
An Instrument For Assessing Local Enterprise's Internal Capacity In Linkage With Foreign Direct Investment

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Abstract: This paper aims to develop an instrument for assessing the internal capabilities of local enterprises on levels corresponding to their readiness to participate in the global supply chain through linkages with foreign direct investment enterprises. The levels reflect the scope of business activities either in “Local”, “Regional”, “National”, “International” or “Global”. The instrument is built on the resource-based theory, including five major domains in terms of corporate governance capacities, human resources, finance, technology, and supply. Twenty indicators are selected from opinions of local and foreign business managers. Their opinions were reflected in 55 formal articles published in mainstream journals in Vietnam from 2016 to 2019. The reliability and validity of the scale are strictly tested. The results determine that this instrument is suitable to apply to related experimental studies. This is a newly developed tool to assess the internal capacity of domestic firms to link with foreign firms.

Keywords: Local firm, internal capacity, FDI linkage, readiness level, questionnaire

INTRODUCTION

The linkage between local enterprises and foreign enterprises (FDI) has received a lot of attention from researchers. If typing the keywords “foreign direct investment and local firm linkages”, Google scholar gives about 230,000 results. Randomly synthesizing 20 articles with direct research content on this linkage, 50% of the articles focused on the role of linkages in the transfer of spillover effects of FDI in general and some specific issues such as productivity, technology, knowledge transfer, innovation activities, regional development effects, and market value; 40% of the research concentrated on linkage formation behaviour via linkages’ determinants, local input linkages, and 10% of the articles reflected the linkages’ status. Data used in these studies were mainly firm level (14 articles); while three articles applied primary data through in-depth interviews; one paper used macro-level data; the rest are two review articles. There has been almost no research to assess the current capacity of local firms through the self-assessment of business managers, whether with the current status they can cooperate with FDI enterprises or not; or whether they want to associate with FDI enterprises (FDI for short).

The reality is that this kind of linkage is very low in developing countries. The (OECD-UNIDO, 2019) reported that the share of locally-produced inputs purchased by foreign multinationals was quite low in ASEAN countries; of which, the proportion in Vietnam was around 20%, with about 5% of input materials being produced by Vietnamese firms (this means that the remaining 15% was provided by foreign enterprises and 80% must be imported). This showed a huge gap for local firms to become suppliers to FDI. The question is whether the capacity of local firms cannot meet the requirements of FDI. According to (Jordaan, Douw and Qiang, 2020), the linkage between local firms and FDI was influenced by three main forces: (1) demands of local materials and characteristics of FDI enterprises such as the policy of using local sources, firm's motivation, investment form and firm's degree of autonomy; (2) the ability of local firms; and (3) macro-environmental conditions such as economic development, infrastructure, and institutional quality. This study focuses on inter-firm linkages and domestic linkages between local firms and FDI that are investing in a local region. This article is to develop an instrument to assess the internal capacity and readiness of local firms in association with FDI.

The article structure consists of six sections. The second section presents the theoretical and practical foundation for building the scale (Item Generation); the third section introduces sample selection and questionnaire distribution; the fourth section represents methods for instrument testing. The fifth section discusses the results and finally the Conclusion in the sixth section.

Theoretical and practical foundation for item generation

Major domains

The Resource-Based View (RBV) considers building a business strategy from analyzing corporate internal factors including tangible and intangible resources. (Wernerfelt, 1995) pointed out that even within the same

industry, there were differences between firms and internal attributes which played an important role in the firm's efficiency. According to (Barney, 1991), a resource creating advantages for a business in competition must satisfy the following four conditions: (1) Valuable, (2) Rare, (3) Inimitable, (4) Non-substitutable (VRIN). Compiled from many studies, (Islami, Mulolli and Skenderi, 2018) recorded the basic internal competencies of an enterprise that were the quality of the workforce including knowledge and skills accumulated by company training, experience, ability to work in groups; the level of technology shown through research and development activities; and corporate governance capacity. (Ahmedova, 2015) also synthesized from previous studies five groups of factors affecting the competitiveness of enterprises, including finance, innovation activities, intellectual property, national internationalisation and implementation with optimal solutions. The World Bank (WB) report written by (Jordaan et al., 2020) listed capacity limitations that make it difficult for local SMEs to become suppliers to FDI including lack of materials, small production scale, product quality and price. Besides, several other capacities of local SMEs can forecast the potential of linkages such as international business experience, experience as a supplier to FDI, participation in global value chains, participation in research and development, technology gap with FDI, and firm size. In short, the internal capacity of an enterprise can be summarised by covering the quality of human resources, technology level, corporate governance, supply as well as financial capacity. These are the five major theoretical factors included in the framework.

Indicators

Summarizing from articles on scale development, (Morgado et al., 2017) reported that 74.2% (on a sample of 105 articles) used experts' opinions for designing measurement criteria. In this study, the indicators were also selected from experts' opinions around the linkage between local and FDI enterprises in Vietnam. However, instead of gathering opinions from a closed source by an invited group of specific experts, this research collected opinions from an open-source newspaper. The experts' opinions were published in 55 formal news articles in mainstream journals to ensure legitimacy. The period was on a wide range from 2016 to 2019 to ensure objectivity over time. With this open-source, we gathered diverse, objective, and practical data to include on the scale. The experts were policymakers and managers of both local and FDI companies; therefore, they were knowledgeable among people who understand linkage issues. Table 1 described a sample for extracting the experts' opinions into measurement criteria.

Table 1. Sample for extracting expert's opinion into measurement criteria

Newspaper	Expert's opinion	Indicators
Joining the global supply chain: Businesses need more support Posted on the website of the Ministry of Finance (Ha Linh, 2016)	According to the Ministry of Industry and Trade, the three biggest hindrances for Vietnamese enterprises participating in the global value chain are capital, human resources and technology. Besides, the awareness of integration is still incomplete and not systematic.	- Internal capacity in technology, finance, and labour quality. - Awareness of international integration
Product value chain enhancement - Sustainable export growth solution Posted on the website of the Ministry of Industry and Trade of Vietnam (Phuong Thao, 2018)	"Enterprises lack labour skills, governance capacity, little technological innovation, difficult access to finance ..." Ms. Pham Chi Lan, Economist, Former Vice President of Vietnam Chamber of Commerce and Industry (VCCI)	- executive management - labour quality - level of technology - capital resources guarantee

The first draft had 24 items to measure five dimensions of internal capacity in Corporate Governance, Human Resources, Finance, Technology and Supply; with 3 items to present the Perception & Readiness for Linkages.

Demographic factors

For the business field: Accordingly, 30.84% of local firms were in agriculture, forestry and fisheries; 22.40% in processing and manufacturing industries; 7.79% in production and distribution of electricity and water; and 38.96% in other industries such as construction, wholesale and services. Meanwhile, 9.26% of FDI invested in agriculture, forestry and fisheries; 74.07% in processing and manufacturing industries; 9.26% in electricity production and distribution, water supply and treatment; and 7.40% in accommodation, catering, and information and communication services.

For the establishment years: The statistical results showed that 56.49% of local enterprises have been operating

for less than 5 years. Meanwhile, FDI in the province had an average life expectancy of 9.24 years, the newest was 3 years and the longest was 27 years of existence.

In terms of business size: Based on the criteria for identifying small and medium-sized enterprises specified in Article 6 of Decree 39/2018 / ND-CP, up to 89.29% and 91.88% of local firms were small and medium size in terms of capital and number of employees. Meanwhile, FDI of medium to large size in terms of capital and labour were 70.37% and 63.16% respectively. Micro small firms were not included in this study to minimize linkage noise.

Regarding respondents' experience: This information was to ensure the reliability of respondents' opinions. The higher the manager position, the higher the full awareness of the company's activities. Statistics showed that 48.10% of respondents hold a managerial position for 5 years or more in the business.

Scale for readiness level

For application in economics, one of the known, widely used and uniform scales was the technological readiness scale (TRL) first developed by NASA and adopted by the European Union (Héder, 2017). TRL was used to evaluate the maturity of technology on a scale of 0-9: Level 1 was fundamental and Level 9 was the use of modern technology. For the same purpose, (Lichtblau et al., 2014) proposed the 5-point Likert scale with 6 levels: Level 0: "Outsider", Level 1: "Beginner", Level 2: "Intermediate", Level 3: "Experienced", Level 4: "Expert", Level 5: "Top performer". Developing from existing TRL models, (Akdil, Ustundag and Cevikcan, 2018) suggested a model for measuring the technological maturity of enterprises (Industry 4.0 maturity model) with four levels, Level 0: "Absence", Level 1: "Existence", Level 2: "Survival", and Level 3: "Maturity". To determine the "maturity" level, questions were weighted from 0 to 3 corresponding to each level. In the field of management of organizational behaviour, (Novit, Hersey and Blanchard, 1971) built up a model that measured the capacity and the willingness of individuals to perform tasks. This scale ranged from low, low to medium, medium to high, and high.

To some extent, the capacity of a local firm will correspond to the level of willingness to join the global supply chain. In this study, the tool was an interval scale with 5 levels named according to the level of the business' scope of activities:

- Level 1 "Local" (corresponding to 0 - 1 point, or 0-25%): business capacity is very low, products and services are only available for small markets, within a radius of less than 10km; enterprises do not have the need to change their business strategies as well as associate with FDI, or join global supply chains.
- Level 2 "Regional" (corresponding to 1 - 2 points, or 26-50%): business capacity is quite low, at a small scale in terms of capital and labour; focus on using technology; want to expand and seek business cooperation; low readiness to join the global supply chain.
- Level 3 "National" (corresponding to 2 - 3 points, or 51-75%): enterprise capacity at fair level, medium to low level of large scale in terms of capital and labour; or having resources belonging to the VRIN group and paying attention to exploitation effectively; investment in technology; expanding business and linking with foreign enterprises, seeking international markets; high readiness to join the global supply chain.
- Level 4 "International" (corresponding to 3 - 4 points, or 76-90%): strong capacity, large scale; are using modern technology; search for global markets; very high readiness to join the global supply chain.
- Level 5 "Global" (corresponding to 4-5 points, or 91-100%): powerful ability, large scale; modern technology; leading the market; very high readiness or already joined the global supply chain.

Sample selection and questionnaire distribution

This study examined enterprises in Ben Tre province. Ben Tre is one of 13 provinces in the Mekong Delta, where the agricultural economy plays a dominant role in the economic structure (agricultural land accounts for 84%). The GRDP growth rate reached 7.85% and the provincial competitiveness index (PCI) ranked 7th nationwide in 2019. For economic development, the provincial government advocates attracting domestic and foreign investment. FDI attraction ranked 35th in the country. The average capital size of FDI in the province was 43.65% higher than that of the whole country. This shows that Ben Tre is one of the poor regions of Vietnam but is on a strong growth momentum with the potential to be a destination for FDI.

We awarded that the quality and quantity of the sample will significantly affect the quality of the tool. To ensure the generalizability of the new scale, the sample needs to be selected in a variety of compositions (Nunnally, 1967).

In terms of the sample nature, companies in our sample were selected according to the following criteria: 1) at least one year of operation; 2) diversifying the business lines; 3) diversifying the size of capital and labour including all medium and large enterprises while small companies were selected randomly.

Regarding the sample size, according to the Department of Planning and Investment of Ben Tre Province (DPI), 824 enterprises belonged to the above-defined sample group. With 95% confidence and a 5% margin of error, the sample should be 280; if the confidence level is up to 99%, the sample size is 363 (Krejcie and Morgan,

1970). In the case of developing a new scale, (DeVellis, 2016) suggested a sample size of 300 for a unidimensional scale constructed with about 20 criteria. Besides, in a model using the CFA test, with 3 to 4 observed variables for each factor, the sample size must be greater than 100 (Boomsma, 1985; Marsh and Hau, 1999). To ensure sample power, (Gudgeon, Comrey and Lee, 1994) divided the sample into six levels: very poor: 50, poor: 100, fair: 200, good: 300, very good: 500 and excellent: 1000. Similarly, (Tabachnick and Fidell, 2012) recommended a sample of around 300. With the rule of thumb, the sample size can be determined based on the ratio of sample size (N) and several measurement criteria (p). The widely accepted ratio is 10: 1 (Nunnally and Bernstein, 1994). Based on the indexes just listed, our tool had six dimensions with 25 indicators, averaging 4 variables per dimension (factor); the sample of 300 was sufficient.

Data was collected by the business management division of DPI in coordination with the Provincial Business Association from September 2019 to April 2020 (interrupted by the COVID-19 pandemic in early 2020). Initially, there were 350 questionnaires sent to businesses by email and directly through the transmitting and receiving channel of Viettel Post. The quality of the questionnaire was strictly controlled. Unsatisfactory responses were removed and replaced by sending questionnaires to other businesses. The research team stopped at accepting 308 copies, reaching the rate of 102.66% of the expected number of samples, and getting more than one-third of the population. This confirmed the sample can contribute to the generalizability of the new scale. Collected data were analyzed by SPSS and AMOS.

Methods for testing the instrument

Various testing techniques have been developed that were found in some articles or review articles. There are differences in subgroups of each test type; however, the nature and use of the testing techniques are relatively consistent. In this paper, we briefly presented a summary of the (Bolarinwa, 2015) techniques used. This article synthesized the tests for questionnaires. Due to space constraints, we will not give details of tests.

Reliability testing

- (1) Repeatability / Test-retest reliability
- (2) Alternative / Parallel-form Reliability or Equivalence
- (3) Inter-rater reliability / Inter-observer reliability
- (4) Internal consistency / inter-item consistency / or Homogeneity including Split-half reliability index and Coefficient alpha index

Validity testing

(1) **The theoretical construct validity** including Face validity and Content validity with two quantities have to calculate: I-CVI (the Item Content Validity Index) and S-CVI (the whole Scale Content Validity Index).

(2) **Empirical construct validity** with two subgroups:

- **Criterion validity / Reference validity** including Concurrence and Predictive
- **Construct validity** including Convergent validity, Discriminant validity, Known-group validity, Factorial validity with the common techniques used are Exploratory Factor Analysis (EFA), Confirmation Factor Analysis (CFA), and Hypothesis-testing validity.

Depending on the research's purposes, the scale will be tested by respective techniques. Based on the (Morgado et al., 2017), most of the authors used either EFA (88.6%), or CFA (72.3%), or convergent validity (72.3%), or discriminant validity (56.2%) for testing the construct validity; while 65.7% of the research applied both EFA and CFA. To test the reliability of the scale, internal consistency is used by most authors; while 22.8% of research studies using the extra test-retest reliability.

Data analysis and result

Face and Content validity

The first draft of the questionnaire was submitted for assessment from an expert panel (EP) including two researchers and two local governmental administrators. The evaluation focused on "the appropriateness of the observed variables measuring the main factor" and "the level of comprehension and clarity" of the words used in the questionnaire. The rating included four points: 1 = very inconsistent / very unclear to 4 = very suitable, very clear. In the face-to-face meeting, EP took turns evaluating each observed variable, and the inconsistent and unclear points were adjusted during the meeting. The EP group proposed to plus two additional items measuring the level of "proactively seeking linkages with FDI" and "joining professional associations".

The second draft was sent to a target panel (TP) of six local CEOs representing 3 sizes of businesses: small, medium, and large. Similar to EP, the TP met online and evaluated each observed variable. The TP proposed to gather items to condense the number of questions so that businesses can easily make choices. Specifically, grouping two items "Access to bank loans" and "Ability to expand business capital" into "Access to capital"; abolished the item "The need to raise capital" because there was a criterion "Capital absorbability". Two items

measuring the experience and education of managers were grouped into one item; likewise, for the criteria measuring the capacity of employees.

The third draft was re-sent to the EP for grading. Most experts rated 3 and 4 for the items, except 5 items rated at 2: G2 (TP5), H2 (EP1), F2 (EP3), T4 (TP1) and L5 (TP2).

The I-CVI is calculated on each observed variable, which is the ratio between the number of experts who agree (choose level 3 and level 4) to the total number of experts participating in the assessment (Polit, Beck and Owen, 2007). The variables G2, H2, F2, T4, L5 had 9 out of 10 experts agree, the I-CVI value of these variables was 0.9. The remaining variables had 10/10 experts agree, the index I-CVI was 1. The value of acceptance of the I-CVI depended on the number of experts. If the number was five or more, this indicator was at least 0.83. The S-CVI index is calculated by the average of all I-CVI in the scale (Lynn, 1986, cited Polit et al., 2007). The value of S-CVI was 0.98 $((20 \times 1) + (5 \times 0.9)) / 25$, which was greater than the standard value of 0.8 (Davis 1992, cited Polit et al., 2007). This showed that the items in this scale satisfied the content validity.

Thus, the final questionnaire represented a scale of 5 levels from low to high: level 1 = very low capacity / low readiness to level 5 = perfect capacity / very high readiness, with 25 indicators to measure six domains Corporate Governance (5 items: G1-G5), Human Resources (3 items: H1-H3), Finance (3 items: F1-F3), Technology (5 items: T1-T5), Supply (4 items: S1-S4) and Perception & Readiness for linkages (5 items: L1-L5).

Internal consistency

We divided the sample into two sub-groups: group 1 "2015 onwards" with an active life of 5 years or less, and group 2 "2014 backwards" with a history of more than 5 years. The difference in the firm-age might partly reflect the difference in the firm's capacity. If the measurement scores between the three groups do not have a great distance, the scale is stable.

Many studies use Cronbach's alpha coefficients for confirming the degree of internal consistency. However, the alpha coefficient does not have a common standard for determining uniformity. (Cortina, 1993) asserted that this coefficient depended on the number of items/indicators or the questions on the scale. The scale with more items had a higher coefficient. Compiling from studies using Cronbach's alpha coefficient, (Peterson, 1994) identified a typical average of 0.77, where the scale was considered homogeneous. (Hoang and Chu, 2008) classified a scale as very good if the CA coefficient was from 0.8 to close to 1; good scale: 0.7 - 0.8; acceptable scale: from 0.6 and up. Notably, (Hulin, Netemeyer and Cudeck, 2001) suggested that a value higher than 0.95 may be an indication of redundancy. Moreover, according to (Nunnally and Bernstein, 1994) only observed variables with correlation coefficients greater than 0.3 can be retained; if below 0.3, they will be discarded.

In this study, after performing EFA, there were two excluded observations, G2 and H2. The results in Table 2 showed that the CA coefficient of variables was from 0.601 to 0.862; there were no observed variables with correlation coefficients less than 0.3. Furthermore, there was no big difference in the homogeneity of the scales between the three groups. This confirmed that the scale was stable and consistent.

Table 2. Internal consistency of the scale

	Items	2015 onwards (n=144)	2014 backwards (n=164)	Overall (n=308)
Corporate Governance	5-1	0.797	0.862	0.835
Human resources	3-1	0.798	0.852	0.831
Finance	3	0.685	0.601	0.639
Technology	5	0.776	0.677	0.722
Supply		0.707	0.659	0.680
Perception & Readiness for linkages	4	0.689	0.831	0.713

Factorial Validity

At first, we applied EFA. Acceptable measurement variables included: a KMO coefficient of about $0.5 \leq KMO \leq 1$ and Bartlett test with Sig. < 0.05 (Hoang and Chu, 2008); loading factor must be greater than 0.4 to ensure stability (Guadagnoli and Velicer, 1988, cited Costello & Osborne, 2005).

Factor analysis is not simple because of the variety of extractions and rotations. According to (UCLA: Statistical Consulting Group., 2018), there are three main extraction methods: Principal components analysis (PCA),

Principal axis factoring (PAF) and Maximum Likelihood. Besides that, there are two main rotations: orthogonal rotation with the common use of Varimax and oblique rotation with the common use of Promax, then Direct Oblimin.

Factor analysis helps the dataset have a simple structure. PAF is useful if handling samples in preparation for further analysis; while Maximum Likelihood or Kaiser's alpha factoring should be applied to the new scale development (Field, 2013: 674-675). Table 3 below showed the dataset applying different extraction and rotation methods. The loading factor were not too different, showing that the scale was stable.

Table 3. A comparison of factor loading between PCA-PAF-Alpha factoring and CFA

Extraction Method		PCA	PAF	Alpha Factoring	CFA
Rotation Method		Orthogonal	Oblique	Oblique	
		Varimax	Promax	Promax	
Item Loadings		Factor Loading			SLE
F_G	G1	0.86	0.95	0.90	0.93
	G3	0.82	0.88	0.86	0.88
	G4	0.66	0.45	0.55	0.57
	G5	0.68	0.47	0.57	0.61
F_T	T1	0.62	0.64	0.54	0.58
	T2	0.69	0.69	0.59	0.54
	T3	0.69	0.59	0.63	0.65
	T4	0.64	0.64	0.54	0.57
	T5	0.64	0.69	0.60	0.59
F_S	S1	0.56	0.50	0.47	0.69
	S2	0.70	0.66	0.67	0.52
	S3	0.65	0.57	0.56	0.62
	S4	0.65	0.53	0.54	0.52
F-F	F1	0.63	0.43	0.44	0.50
	F2	0.67	0.61	0.66	0.81
	F3	0.77	0.62	0.71	0.54
F_H	H1	0.85	0.77	0.82	0.64
	H3	0.87	0.78	0.72	0.89
F_L	L1	0.71	0.79	0.80	0.83
	L2	0.77	0.87	0.85	0.81
	L3	0.59	0.40	Freestanding	Suppressed
	L4	0.72	0.71	0.61	0.69
	L5	0.59	0.42	Freestanding	Suppressed

After eliminating two variables L3 and L5 respectively, KMO was 0.814; Bartlett's equalled 0,000; at the eigenvalues of 1.061 was extracted six factors with total variance explained reached 62,785%. As such, all of these criteria qualify for inclusion in the next analysis.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.814	
Bartlett's Test of Sphericity	Approx. Chi-Square	2223.740
	df	210
	Sig.	.000

(Costello and Osborne, 2005) argued that “Once an instrument has been developed using EFA and other techniques, it is time to move to confirmatory factor analysis”. (Hair et al., 2010) believe that factor loading estimates are accepted from 0.5, preferably 0.7 and over. Standardized Loading Estimates (SLE) in Table 3 were from 0.5 to 0.9. This result confirmed that the scale was validity.

(Bolarinwa, 2015) mentioned that some authors used hypothesis-testing in evaluating the accuracy of the new scale. In this study, the regression result for R² was 0.414; F was 42.749 and Sig was equivalent to 0.000. The result supported our instrument.

Model Summary					
Model	R	R Square	Adjusted R Square	R	Std. Error of the Estimate
1	.644 ^a	.414	.405		1.68826

a. Predictors: (Constant), F_H, F_F, F_T, F_G, F_S

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	609.223	5	121.845	42.749	.000 ^b
	Residual	860.764	302	2.850		
	Total	1469.987	307			

a. Dependent Variable: F_L
b. Predictors: (Constant), F_H, F_F, F_T, F_G, F_S

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.289	.919		1.404	.161
	F_G	.332	.046	.370	7.272	.000
	F_T	.241	.042	.269	5.766	.000
	F_S	.103	.055	.099	1.895	.059
	F_F	.186	.057	.161	3.275	.001
	F_H	.075	.053	.063	1.420	.157

a. Dependent Variable: F_L

Generally, the results of testing of Face and Content validity, Internal consistency and Factorial Validity determined that the scale met the conditions of reliability and validity and ready for use. The instrument was in Appendix.

CONCLUSION

Governments, especially developing countries, always consider attracting FDI as one of the things to do. The benefits of FDI can be measured through figures such as investment capital, GDP contribution, quantity and value of exports, and the number of jobs. However, governments, especially developing countries, also recognize the internal capacity gap between foreign and local firms. This disparity is a “sustainable” barrier that prevents the benefits of FDI from being transferred to host countries through local firms. Business managers, policymakers, and academic researchers often raise the issue of the weak state of local enterprises but have not yet pointed out the extent to which they are weak. This study provided an instrument for assessing the internal capacities of local companies and their readiness for linkage with FDI firms.

In theory, this study contributed a 5-level scale to assess five domains of the internal capacity of local firms in terms of corporate governance, human resources, finance, technology and supply based on 20 criteria. The main dimensions relied on the resource-based theory; while the criteria were extracted from the practical opinions of

experts. This was an open tool because, first of all, the criteria can be changed and adjusted depending on the environment in which local companies exist; secondly, sources of experts' opinions are available and plentiful through formal newspapers. This makes the selected criteria very diverse and objective, without being biased by a target group.

In practice, this tool helped businesses and governmental staff measure what scope the business capacity is at a local or global level; whether local enterprises have enough capacity to cooperate with FDI, whether local enterprises can be a bridge to transfer FDI benefits; and whether they can become a player in the global supply chain or not.

In terms of policy, if the assessment data shows that local firms are at a very low level of capacity and readiness (subjectively, this is likely to happen in developing areas/countries), the government should consider either promoting to attract FDI or improving the country's absorptive capacity with the focus on local companies.

Limitation

The scale's stability and accuracy will be evaluated based on inputs that are collected via respondents' choices (questionnaire). A very good scale under experts' judgment (high content validity) can become a bad scale (low CA, KMO, SLE) if the respondents are not attentive and accountable to their choices. People in managerial positions are generally not interested in scientific research. Consequently, studies in which managers are participants can give biased results. Therefore, the excluded criteria in this study may be useful in other studies as well.

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Appendix

INSTRUMENT FOR ASSESSING FORM'S INTERNAL CAPACITY

This scale has 25 criteria to assess six dimensions in terms of Corporate Governance, Human resources, Finance, Technology, Supply, and Perception & Readiness for linkages with FDI enterprises. Please Click/circle the box corresponding to:

- Level 1 is about 25% of perfection, meets conditions for the inter-village operation
- Level 2 is about 50% of perfection, meets conditions for inter-regional operation
- Level 3 is about 75% of perfection, meets conditions for national operation
- Level 4 is about 90% of perfection, your business meets conditions for international operation
- Level 5 reaches 100% of perfection, your business meets conditions for global operation

Factors	Symbol	Indicators
CORPORATE GOVERNANCE	G1	Daily executive management
	G2	PR management
	G3	Production and service management
	G4	Supply chain management
	G5	Strategic management
HUMAN RESOURCES	H1	Quality of labours/staffs: Knowledge, Skills and Experience
	H2	Quality of management team: Knowledge, Skills and Experience
	H3	Ability to participate in association activities in terms of HR
FINANCE	F1	Ability to accumulate capital and equity capital
	F2	Ability to access bank loans and expand business capital
	F3	Capital absorption (deployment and use)
TECHNOLOGY	T1	Application of information technology to the management and administration of business activities
	T2	Application of technology in production / cultivation / animal husbandry / service
	T3	Application of technology in supply chain
	T4	R&D
	T5	Absorption of technology
SUPPLY	S1	Quality and Price
	S2	Quantity
	S3	Diversity of products and services
	S4	Experience
PERCEPTION & READINESS FOR LINKAGE	L1	Awareness of the importance of linking with FDI
	L2	Potential ability to linkages
	L3	Current linkages
	L4	Readiness to linkages

	L5	Member of professional associations
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