

Phan The Cong; Pham Thi Minh Uyen

## Article

Study of factors affecting micro-barriers that hinders the development of private enterprises : mediating role of intention to use of renewable energy

International Journal of Energy Economics and Policy

## Provided in Cooperation with:

International Journal of Energy Economics and Policy (IJEEP)

*Reference:* Phan The Cong/Pham Thi Minh Uyen (2020). Study of factors affecting micro-barriers that hinders the development of private enterprises : mediating role of intention to use of renewable energy. In: International Journal of Energy Economics and Policy 10 (6), S. 594 - 601.  
<https://www.econjournals.com/index.php/ijEEP/article/download/10588/5513>.  
doi:10.32479/ijEEP.10588.

This Version is available at:  
<http://hdl.handle.net/11159/8070>

## Kontakt/Contact

ZBW – Leibniz-Informationszentrum Wirtschaft/Leibniz Information Centre for Economics  
Düsternbrooker Weg 120  
24105 Kiel (Germany)  
E-Mail: [rights\[at\]zbw.eu](mailto:rights[at]zbw.eu)  
<https://www.zbw.eu/>

## Standard-Nutzungsbedingungen:

Dieses Dokument darf zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden. Sie dürfen dieses Dokument nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen. Sofern für das Dokument eine Open-Content-Lizenz verwendet wurde, so gelten abweichend von diesen Nutzungsbedingungen die in der Lizenz gewährten Nutzungsrechte. Alle auf diesem Vorblatt angegebenen Informationen einschließlich der Rechteinformationen (z.B. Nennung einer Creative Commons Lizenz) wurden automatisch generiert und müssen durch Nutzer:innen vor einer Nachnutzung sorgfältig überprüft werden. Die Lizenzangaben stammen aus Publikationsmetadaten und können Fehler oder Ungenauigkeiten enthalten.

## Terms of use:

*This document may be saved and copied for your personal and scholarly purposes. You are not to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute or otherwise use the document in public. If the document is made available under a Creative Commons Licence you may exercise further usage rights as specified in the licence. All information provided on this publication cover sheet, including copyright details (e.g. indication of a Creative Commons licence), was automatically generated and must be carefully reviewed by users prior to reuse. The license information is derived from publication metadata and may contain errors or inaccuracies.*



<https://savearchive.zbw.eu/terms-of-use>



# Study of Factors Affecting Micro-barriers that Hinders the Development of Private Enterprises: Mediating Role of Intention to Use of Renewable Energy

Phan The Cong\*, Pham Thi Minh Uyen

Thuongmai University, Hanoi, Vietnam. \*Email: [congpt@tmu.edu.vn](mailto:congpt@tmu.edu.vn)

Received: 19 June 2020

Accepted: 10 September 2020

DOI: <https://doi.org/10.32479/ijeeep.10588>

## ABSTRACT

Private enterprises in Vietnam as well as in other countries play an important role in the economy, but they have encountered several barriers in their development at both micro and macro levels. Inquires of these barriers is meaningful in making policy recommendations to remove barriers to private enterprise development in countries where the State/Government is considered a major factor. This study focuses on evaluating factors affecting the micro-barrier system that hinder the development of private enterprises in Vietnam to answer two research questions: which factors influence micro-barriers that hinder the development of private enterprises in Vietnam and what is the degree of influence of those factors along with the mediating impact of intention to use of renewable energy? The study applies quantitative research methods to measure the impact of factors on the micro-barriers system that hinder private enterprise development based on the survey sample of 392 private enterprises in Vietnam, which are mainly small and medium-sized private enterprises (most affected by micro barriers). Research findings indicate that state management policies; legal and tax systems, expanding scientific research and technological innovation activities are the main factors affecting the micro barriers that hinder the development of private enterprises in Vietnam. Intention to use of renewable energy significantly mediates between competitiveness in production and business, support for scientific research and technological innovation activities, expanding cooperation and international integration, state management policy, law and tax and barriers restricting enterprise development. These results could become experiences for other countries like Vietnam.

**Keywords:** Tectonic Government, Tectonic State, Innovative Government, Remove Barriers, Private Enterprises, Renewable Energy

**JEL Classifications:** L2, O2, Q2

## 1. INTRODUCTION

Both economists with a free-market perspective and economists with modern perspectives agree that the role of the state as a regulatory actor is a natural need of the market. Therefore, creating a healthy development environment for economic sectors is both a task and a goal of the State/Government when intervening in a market economy. How the state/government (depending on the political institutions of each country) intervenes in the economy is usually a topical question; especially in recent years, when economies are increasingly dependent on each other in bilateral and multilateral trade relations, these questions become even more important.

In Vietnam, despite significant achievements in socio-economic development since the introduction of the “Doi Moi” (Renovation) strategy and policy in 1986, Vietnam continues to face many development challenges. Per capita income is below the national expectation, leading to a high risk of falling into the middle-income trap. Productivity growth has slowed down in recent years, and social and environmental problems in economic development are emerging, such as environmental pollution, social evils and increasingly extensive inequalities, weak economic and governance institutions were honestly admitted by the Party and Government of Vietnam (Congress, 2016). To achieve the objectives, set out in the 5-year socio-economic development plan 2020-2025 with a vision to 2035, Vietnam needs to accelerate its institutional

improvement and more effective access to opportunities, and actively participate in solving global challenges if they do not want to lag behind other economies in the region and the world.

Renewable energy endorses various roles between a variety of variables signifying strengthens and weakness of relationships or impacts. Although, renewable energy is based on human exercise the wide benefits enumerated through renewable energy establishes in eliminating various barriers (Rezaei and Ghofranfarid, 2018). States strive for the deployment of various renewable energy measures to retain the competitive structure while performing varieties of instances pertain to the measures that restrict the development of businesses. The intention of using renewable energy has become the open end for the users individually for the means of different innovation activities that are important for technological and research (Bozorgparvar et al., 2018). Over the time, renewable energy counted as significant measure through which businesses are inserting robust impacts; therefore, using renewable energy has become dominant source between the supports that are needed for activities of research and technology to induce dominant impact on the barriers of enterprise development (Nawaz et al., 2019; Shakeel and Rahman, 2018). Renewable energy could insert its usage between the independent factors of this study to induce its influence upon the dependent factors, although, use of renewable energy could dominantly play a significant role among them the effectiveness of renewable energy helps to elaborate the various benefiting measures exist between them (Wojuola and Alant, 2017).

In addition, Vietnam has acknowledged that the market economy can only mature when it is led by the private sector, competition and deeper integration into the global economy. This is a significant stage that all economic models must go through. The way the government intervenes in a market economy to promote the development of the private sector, especially private enterprises, is a topical issue not only for Vietnam but also of many other developing countries. It is a strong development of private enterprises that can drive the national economy to break from a developing economy to a developed one. Therefore, the case study of Vietnam is not only meant to be a typical representative for a developing country desiring to become a developed country, choosing to encourage the development of private enterprises economy with small and medium-sized enterprises as key players; but also marks a great transformation of the role of the state/government in the economic development of a specific economic model (socialist-oriented market economy).

Many researchers studying Vietnam's economy think that this is a dynamic and emerging developing economy in Southeast Asia and Asia with an increasingly important role in the international arena, but there are significant barriers that hinder the development of private enterprises at both micro and macro levels. At the micro-level, (Wang, 2016) identifies possible barriers as the banking system and financial/credit market; competitive pressures under market mechanism slow growth of the input market; limited confidence among workers; the lack of governance capacity and poor cooperation in application research limited trust in entrepreneurs and poor establishment of entrepreneurship culture,

as well as uniformity in organizational structure, are micro barriers to the development of private enterprises (Bassey and Ekong, 2019; Chung, 2017; Kazemi, 2013). The study of these barriers for each economy is important in making policy recommendations to remove barriers to private enterprise development in countries where the role of the State/Government is considered as a key factor. Therefore, the purpose of the study is to assess the factors affecting the micro-barrier system that hinders the development of private enterprises in Vietnam. To achieve the purpose of the research, the research needs to answer two research questions: which factors influence micro-barriers that hinder the development of private enterprises in Vietnam and what is the degree of influence of those factors? The study used the method of measuring the level of the impact of micro-barrier factors on the development of private enterprises based on the survey sample of 392 Vietnamese private enterprises nationwide, mainly private small and medium enterprises (the type of enterprise most affected by micro barriers).

## 2. THEORETICAL FRAMEWORK

Many studies address the barriers to private enterprise development in developing countries, especially small and medium-sized private enterprises. The most extensive study, Wang (2016) used the cross-country data obtained from the World Bank's Enterprise Survey of 130,000 businesses in 135 countries and the multivariable regression model investigating barriers to small and medium-sized enterprises in developing countries. The study found five main factors affecting businesses including access to finance, tax rates, competitive pressure, electricity prices, and political factors. The two most influential factors are access to finance and competition. The Egyptian economy analyzed and identified major barriers affecting private sector development in the country as difficult access to finance; policy instability and vulnerability in macroeconomic shocks; limited support for private enterprise development by the legal system; lack of market-driven competitiveness in the real estate and energy sectors; weakness of domestic value chains; and financial institutions. The study also identifies barriers by sectors such as energy, banking and finance, industry, and agribusiness.

In addition, the research of Amentie et al. (2016) using Ethiopian interdisciplinary data and the sampling method combined with descriptive statistics identified nine major and moderate factors influencing the development of small and medium enterprises in Ethiopia, including micro barriers such as competitive pressure, high-interest rate, debt payment problem of customers, unavailability of raw materials, weaknesses of the banking system and unavailability of corporate credit systems; and the market's low demand for enterprise products. Agreeing with the above study, the poor infrastructure and limited finance, weak management ability and the absence of supporting information as well as low entrepreneurial spirit greatly hinder the development of enterprises in the industry. Even if credit is available to small and medium-sized businesses, it is still difficult to access and use this credit flow (Salami., 2003).

Renewable energy widely became a dominant element in various countries which not only helps for businesses but also for various

definite means. The importance of renewable energy has gained a dominant place in the literature which has a significant role between varieties of elements existing in studies (Ari and Yikmaz, 2019). The base of renewable energy eminently discussed in literature helps various countries to establish links between them and insert procedures of cooperation for international integration. The intention of using renewable energy enumerates vast varieties inserts role in the thoughts of business and production while remaining in competitiveness to counter the terminologies that restrict the development of enterprises (Kahia et al., 2017). Wide studies significant elaborated the using intentions of renewable energy among the development of enterprise where competitiveness in businesses are also eminent. The element of competitiveness in business and production is eminent in the process of eliminating barriers that exist in the development of business whereas the intentions of using renewable energy employs eminent role among them (Dogan and Ozturk, 2017). The use of renewable energy is eminent in the competitiveness of business and production while renewable energy also asserts dominant measures in the restricting elements of enterprise development (Demirbag and Yilmaz, 2020). Literature induced the various measures for support of technological innovation activities and scientific research among the elements restraining developments of business where renewable energy usage intentions significantly insert possible role between them (Uyar and Beşikci, 2017).

Continuing to explore in-depth the internal factors of the enterprise itself as a barrier to private enterprise development, Kazemi (2013) surveyed Iranian biotechnology product manufacturers and found five main groups of barriers related businesses themselves: limited trust and encouragement for employees, the absence of corporate culture with poor cooperation, solidarity and cultural differences; lack of confidence in entrepreneurs; weak business skills and coordination in the organizational structure as well as poor corporate governance. The research also emphasized the importance of building a startup culture that significantly affects the development of private enterprises. Levy (1992) in his study of the furniture industry in Tanzania shows that the lack of credit financing in the market makes it difficult for both large and small enterprises to develop. Meanwhile, in Sri Lanka, small and medium enterprises have difficulty accessing the inputs that are the advantages of state-owned corporations. With the ambition to find out if access to finance is a major constraint for small and medium enterprises in most countries. Research findings show that in countries with underdeveloped capital markets, the central bank tends to prioritize loans for state-owned enterprises or large enterprises designated by the Government instead of promoting capital for small and medium enterprises. Agreeing with the above conclusion, Chavis et al. (2011) use world bank business survey data to conduct research and find that 31% of businesses consider credit access as the main concern; even the financial barrier causes more serious effectors on small and medium-sized private enterprises than larger firms and this barrier is more impactful than other factors.

Renewable energy depends on various elements which are positively important for scientific research whereas the dominance of innovation activities are also significantly important

technologically to induce influence upon the restraining barriers (Higueras-Castillo et al., 2019). For enumeration of renewable energy various scientific measures are used however, the existence of renewable energy intentions better enumerates the significance between the technological innovation activities and restricting barriers in the development of enterprises. The source of renewable energy is variant in studies, while literature placed dominant measures for expanding of cooperation between various countries and for the integrations internationally to eliminate the barriers in businesses growth (Hai et al., 2017). The overall dependence of renewable energy is based on the state policies for its effective usage among various elements. The effective management policies are efficient for influencing the barriers that restrict the development of enterprise while the positive role of using renewable energy could elaborate positive results from them (Irfan et al., 2020). Law and tax are also dominant in the intentions of using renewable energy due to the company's involvement which is using renewable energy for various measures in countering eminent barriers of developing businesses (Husin and Alrazi, 2017). For cooperation's that must exist between the states of various countries for renewable energy intentions could enhance its significance between the expansions and international limelight's on the restricting barriers of developing enterprises. Role of renewable energy countered as a dominant place in the literature influencing various factors (Komendantova and Yazdanpanah, 2017). The intentions of using renewable energy have widely stated by literature through various modes for various purposes.

Studies into the development of private enterprises and the private sector in Vietnam in recent decades generally conclude that private enterprises are facing many development barriers. There are many points of disagreement between the perception of private economic thinking and the development prospect of this economic sector. There is not even a clear definition of private enterprises, which makes it difficult for statistical and research activities. The difficulties in accessing private credit are still seen. Only 40% of operating enterprises can access bank loans. Many private businesses find it difficult to meet the lending regulations of credit institutions because they are not transparent and fully aware of their financial situation. The private enterprises have high average business costs that reduce competitiveness such as transportation and personnel costs, or the slow and inconsistent development of the input market and the production auxiliary market has caused significant obstacles for the development of Vietnamese private enterprises. The barriers to corporate governance are also the reason why the private sector has not yet reached its full potential. To sum up, studied micro-barriers that can impede the development of private enterprises in Vietnam are shown in the following Table 1:

### 3. RESEARCH METHODOLOGY

#### 3.1. Samples

Samples of the study were selected based on the convenient method, one of the non-probability sampling approaches. According to the convenient sampling method, selected subjects were accessible objects. The survey subjects of this study are



managers and employees in enterprises. In EFA, sampling is usually based on (Congress, 2016) minimum size and the number of measurement variables in the analysis. Hair et al. (1998) suggests that to use EFA, the sample size should be at least 50, preferably 100 and the observed/measurement ratio should be 5:1, meaning that a measurement variable needs at least 5 observations. In this study, the total number of observed variables is 42, so the minimum number of samples to achieve is 210. For multivariable regression analysis: the minimum sample size to achieve is calculated by the formula of  $50 + 8 \cdot m$  ( $m$ : number of independent variables) (Tabachnick and Fidell, 1996). Thus, to identify the factors affecting business development barriers, the study conducted in-depth interviews and used 400 structured questionnaires for management leaders and workers in private enterprises in Vietnam. The findings were from 400 questionnaire samples collected. Of which 392 were valid, 3 were invalid, 4 were incomplete, and 1 was rated at the same score.

### 3.2. Data Analysis Method

In this study, the authors applied the Structural Equation Modelling (SEM) with Smart-PLS: analysing Cronbach's Alpha, Confirmatory Factor Analysis (CFA), and Structural Equation Modelling (SEM), specifically as follows:

Step 1: Evaluation of the reliability of the scale. Cronbach's alpha (CA) was used to evaluate the reliability of the scale for each observed variable belonging to the factor groups. Peterson Peterson (1994) (Peterson) suggests that any factor with CA less than 0.6 should be excluded from the research model.

Step 2: Confirmation factor analysis (CFA). The affirmative factor analysis (CFA) is appropriate when researchers have some knowledge of the underlying variable structure. In which the relationship or hypothesis (derived from theory or experiment) between the observed variable and the base factor is accepted by the researchers before conducting statistical testing. In CFA development, the observed variables are also indicator variables in the measurement model, because they "upload" the conceptual basis theory. The factor analysis asserts that CFA accepts the hypotheses

of the researchers, determined by the relationship between each variable and one or more factors. Indicators for measuring the suitability of the model with data include Chi-squared (CMIN); Chi-square adjusted according to degrees of freedom (CMIN / df); Comparability index (CFI); Tucker and Lewis index (TLI); and Root Mean Square Error of Approximation (RMSEA). According to Hair et al. (1998), if  $1 < \text{CMIN}/\text{df} < 3$ , the model is considered to be a good fit. If the model receives CFI values,  $\text{TLI} \geq 0.9$ ;  $\text{RMSEA} \leq 0.08$ , and  $P > 0.5$ , the model is suitable for the data.

Step 3: Structural equation modelling (SEM). Structural equation modelling (SEM) helps test a set of regression equations at the same time. In this study, the SEM model was implemented to identify the influencing factors and the degree of influence of each factor on the micro-barriers that limit the development of private enterprises. The variables that have been adopted by the present study includes the intention to use of renewable energy (IURE) has four items, competitiveness in production and business (CPB) has four items, support for scientific research and technological innovation activities (SSRTIA) has three items, expanding cooperation and international integration (ECII) has three items, state management policy (SMP) also has three items, law and tax (LT) also has three items and barriers restricting enterprise development (BRED) has seven items. These are shown in Figure 1.

## 4. RESULTS

The findings show the convergent validity that exposes the correlation among the items and the statistics show that the figures of Alpha and CR are larger than 0.70 while the figures of loadings and AVE are more than 0.50. These statistics proved that convergent validity has valid and high linkage among the items. These statistics are shown in Table 2. In addition, the management model assessment reported in Figure 2 and Structural model assessment reported in Figure 3.

The findings also show the discriminant validity that exposes the correlation among the variables and Fornell Larcker along with cross-loadings has been conducted for the checking of discriminant validity. The statistics show that the figures of the relationship of variables with itself are more than with other variables. These statistics proved that discriminant validity has valid and no high linkage among the variables. These statistics are shown in Tables 3 and 4.

**Table 1: Micro barriers restricting the development of Vietnamese private enterprises**

Abbreviation	Barriers restricting enterprise development (micro-level)	Literature
BRED 1	The banking system and the financial/credit market	Amentie et al. (2016); Levy (1992); Chavis et al. (2011)
BRED 2	Competitive pressure in the market mechanism	Wang (2016)
BRED 3	Input	Levy (1992)
BRED 4	Absence of workers' confidence	Kazemi, 2013)
BRED 5	Lack of cooperation, governance capacity	Kazemi (2013)
BRED 6	Lack of confidence in entrepreneurs and entrepreneurship culture	Kazemi, 2013)
BRED 7	Lack of uniformity in the organizational structure of enterprises	(Kazemi, 2013)

**Figure 1: Theoretical framework**

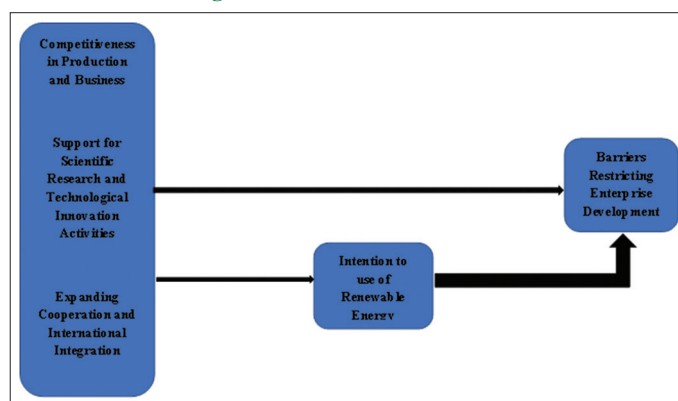


Figure 2: Measurement model assessment

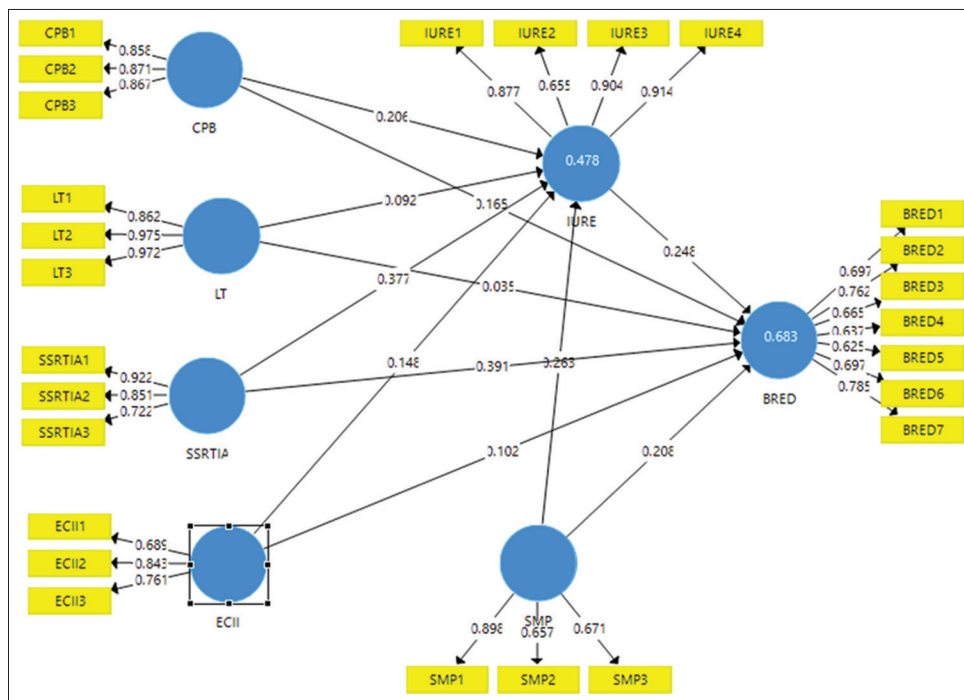


Table 2: Convergent validity

Constructs	Items	Loadings	Alpha	CR	AVE
Barriers Restricting Enterprise Development	BRED1	0.697	0.827	0.868	0.587
	BRED2	0.762			
	BRED3	0.665			
	BRED4	0.637			
	BRED5	0.625			
	BRED6	0.697			
	BRED7	0.785			
Competitiveness in Production and Business	CPB1	0.858	0.833	0.900	0.749
	CPB2	0.871			
	CPB3	0.867			
Expanding Cooperation and International Integration	ECII1	0.689	0.751	0.810	0.588
	ECII2	0.843			
	ECII3	0.761			
Intention to use of Renewable Energy	IURE1	0.877	0.858	0.907	0.713
	IURE2	0.655			
	IURE3	0.904			
	IURE4	0.914			
Law and Tax	LT1	0.862	0.931	0.956	0.880
	LT2	0.975			
	LT3	0.972			
State Management Policy	SMP1	0.898	0.710	0.790	0.562
	SMP2	0.657			
	SMP3	0.671			
Support for Scientific Research and Technological Innovation Activities	SSRTIA1	0.922	0.785	0.873	0.699
	SSRTIA2	0.851			
	SSRTIA3	0.722			

Table 3: Fornell Larcker

	BRED	CPB	ECII	IURE	LT	SMP	SSRTIA
BRED	0.698						
CPB	0.569	0.865					
ECII	0.356	0.163	0.767				
IURE	0.685	0.497	0.328	0.844			
LT	-0.354	-0.254	-0.207	-0.261	0.938		
SMP	0.582	0.422	0.279	0.517	-0.294	0.750	
SSRTIA	0.702	0.475	0.243	0.570	-0.511	0.404	0.836

The Heterotrait Monotrait (HTMT) ratio has also been conducted for the checking of discriminant validity. The statistics show that the figures for ratios are not more than 0.90. These statistics proved that discriminant validity has valid and no high linkage among the variables. These statistics are shown in Table 5.

The path analysis shows that support for competitiveness in production and business (CPB), scientific research and

Figure 3: Structural model assessment

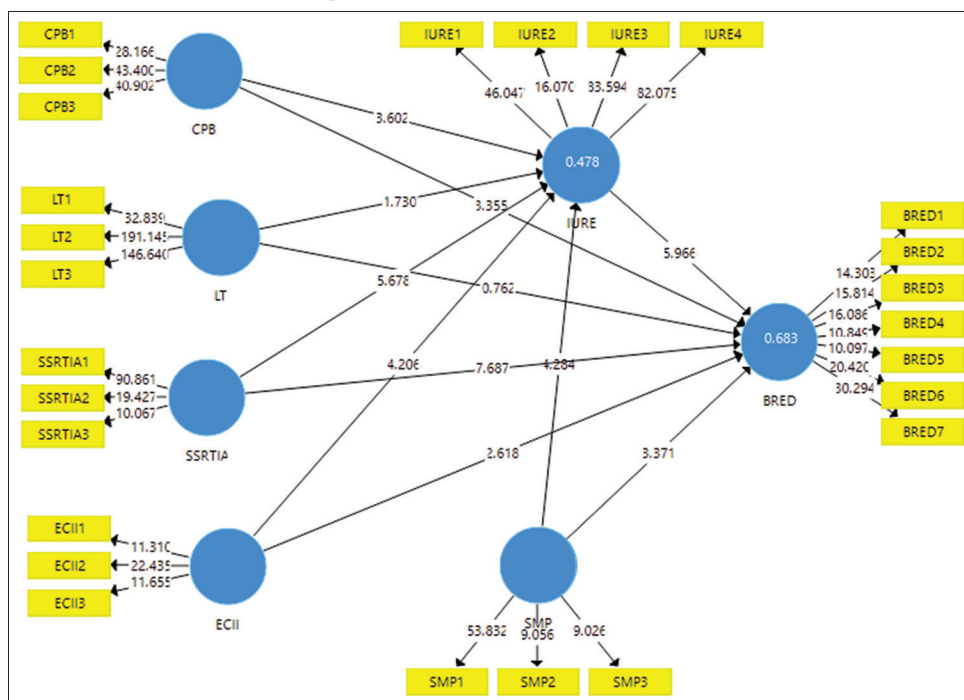


Table 4: Cross-loadings

	BRED	CPB	ECII	IURE	LT	SMP	SSRTIA
BRED1	<b>0.697</b>	0.323	0.217	0.375	-0.254	0.300	0.374
BRED2	<b>0.762</b>	0.388	0.271	0.466	-0.200	0.295	0.461
BRED3	<b>0.665</b>	0.502	0.219	0.548	-0.169	0.766	0.356
BRED4	<b>0.637</b>	0.354	0.383	0.290	-0.262	0.280	0.334
BRED5	<b>0.625</b>	0.386	0.173	0.417	-0.266	0.274	0.327
BRED6	<b>0.697</b>	0.391	0.247	0.549	-0.276	0.427	0.642
BRED7	<b>0.785</b>	0.408	0.255	0.583	-0.308	0.381	0.764
CPB1	0.472	<b>0.858</b>	0.189	0.454	-0.239	0.412	0.375
CPB2	0.467	<b>0.871</b>	0.136	0.435	-0.168	0.307	0.376
CPB3	0.538	<b>0.867</b>	<b>0.100</b>	0.401	-0.249	0.376	0.480
ECII1	0.307	0.160	<b>0.689</b>	0.223	-0.050	0.189	0.170
ECII2	0.287	0.100	<b>0.843</b>	0.322	-0.301	0.265	0.222
ECII3	0.205	0.118	<b>0.761</b>	0.182	-0.088	0.168	0.155
IURE1	0.533	0.364	0.245	<b>0.877</b>	-0.141	0.451	0.396
IURE2	0.608	0.478	0.354	<b>0.655</b>	-0.347	0.272	0.658
IURE3	0.568	0.429	0.245	<b>0.904</b>	-0.165	0.538	0.382
IURE4	0.564	0.373	0.238	<b>0.914</b>	-0.198	0.475	0.440
LT1	-0.269	-0.223	-0.182	-0.221	<b>0.862</b>	-0.260	-0.455
LT2	-0.364	-0.247	-0.206	-0.257	<b>0.975</b>	-0.286	-0.499
LT3	-0.354	-0.244	-0.194	-0.253	<b>0.972</b>	-0.281	-0.486
SMP1	0.568	0.446	0.227	0.513	-0.193	<b>0.898</b>	0.352
SMP2	0.301	0.195	0.205	0.248	-0.142	<b>0.657</b>	0.197
SMP3	0.383	0.247	0.206	0.342	-0.341	<b>0.671</b>	0.340
SSRTIA1	0.685	0.446	0.195	0.564	-0.440	0.391	<b>0.922</b>
SSRTIA2	0.640	0.424	0.189	0.472	-0.363	0.281	<b>0.851</b>
SSRTIA3	0.377	0.300	0.251	0.366	-0.532	0.357	<b>0.722</b>

Table 5: Heterotrait Monotrait ratio

	BRED	CPB	ECII	IURE	LT	SMP	SSRTIA
BRED							
CPB	0.676						
ECII	0.479	0.223					
IURE	0.774	0.581	0.416				
LT	0.400	0.288	0.247	0.284			
SMP	0.751	0.553	0.436	0.680	0.400		
SSRTIA	0.797	0.576	0.347	0.668	0.625	0.584	

technological innovation activities (SSRTIA), expanding cooperation and international integration (ECII), and state management policy (SMP) has a positive and significant association with barriers restricting enterprise development (BRED). However, law and tax (LT) have an insignificant association with barriers restricting enterprise development (BRED). In addition, intention to use of renewable energy has positively mediating among the links of competitiveness in production and business

**Table 6: A path analysis**

Relationships	Beta	S.D.	t-statistics	P-values	L.L.	U.L.
CPB -> BRED	0.165	0.049	3.355	0.001	0.083	0.234
CPB -> IURE	0.206	0.057	3.602	0.000	0.110	0.296
ECII -> BRED	0.102	0.039	2.618	0.005	0.037	0.166
ECII -> IURE	0.148	0.035	4.206	0.000	0.081	0.203
IURE -> BRED	0.248	0.042	5.966	0.000	0.181	0.311
LT -> BRED	0.035	0.046	0.762	0.224	-0.051	0.110
LT -> IURE	0.092	0.053	1.730	0.043	0.005	0.162
SMP -> BRED	0.208	0.062	3.371	0.001	0.098	0.308
SMP -> IURE	0.263	0.061	4.284	0.000	0.163	0.377
SSRTIA -> BRED	0.391	0.051	7.687	0.000	0.307	0.478
SSRTIA -> IURE	0.377	0.066	5.678	0.000	0.260	0.471
CPB -> IURE -> BRED	0.051	0.019	2.746	0.004	0.023	0.079
ECII -> IURE -> BRED	0.037	0.010	3.520	0.000	0.019	0.055
LT -> IURE -> BRED	0.023	0.014	1.668	0.049	0.001	0.044
SMP -> IURE -> BRED	0.065	0.015	4.452	0.000	0.041	0.086
SSRTIA -> IURE -> BRED	0.094	0.024	3.933	0.000	0.052	0.130

(CPB), scientific research and technological innovation activities (SSRTIA), expanding cooperation and international integration (ECII), state management policy (SMP), law and tax (LT) and barriers restricting enterprise development (BRED). These links are shown in Table 6.

## 5. CONCLUSIONS AND POLICY IMPLICATIONS

The research has synthesized and analyzed micro-barriers that limit the development of private enterprises, including banking system and financial/credit market; competitive pressure under the market mechanism; Source of inputs; Lack of confidence among workers; Lack of cooperation, governance capacity; Lack of confidence in entrepreneurs and entrepreneurship culture; and Lack of uniformity in the organizational structure of enterprises. The analysis results show that the factors affecting the micro barriers that limit the development of private enterprises such as State management policies, Legal system and taxation, Expanding international cooperation and integration, Increasing support for scientific research and technological innovation activities and Competitiveness in production - business areas all have a counter or negative impacts on the factor “Micro barriers limit the development of private enterprises.” In other words, when the government creates and supports the development of private enterprises, including good state management policies; transparent and consistent legal and tax system; strengthened international cooperation and integration; increased support for scientific research and technological innovation activities; and increased support for businesses to improve competitiveness in production and business areas, barriers will be removed, thereby promoting the development of private enterprises better.

Positive results for the role of renewable energy generated from the study. The significance of using renewable energy helps through various channels to interpret the circumstance existing in this study. These findings are same as the output of Gabriel (2016) who also examined that enterprise development has influence on the use of renewable energy. Dominant intentions of using renewable energy are where significant in retaining the competitiveness of

business and production, renewable energy also dominantly insert significant role among various factors that influences the restricting barriers. Results significantly enumerated the benefits of using renewable energy between the elements existing in states for positive implications and different barriers in the development of business and enterprises. A study by Munro et al. (2016) examined that positive association among the enterprise development and the use of energy resources in the country. Therefore, the intention of using renewable energy countered as eminent factor inserts role between the factors affecting barriers in the development of enterprises.

For the private sector to grow, the Government of each country needs to continue its administrative reform, creating a favorable business environment for businesses to develop. At the same time, the Government needs to improve its mechanisms and policies to encourage and facilitate strong development of the private economy; develop policies to support the development of small and medium-sized enterprises and start-ups; and develop legal regulations related to business investment, avoiding overlapping, causing difficulties for private enterprises. In doing so, micro-barriers that limit the development of enterprises will be gradually removed, paving the way for more sustainable development of private enterprises in the future.

This study was conducted in Vietnam, a strongly growing economy in Southeast Asia thanks to drastic reforms of the Vietnamese government in managing and operating the economy for a favorable environment for the private sector. Therefore, the study can be considered as a meaningful lesson of experience of Vietnam for other countries in the region and the world with similar conditions. Changing the factors of micro barriers to the development of private enterprises requires a strong innovation of the government role, and the tectonic government is a direction with a lot of advantages. The study also provided similar findings to previous studies on the tectonic government in the countries.

## REFERENCES

Amentie, C., Negash, E., Kumera, L. (2016), Barriers to growth of medium and small enterprises in developing country: Case study Ethiopia.



- Journal of Entrepreneurship and Organization Management, 5, 190-194.
- Ari, I., Yikmaz, R.F. (2019), The role of renewable energy in achieving Turkey's INDC. *Renewable and Sustainable Energy Reviews*, 105(2), 244-251.
- Bassey, G.E., Ekong, U.M. (2019), Energy consumption and inflation dynamics in Nigeria: An ARDL cointegration approach. *Energy Economics Letters*, 6(2), 66-83.
- Bozorgparvar, E., Yazdanpanah, M., Forouzani, M., Khosravipour, B. (2018), Cleaner and greener livestock production: Appraising producers' perceptions regarding renewable energy in Iran. *Journal of Cleaner Production*, 203(1), 769-776.
- Chavis, L.W., Klapper, L.F., Love, I. (2011), The impact of the business environment on young firm financing. *World Bank Economic Review*, 25, 486-507.
- Chung, T.K. (2017), The private sector's role in Vietnam's economic development model for the period 2016-2020 with a vision to 2035. *International Journal of Economics and Management*, 80, 4-13.
- Congress, V.C.P. (2016), Evaluation of the implementation of the 2011-2015 economic development and socio-economic development directions and missions for 2016-2020. In: *Proceedings of the 12<sup>th</sup> Vietnam Communist Party Congress*.
- Demirbag, M., Yilmaz, S. (2020), Preservice teachers' knowledge levels, risk perceptions and intentions to use renewable energy: A structural equation model. *Journal of Education in Science Environment and Health*, 6(3), 193-206.
- Dogan, E., Ozturk, I. (2017), The influence of renewable and non-renewable energy consumption and real income on CO<sub>2</sub> emissions in the USA: Evidence from structural break tests. *Environmental Science and Pollution Research*, 24(11), 10846-10854.
- Gabriel, C.A. (2016), What is challenging renewable energy entrepreneurs in developing countries? *Renewable and Sustainable Energy Reviews*, 64, 362-371.
- Hai, M.A., Moula, M.M.E., Seppälä, U. (2017), Results of intention-behaviour gap for solar energy in regular residential buildings in Finland. *International Journal of Sustainable Built Environment*, 6(2), 317-329.
- Hair, J.F., Anderson, R.E., Tatham, R.L., Black, W.C. (1998), *Multivariate Data Analysis*. Upper Saddle River, NJ: Prentice Hall.
- Higueras-Castillo, E., Liébana-Cabanillas, F., Muñoz-Leiva, F., Molinillo, S. (2019), The role of collectivism in modeling the adoption of renewable energies: A cross-cultural approach. *International Journal of Environmental Science and Technology*, 16(4), 2143-2160.
- Husin, N., Alrazi, B. (2017), Renewable energy investment in Malaysia: An integrated model in evaluating public decision making process. *Journal of Clean Energy Technologies*, 5(4), 343-346.
- Irfan, M., Zhao, Z.Y., Li, H., Rehman, A. (2020), The influence of consumers' intention factors on willingness to pay for renewable energy: A structural equation modeling approach. *Environmental Science and Pollution Research*, 10(2), 1-15.
- Kahia, M., Aïssa, M.S.B., Lanouar, C. (2017), Renewable and non-renewable energy use-economic growth nexus: The case of mena net oil importing countries. *Renewable and Sustainable Energy Reviews*, 71(3), 127-140.
- Kazemi, A. (2013), Studied barriers to entrepreneurship in industrial companies (case study: Iranian companies producing biotechnology products. *European Journal of Experimental Biology*, 3, 484-489.
- Komendantova, N., Yazdanpanah, M. (2017), Impacts of human factors on willingness to use renewable energy sources in Iran and Morocco. *Environmental Energy and Economic Research*, 1(2), 141-152.
- Levy, B. (1992), Obstacles to developing indigenous small and medium enterprises: An empirical assessment. *The World Bank Economic Review*, 7, 65-83.
- Munro, P., van der Horst, G., Willans, S., Kemeny, P., Christiansen, A., Schiavone, N. (2016), Social enterprise development and renewable energy dissemination in Africa: The experience of the community charging station model in Sierra Leone. *Progress in Development Studies*, 16(1), 24-38.
- Nawaz, M.A., Azam, M.A., Bhatti, M.A. (2019), Are natural resources, mineral and energy depletions damaging economic growth? Evidence from ASEAN countries. *Pakistan Journal of Economic Studies*, 2(2), 45-53.
- Peterson, R.A. (1994), A meta-analysis of cronbach's coefficient alpha. *Journal of Consumer Research*, 21, 381-391.
- Rezaei, R., Ghofranfarid, M. (2018), Rural households' renewable energy usage intention in Iran: Extending the unified theory of acceptance and use of technology. *Renewable Energy*, 122(3), 382-391.
- Salami, C.A.T. (2003), Guidelines and Stakeholders Responsibilities in SMIEIS. Seminar on Small and Medium Industries Equity Investments Scheme (SMIEIS). p50-65.
- Shakeel, S.R., Rahman, S.U. (2018), Towards the establishment of renewable energy technologies' market: An assessment of public acceptance and use in Pakistan. *Journal of Renewable and Sustainable Energy*, 10(4), 45907.
- Tabachnick, B.G., Fidell, L.S. (1996), *Using Multivariate Statistics*. 3<sup>rd</sup> ed. United States: Harpercollins College.
- Uyar, T.S., Beşikci, D. (2017), Integration of hydrogen energy systems into renewable energy systems for better design of 100% renewable energy communities. *International Journal of Hydrogen Energy*, 42(4), 2453-2456.
- Wang, Y. (2016), What are the biggest obstacles to growth of SMEs in developing countries? An empirical evidence from an enterprise survey. *Borsa Istanbul Review*, 16, 167-176.
- Wojuola, R.N., Alant, B.P. (2017), Public perceptions about renewable energy technologies in Nigeria. *African Journal of Science Technology Innovation and Development*, 9(4), 399-409.