Bang (China) Cross Border Economic Zone*. Paper presented at International Conference Proceedings Theoretical foundations for establishing and developing Cross Border Economic Zones in Vietnam, Cao Bang.
- Nguyen, T. G. (2017 October). *Border economic cooperation of Lao Cai (Viet Nam) and Yunnan (China): Situation and Issues*. Paper presented at International Conference Proceedings Cross-border economic zone: Issues and Prospects, Cao Bang.
- Payan, T. (2014). Theory-building in border studies: the View from North America. *Eurasia Border Review*, 5(1), 1-18.
- Provincial Party Committee of Cao Bang. 2016. *Report on potentials, advantages and challenges of constructing Tra Linh - Long Bang Cross Border Economic Zone, Cao Bang*. Cao Bang: Provincial Party Committee of Cao Bang.
- Quang Ninh Economic Zone Management Board. (2019). *Current situation of border economic cooperation and conditions for establishing economic cooperation zone in Quang Ninh province*. Quang Ninh: Quang Ninh People's Committee.
- Quang Ninh People's Committee. (2018). *Report on the social and economic performance of the year 2017 and orientation for the year 2018*. Quang Ninh: Quang Ninh People's Committee.
- Wallack, R. L., Zhaohui, W., & Nguyen A. T. (2011). *Project: Developing Cross-Border Economic Zones Between the PRC and Viet Nam: Institutional Development and Capacity Building*. Asian Development Bank.
- Weiler, S., & Zerlentes, B. (2003). Maquila sunrise or sunset? Evolutions of regional production advantages. *The Social Science Journal*, 40(2), 283-297. doi:10.1016/S0362-3319(03)00009-0

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