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*Governance and barriers to entrepreneurship development in
ASEAN+3: Empirical Evidence from World Bank Data*

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Governance and barriers to entrepreneurship development in ASEAN+3: Empirical Evidence from World Bank Data

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Abstract

This paper explores the impact of the governance indices on the development of entrepreneurship in the context of ASEAN+3 countries including China, Japan and South Korea. These are the three important partners to South East Asian nations in wide range of development aspects. With the use of World Bank's data set on the World Governance Indices and Entrepreneurship known as Doing Business, natural logarithm regression analysis was adopted to figure out the extent to which governance would exert its impacts on the entrepreneurship development in the member countries of ASEAN as well as China, Japan and South Korea . On the basis of the study findings, conclusions and recommendations were to be drawn for policy modernization in the ASEAN+3 countries. This research found a diverse impact of governance on the constraints for entrepreneurship, thereby contributing a better knowledge to explain the governance-entrepreneurship nexus in the ASEAN Plus Three context.

Key words: Governance, Entrepreneurship; ASEAN + 3; World Bank

I. Introduction

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In the last few decades, entrepreneurship has emerged as a key issue in the policy arena (Norbäck et al, 2014; World Bank, 2016; United Nations, 2013). While it is defined as the governing process and institutions by which authority is exercised (Acs et al, 2014; Ong, 2006), entrepreneurship is considered as a tool for economic growth and innovation across countries regardless of stages of development (Chari and Dixit, 2015; Friedman, 2011). In many ways, entrepreneurship is critical to the well-being of society (Amorós and Bosma, 2013). Therefore, resolving the conundrum of the governance–entrepreneurship nexus has been an important area of policy research and discussion in recent years (Acs 2014; ADB, 2013; Bower, 2011). For ASEAN, which is composed of ten member states with a unitary motto known as “one vision, one identity, one community” governance trends are not linear and cannot be applied, nor have been imported generally, across borders (EWC, 2014). Entrepreneurship plays a crucial role in the upcoming ASEAN Economic Community, as a key driver of sustainable economic growth and job creation. While the potential benefits of increased entrepreneurship are widely recognized, better evidence is needed to identify the most effective policies for entrepreneurship promotion in the region (Dosch, 2015; Xavier et al 2015).The ASEAN economics have been projected to grow at 4.9 percent in 2016 and they have been also planning to introduce an ASEAN Economic Community (AEC) by the end of 2015 (Petri and Plummer, 2016; EWC, 2015). Coupled with this ASEAN’s growing middle class, now estimated at nearly 100 million, is making its voice heard (Dosch, 2015; Deb, 2013; Wielemaker and Gedajlovic, 2010). That trend is one that is strengthening ASEAN itself when it is in an important talk about many issues with its three important partners (Green and Szechenyi, 2014; Ito et al, 2013; Roy, 2013). ASEAN countries have to try harder to neatly align the relationship between governance and entrepreneurship development with the aim at boosting the economic growth. This, in turn, will

empower the ASEAN block to maintain a fair-play cooperation with the three countries of China, Japan and South Korea on the basis of good governance practice and a favorable environment for business start-up and doing business. This will, in turn, increase the block's competitiveness (Xavier et al 2015; Thomas, 2009; Gugler and Chaisse, 2009). Given the lack of empirical evidence on the issue, the purpose of this research is to assess the impact of governance on the entrepreneurship development in this spotlight region. This not only should shed more light on this much debated relationship, but would also draw policy implications for ASEAN countries and its three important partners to confidently enter its most contentious period since the establishment of this organization (Cronin, 2014). This paper includes China; Japan and South Korea because of their important role not only in the international arena, but also in the South East Asian region (ASEAN, 2015; Sun, 2014). Nowadays, these three countries play an important role for ASEAN in almost all facets of political socio-economic and cultural development. Therefore, results of this research help draw a broad picture that goes beyond the ASEAN countries themselves.

II. Literature Review on governance and entrepreneurship development

II.1. ASEAN Plus Three (APT)

The Association of Southeast Asian Nations (ASEAN) was established in Bangkok in 1967 by the five original member countries. Namely, they are Indonesia, Malaysia, Philippines, Singapore and Thailand. Brunei Darussalam joined in 1984, Vietnam in 1995, Laos and Myanmar in 1997, and Cambodia in 1999. ASEAN and Japan first established informal dialogue relations in 1973, which was later formalized in March 1977 with the convening of the ASEAN-Japan Forum. Since then, significant progress has been made in all areas of political security, economic, finance and socio-cultural cooperation (EWC, 2015).

ASEAN-China Dialogue Relations commenced in Kuala Lumpur, Malaysia in 1991. The relationship between ASEAN and China was elevated with the signing of the Joint Declaration of the heads of Government on Strategic Partnership for Peace and Prosperity at the 7th ASEAN-China Summit in Bali, Indonesia in 2003. Currently, ASEAN is also closely collaborating with China, and Japan and Korea under the form of the ASEAN Plus Three (APT).

ASEAN and the Republic of Korea (ROK) initiated sectorial dialogue relations in November 1989 (EWC, 2013). South Korea was accorded a full Dialogue Partner status by ASEAN at the 24th ASEAN Ministerial Meeting (AMM) in July 1991 in Kuala Lumpur. Since the ASEAN-ROK partnership was elevated to a summit level in 1997 in Kuala Lumpur, relations between ASEAN and the South Korea have broadened and deepened. The relationship reached a new height with the signing of the Joint Declaration on Comprehensive Cooperation Partnership at the 8th ASEAN-South Korea Summit on 30 November 2004 in Vientiane and the adoption of the ASEAN-South Korea Plan of Action (POA) to implement the Joint Declaration at the 9th ASEAN-South Korea Summit on 13 December 2005 in Kuala Lumpur. The 13th ASEAN- South Korea Summit on 29 October 2010 in Ha Noi agreed to elevate ASEAN-South Korea dialogue relations from comprehensive cooperation to a strategic partnership.

Across ASEAN countries it is also widely argued that good governance also nurtures the entrepreneurship development (Dosch, 2015; ADB, 2013; Friedman 2011; Amorós and Bosma (2013); Haltiwanger et al, 2010; Khorshed, 2005; Thomas, 2009). However, fostering entrepreneurship development requires government efficiency to be sustained on a long-term basis (Xavier et al, 2015; Gugler and Chaisse, 2009). Governments can take a variety of actions in favor of entrepreneurial activities by increasing quality of governance (Thai and Turkina, 2013). However, measures to encourage people to register their entrepreneurial activities through

improved governance quality may not be functioning as usual for countries in low economic development stages (EWC 2015; Thai and Turkina, 2013). On the one hand, the regulatory environment is generally weak in such countries, and people can gain legitimacy without the government's support in developing countries (Desai, 2009; Friedman, Cox & Tribunella, 2010). On the other hand, they may have some doubts about its protective ability due to deep-rooted rampant corruption, and thus, are more unlikely to register their business or to operate in the formal sector (Yoon et al 2014; Dreher and Schneider, 2010).

Morrison (2000) cites the cultural and societal specificity as the triggers of the entrepreneurship. Other scholars (Troilo, 2011; Peter and Savoie, 2000; Cressy, Cumming and Mallin, 2013) argued that it is made possible because trust in government effectiveness, political stability, rule of law, and voice in government affairs should be related to citizens' willingness to take risks associated with investing, starting and managing new businesses. Friedman (2011) concludes that the economic, social and self-actualization benefits of starting up and managing new businesses must, ultimately, outweigh the risks and burdens in order for entrepreneurship to occur. A comprehensive review made by several scholars (Friedman, 2011; Gedeon, 2010; Khorshed, 2005; Lowrey, 2003; Thai and Turkina, 2013) shows that research which identifies the impact of governance on entrepreneurship development is limited. Yet, conflicting results sometimes appear. More research is, therefore, needed in this area. Established measures of governance and the barriers to entrepreneurship are described below.

II.1. The barriers to entrepreneurship

Gedeon (2010) has made a thorough review of the literature on the issue and come to a conclusion that the level of entrepreneurship varies systematically across the different countries. Factors such as economic conditions and institutions are important determinants for

entrepreneurship to prosper (Thai and Turkina, 2013; Bettignies and Brander, 2007; Gentry and Hubbard, 2000; Harper, 1998; McMillan and Woodruff, 2002).

Entrepreneurship scholars have yet to reach a common definition of the concept on entrepreneurship (Wiklund et al, 2011). Depending on the research focus and interest, a variety of entrepreneurship definitions is used (Rauch, et al 2009). According to Thai and Turkina (2013) there are four streams of entrepreneurship research that adopt four different views on the functions of entrepreneurs in the economy. Amorós and Bosma (2013) also argue that entrepreneurs are driven to start up their business by “*push*” and “*pull*” motivations in order to better understand the entrepreneurial phenomenon. In this connection, data produced by the Global Entrepreneurship Monitor (GEM) or the World Bank (WB) have become increasingly popular in recent studies (Amorós et al., 2013; Sternberg and Wennekers, 2005). In this paper we adopt this popular trend in entrepreneurship research by examining World Bank sets of data. These data offer different measures of new business start-ups and doing business, and each with different coverage in terms of years and countries. The World Bank’s sets of data are available online at the doingbusiness.org webpage (World Bank 2016; World Bank and IFC, 2014). As of January 2015, the World Bank sample comprises entrepreneurship information from 2004-2015 for more than 120 countries. The reason for using these sets of World Bank data on entrepreneurship is the compatibility or corresponding measures in terms of time and methods as compared to the data on World Governance Indicators also created by the World Bank. Furthermore, by selecting five types of entry hindrance for entrepreneurs to start up and run their business such as: (1) Cost of starting a business; (2) Property registration cost; (3) Cost of export; (4) Cost of import; and (5) Time needed for contract enforcement, we tried to look into the entrepreneurship phenomenon from a “hindrance” angle rather than a “motivational factor”

lenses. In doing so, we attempted to empirically test the explanatory power of governance on the barriers to entrepreneurship development that have been theoretically developed, yet still neglected practice, especially in the context of ASEAN Plus Three (APT).

II.2. World Governance Indicators

Kaufmann et al (2010) draw on existing notions of governance, and seek to navigate between overly broad and narrow definitions, to define governance as “the traditions and institutions by which authority in a country is exercised. This includes: firstly the process by which governments are selected, monitored and replaced; and secondly, the capacity of the government to effectively formulate and implement sound policies; and thirdly, the respect of citizens and the state for the institutions that govern economic and social interactions among them.” Therefore, two measures of governance corresponding to each of these three areas, resulting in a total of six dimensions of governance which include: (1) voice and accountability (**VA**); (2) political stability and absence of violence (**PV**); (3) government effectiveness (**GE**); (4) regulatory quality (**RQ**); (5) rule of law (**RL**); and (6) control of corruption (**CC**).

At the macro level, entrepreneurship is useful for policy makers to understand what drives entrepreneurs to set up their business (UN, 2013; Thai and Turkina, 2013). Therefore, knowing about institutional hindrances to business start-up can help them not only understand the current situation, but also come up with policy measures in order to keep their countries’ entrepreneurship development on the right track. In this process, Bjørnskov and Foss, (2008) and Wennekers et al (2002) believe that governance plays a critical role in making that happen.

III. Methodology

III.1. Research model

To quantify impacts of governance on the entrepreneurship, this research used five types of common barriers to entrepreneurship that entrepreneurs are often faced with. They are the five types of costs as described in the World Bank data set on entrepreneurship. Thus, let a number of independent variables $Y(\text{Cost})_{ij}$ respectively be the natural logarithm of (YC₁) Cost of starting a business which is calculated as a percentage of income per capita; (YC₂) Property registration cost which is referred to as being the one at a percentage of property value; (YC₃) Cost to export as the absolute US\$ per container; (YC₄) Cost to import which is incurred in an amount of US\$ per container; (YT₅) Time needed for contract enforcement calculated as the amount of days that entrepreneurs are in need for completely enforcing the contract for ASEAN country i during the period j . The impact of governance can be tested using five respective econometric equations:

Cost of doing business (YC₁)

$$\ln YC_1 = \alpha_{01} + \sum_{j=1}^{12} \beta_j N_j + \sum_{k=1}^6 \gamma_{ki} \ln W_{ki} + \varepsilon_1 \quad (1)$$

Cost of property registration (YC₂)

$$\ln YC_2 = \alpha_{02} + \sum_{j=1}^{12} \beta_j N_j + \sum_{k=1}^6 \gamma_{ki} \ln W_{ki} + \varepsilon_2 \quad (2)$$

Cost to export (YC₃)

$$\ln YC_3 = \alpha_{03} + \sum_{j=1}^{12} \beta_j N_j + \sum_{k=1}^6 \gamma_{ki} \ln W_{ki} + \varepsilon_3 \quad (3)$$

Cost to import (YC₄)

$$\ln YC_4 = \alpha_{04} + \sum_{j=1}^{12} \beta_j N_j + \sum_{k=1}^6 \gamma_{ki} \ln W_{ki} + \varepsilon_4 \quad (4)$$

Time needed for contract enforcement (YT₅)

$$\ln YT_S = \alpha_{0S} + \sum_{j=1}^{12} \beta_j N_j + \sum_{k=1}^6 \gamma_{ki} \ln W_{ki} + \varepsilon_S \quad (5)$$

Where:

α_{0i} is the constant of the natural logarithm regression.

$\sum_{j=1}^{12} \beta_j N_j$ is the vector of dummy variables for ASEAN Plus Three (APT) countries

$\sum_{k=1}^6 \gamma_{ki} \ln W_{ki}$ is the natural logarithm vector of World Governance Indicators, 1st to 6th

VA is the Voice and Accountability

PV is the Political Stability and Absence of Violence

GE is the Government Effectiveness

RQ is the Regulatory Quality

RL is the Rule of Law

CC is the Control of Corruption

ε_i is residual term in the model with $i=1$ to 5

ASEAN+3 countries included in the analysis are composed of 12 nations. Namely, Brunei Darussalam (**BRN**); Cambodia (**KHM**); Indonesia (**IND**); Laos (**LAO**); Malaysia (**MAS**); the Philippines (**PHL**); Singapore (**SGP**); Thailand (**THA**); Vietnam (**VNM**); China (**CHN**); Japan (**JPN**) and South Korea (**KOR**). Myanmar is not brought into the model due to the unavailability of the World Bank data. For a polychromous factors of these 12 countries there is a need to code 11 dummy variables. In this type of natural logarithm regression analysis, Lao PDR (**LAO**) serves as a baseline to which other countries are compared in the regression analysis. The above-

mentioned econometric model would also allow the overcoming of the normality condition or statistical normality test known as Kolmogorov-Smirnov test (Hair et al, 2008).

III.2. Hypotheses

As it has been confirmed in the works of several scholars (i.e. Bjørnskov and Foss, 2008; Friedman, 2011; Klapper et al 2009; Kaufmann et al 2010; Lowrey, 2003; Thai and Turkina, 2013) entrepreneurship flourishes under favorable governance conditions. This also means good governance is helpful to reduce the hindrances and barriers for entrepreneurship. Therefore, governance is of good quality only when starting businesses would cost the entrepreneurs an acceptable amount of money and time. More importantly, it would entail such beliefs as trust in government effectiveness, political stability. The rule of law must also exist to ensure an acceptable level of certainty to bring about a situation in which contractual obligations are met (Friedman, 2011, Huynh et al, 2009). Given the above mentioned reasoning the specific hypotheses are developed as follows:

Hypothesis 1: Across ASEAN+3 countries, governance indicators are negatively impacted by the cost of starting up a business.

Hypothesis 2: Across ASEAN+3 countries, governance indicators are negatively impacted by property registration cost.

Hypothesis 3: Across ASEAN+3 countries, governance indicators are negatively impacted by cost of export.

Hypothesis 4: Across ASEAN+3 countries, governance indicators are negatively impacted by cost of import.

Hypothesis 5: Across ASEAN+3 countries, governance indicators are negatively impacted by time needed for contract enforcement.

Hypothesis 6: Across ASEAN+3 countries, the degree to which governance indicators exert impact on the costs of doing business and time for contract enforcement is different.

Hypothesis testing should be conducted using the above mentioned econometric models from (1) to (5) with regards to the impacts of governance on the barriers to entrepreneurship using the availability of the 2004-2014 World Bank data on governance and barriers to doing business as described above.

IV. Findings

IV.1. Descriptive statistics

The ASEAN+3 yearly entrepreneurship data were taken from the World Bank dataset from the year of 2004 to 2014. At the same time, yearly data on six dimensional governance indicators for ASEAN countries and China were also retrieved from the World Bank for the period of 2004-2012 (WGI, 2014). Due to the data unavailability for some countries at this point in time, this study used the mean series method to replace the missing values of the WGI data for the years of 2013 and 2014 consecutively. All of these six dependent predictors were consecutively regressed against the five dependent variables with a set of nine dummy variables due to the exclusion of Myanmar. Descriptive statistics for the ASEAN+3 are shown below.

Table1. Descriptive statistics of entrepreneurship and governance for ASEAN +3

Variables	ASEAN		Japan		China		South Korea	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Cost of business start-up	43.3	84.9	8.3	1.4	8.2⁺	5.5	15.9	1.4
Cost of property registration	3.8	3.1	4.5	1.6	3.4⁺	1.1	4.7	1.5
Cost of Import	481.1⁺	240.7	731.8	362.0	481.1⁺	74.4	601.7	300.9
Cost of Export	511.9⁺	282.9	899.8	444.9	520.5	67.0	653.5	346.6
Time for contract enforcement	48.5	41.0	31.4	2.6	11.1	0.90	10.3⁺	0.09
Voice and Accountability	29.0	13.8	80.0⁺	3.2	9.7	8.5	69.0	1.04
Political Stability and No Violence	43.8	27.2	80.7⁺	3.4	31.5	5.8	58.2	2.9
Government Effectiveness	0.2	0.8	1.5⁺	0.1	0.0	0.09	1.1	0.1
Regulatory Quality	52.2	23.4	83.9⁺	1.8	47.9	3.4	83.3	2.0
Rule of Law	46.1	22.5	88.5⁺	1.0	42.3	3.5	79.4	3.1
Control of Corruption	41.7	26.8	89.4⁺	3.2	36.0	3.2	69.4	2.2

Note: sign (⁺) indicates the countries will have the dominance on the variable.

Source: Calculated by authors from 2004-2014 World Bank WGI and Entrepreneurship data.

Mean values and standard deviations for ASEAN countries and the three countries of China; Japan and South Korea are presented in Table 1. Japan is noted to score highest rankings on such six world governance indicators as Voice and Accountability (VA); Political Stability and Absence of Violence (PA); Government Effectiveness (GE); Regulatory Quality (RQ); Rule of Law (RL); Control of Corruption (CC). On the other hand, the ASEAN countries have the advantages over the other three countries on the indicators such as Cost of Import and Cost of Export. China also has lower cost advantages in starting up a business and registration of the

property. China is also equal with ASEAN countries in terms of Cost of Import. South Korea excels the rest of ASEAN countries, Japan, and China with regards to the Time needed for contract enforcement which is one of the most difficult barriers to running businesses in the ASEAN+3 context.

Table 2 Partial correlations among variables across the ASEAN+3

	Ln (VA)	Ln PV	Ln GE	Ln RQ	Ln RL	Ln CC
Ln (YC ₁)	-0.064	-0.388**	-0.543**	-0.408**	-0.63**	-0.558**
Ln (YC ₂)	0.296**	-0.353**	-0.124	-0.060	-0.157	-0.151
Ln (YC ₃)	0.48**	-0.053	0.466**	0.56**	0.336**	0.474**
Ln (YC ₄)	0.415**	0.034	0.377**	0.471**	0.269**	0.398**
Ln (YT ₅)	0.035	-0.148	-0.45**	-0.315**	-0.506**	-0.417**

Note: the asterisks * and ** indicate statistical significance at $\alpha = 0.05$ and $\alpha = 0.01$

Table 2 presents the partial correlations among variables in the models. Across the ASEAN+3, countries, Cost of Business Start-up (Ln YC₁) is negatively associated with Voice and Accountability (non-significant degree of correlation with Ln VA at -0.064); with Political Stability (significant degree of correlation with Ln PV at -0.388); with Government Effectiveness (Ln GE at a statistically significant correlation of -0.543). The Regulatory Quality; Rule of Laws; and Control of Corruption are highly correlated with Cost of Business Start-up (Ln YC₁) at respective degrees of -0.408; -0.63 and -0.558.

With regards to the Cost of Property Registration (Ln YC₂), Voice and Accountability (Ln VA) has a positive correlation of 0.296 while Political Stability and Absence of Violence (PV) has a

statistically significant negative correlation of -0.353. As opposed to the Costs of Business Start-up and Property Registration the cost of import ($\mathbf{Ln YC}_3$) and cost of export ($\mathbf{Ln YC}_4$) have similar patterns of correlating with those six governance indicators. The last dependent variable Time needed for Contract Enforcement ($\mathbf{Ln YT}_5$) has negative correlations with Political Stability (Ln PV at -0.45); Government Effectiveness (Ln GE at -0.315); Regulatory Quality (Ln RQ at -0.506), and Control of Corruption (Ln CC at -0.417). However, this dependent variable of \mathbf{LnYT}_5 has a minor positive correlation with the governance indicator of Voice and Accountability at 0.035 which is non-statistically significant.

IV.2. Hypothesis testing

Table 3 shows the results of natural logarithm regression analysis. It is shown that five logarithm regression models indicate quite high degrees of R^2 . This shows all of the five models are quite robust and well explaining the regression models' variances. Coupled with this, the Durbin-Watson test confirmed that there was no violation of the colinearity across the five regression models. As Laos is the baseline in the five logarithm regression models, in this case the constant values are for Laos. Thus the other remaining ASEAN+3 countries could be compared with this country on these five types of dependent variables as mentioned above. Natural logarithm regression models show the results of hypothesis testing in Table 3 as follows. Hypotheses of from 1 to 5 were partially accepted because the beta coefficients in 5 regression models were not all negative. Namely, for hypothesis #1, cost of starting a business was still positively impacted by Government Effectiveness (beta coefficient of 0.528) and Control of Corruption (beta coefficient of 0.197). With respect to hypothesis #2, Cost of Property Registration was positively impacted by political stability (beta coefficient = 0.0.15) and the Rule of Law (beta coefficient of

1.069 at a statistical significance). In hypotheses #3 and #4, Costs To Import and Cost to export were still positively impacted by the Rule of Law and Control of Corruption with corresponding beta coefficients of 1.213; 1.584; 1.139 and 2.031 at a statistical significant level of 0.001 as shown in Table 3. For hypothesis #5, the contract enforcing time was impacted by Political Stability and Absence of Violence (beta coefficient of 0.008) and Government Effectiveness with a beta coefficient of 0.055 at non-statistically significant level. Results of regression analysis confirmed the acceptance of the last sixth hypothesis across 5 models. Below is presented the discussion of the testing of the sixth hypothesis.

With regards to the cost of starting a business, ASEAN+3 countries have a rather high level of the start-up business expenditures. Especially, such countries as Cambodia, Indonesia, Malaysia and Brunei are leading countries in terms of bigger business start-up costs ($\ln YC_1$) while Vietnam, Thailand and China have a smaller amount of costs ($\ln YC_1$) compared to Laos which serves as a base line in the five regression models. Governance indicators on Government Effectiveness (**GE**) and Control of Corruption (**CC**) scored positive impacts of -0.528 and 0.197 respectively on costs of starting a business (YC_1) across ASEAN+3 countries. However, the remaining governance indicators such as **VA**; **PV**; **RQ**; and **RL** do exert negative impacts on the Costs of Starting a Business (YC_1).

Table 3. Results of natural logarithm linear regression models

Independent Predictors	Natural Logarithm Regression Unstandardized Beta Coefficients				
	$\ln YC_1$	$\ln YC_2$	$\ln YC_3$	$\ln YC_4$	$\ln YT_5$
Constant	5.267**	2.762**	6.783**	7.914**	3.515**
BRN ⁺	0.669*	-0.370	6.15**	6.214**	0.239**
KHM ⁺	3.022**	1.389**	6.304**	6.156**	1.173**

IND ⁺	1.667**	2.386**	5.587**	5.653**	1.504**
MAS ⁺	1.175**	1.33**	5.805**	5.838**	-0.103*
PHL ⁺	0.818*	1.782**	6.185**	6.533**	-0.183*
SGP ⁺	-1.681**	1.273**	5.859**	5.761**	-0.320**
THAI ⁺	-0.104	1.65**	5.628**	4.711**	-0.705**
VNM ⁺	0.632*	-0.356*	5.481**	5.766**	-0.034
CHN ⁺	-0.533*	1.506**	6.077**	6.60**	-1.033**
JPN ⁺	0.871*	1.63**	6.143**	6.076**	0.051
KOR ⁺	1.409**	1.765**	6.197**	6.146**	-1.065**
Ln (VA)	-0.235*	0.101	0.235	0.52	-0.007
Ln (PV)	-0.277*	0.15	-0.379*	-0.19	0.008
Ln (GE)	0.528	-0.949*	-2.617**	-3.454*	0.055
Ln (RQ)	-0.391	-0.946*	-1.417**	-1.609*	-0.003
Ln (RL)	-0.739	1.069*	1.213*	1.139	-0.064
Ln (CC)	0.197	-0.049	1.584**	2.031**	-0.016
Adjusted R Square	0.912	0.827	0.917	0.728	0.991
Durbin-Watson	0.817	1.329	1.935	1.421	0.819

The sign + indicates countries are set to be dummy variables

The asterisks (*) indicates statistical significance $\alpha = 0.05$; ** $\alpha = 0.01$

Concerning the Costs of Property Registration ($\text{Ln } YC_2$), such countries as Brunei, Laos, and Vietnam, with negative beta coefficients, indicate a lower level than Lao's baseline of 2.762 while Cambodia, Indonesia, Malaysia, the Philippines; Singapore; Thailand and China have a higher degree of property registration costs than that of Lao. Governance indicators on Government Effectiveness (GE); the Regulatory Quality (RQ) and Control of Corruption (CC) have negative impacts (0.949; -0.946; and -0.049 respectively) on the costs related to property registration ($\text{Ln } YC^2$) across ASEAN+3. As opposed to these figures, the rest of the governance

measures such as Political stability and no Violence (**PV**) and the Rule of Law (**RL**) exert greater negative impacts of -0.15 and -0.049 on the Cost of Property Registration ($\text{Ln } YC_2$).

Exporting as well as importing activities and their related costs are also major concerns for business start-up which serves as an indication to hinder the entrepreneurship development. Entrepreneurs in Brunei, Cambodia, China, Philippines tend to incur much larger costs of export and import than those of Laos. The regression models show that beta coefficients are 6.783 and 7.914 respectively for the Cost of Import and Cost of Export as far as Laos is concerned. Yet, the rest of ASEAN+3 have much larger cost of import and cost of export. Concerning the governance indicators in the regression models in which the Cost of export ($\text{Ln } YC_3$) and cost of import ($\text{Ln } YC_4$) are the dependent variables. Such independent predictors as Voice and Accountability (**VA**); Rule of Law (**RL**); and Control of Corruption (**CC**) are included in the regression models. These independent variables have a positive impact on both Cost of Export ($\text{Ln } YC_3$) and Cost of Import ($\text{Ln } YC_4$) by respective coefficients of 0.235; 1.213; and 1.584 in ($\text{Ln } YC_3$) model, and respective coefficients of 0.52; 1.139 and 2.031 in the model ($\text{Ln } YC_4$). As opposed to this, the remaining independent predictors such as Political Stability (**PV**); Government Effectiveness (**GE**); and Regulatory Quality (**RQ**) exert a negative impact on both dependent variables: Costs of Export ($\text{Ln } YC_3$) and Costs of Import ($\text{Ln } YC_4$) with respective coefficients of -0.379 and -2.617; and -1.417 in the model ($\text{Ln } YC_3$) and --0.19; and -3.453 and -1.609; in the model ($\text{Ln } YC_4$).

The last issue which is related to the entrepreneurship development is concerned with the time necessary for contract enforcement as described in World Bank data. As compared to the other remaining independent variables, contract enforcement time seemed to be exposed to the negative impact by six governance indicators to a lesser degree. In the regression model China

and Thailand all have smaller impacts on the contract-enforcing time $\mathbf{Ln (YT_5)}$ as compared to Lao's benchmark by respective beta coefficients of -0.72; -0.38; and -0.01. In addition, the remaining ASEAN countries such as Malaysia; the Philippines; Singapore; Thailand and Vietnam have lower degrees of impact on the contract-enforcing time $\mathbf{Ln (YT_5)}$ than that of Laos by respective margins of 0.103; ; 1.83; 0.32; 0.705; and 0.034,. Across ASEAN+3 countries, the following governance indicators all have negative impacts on the contract-enforcing time ($\mathbf{LnYT_5}$): Voice and Accountability ($\mathbf{Ln VA}$); Regulatory Quality ($\mathbf{Ln RQ}$); Rule of Law ($\mathbf{Ln RL}$); and Control of Corruption ($\mathbf{Ln CC}$) to respective degree of -0.007; -0.003; -0.064; and -0.016. This indicates a positive signal that ASEAN+3 countries are trying to achieve in order to improve the governance performance in the region. However, Political Stability ($\mathbf{Ln PV}$) and Government Effectiveness ($\mathbf{Ln GE}$) show that they still have a lot to do in an attempt to improve their business environment for entrepreneurship development in general, and make business contracts enforceable for entrepreneurs in particular.

V. Discussion and Policy Implications

The testing shows that hypotheses of from 1 to 5 were partially supported while the hypothesis #6 was confirmed. The findings of this research lend meaningful implications to better understand the governance constraints in terms of barriers to entrepreneurship (i.e. business start-up cost; property registration expenses; export-import costs and time for contract enforcement) that entrepreneurs are supposed to overcome. Resulting impacts from those dimensions of governance on the constraints for entrepreneurs varies across ASEAN+3 countries. This is because governance performance within the region is quite diverse and non-importable across borders as remarked by Xavier et al (2015) and Bower (2011).

Positive impacts of Government Effectiveness and Control of Corruption on the business startup cost imply that ASEAN+3 countries are faced with a daunting task in order to ease this constraint to doing business better. This study's results have somewhat contradicted with what Huynh et al (2008) have found. They concluded that that only three of the six measures: Voice and Accountability, Political Stability, and the Rule of Law are significantly correlated with economic growth. Regulatory control, Control of Corruption, and Government Effectiveness were found to be insignificant.

Given the fact that ASEAN's governance performance is lagging behind the other countries with the exception of Japan; South Korea and Singapore (OECD 2015; Lee et al, 2014; Heimann et al, 2014; ADB, 2013), Government Effectiveness (GE) and Control of Corruption (CC) might be the two first-priority issues for ASEAN+3 countries to focus on. There have been anti-corruption campaigns, every now and then, taking place in China, Vietnam and Thailand in an effort to tidy up their governance. Its momentum, however, should be maintained on a continuous and long-term basis in order to reduce the business start-up costs for the private sector in general and the entrepreneurs in particular.

That governance unanimously has negative impacts on costs of export and import implies several practicalities for ASEAN+3 countries. In order to reduce these costs the governance performance in ASEAN+3 should be enhanced in order to create a level-playing field for entrepreneurs. This, however, is a daunting task. On the one hand, ASEAN+3 are crimped by weakness in its three biggest economies. On the other hand, lackluster export markets and moderated investment have weighed on growth in Indonesia, Thailand, and Malaysia (EWC 2014; ADB, 2013). One food-for-thought solution for policy makers is to increase the intra-country trade within the ASEAN block itself as Khorshed (2005) confirmed that this issue is very low and in most cases is

declining overtime. With the exception of Malaysia-Singapore export trade, no other countries in ASEAN have a significant amount of trade with one another even though they have similar patterns of resource endowments in favor for labor-intensive production modes (Deb, 2013; Norbäck et al 2014).

The other recipe for ASEAN+3 countries to effectively deal with the export and import issue is to boost its economic development with the US in the non-existing TPP context. The ASEAN matters to the US because of its potential to become a gateway into the Asian region which is considered as one of the most diverse and rapidly growing regions in the world (Das, 2014; East West Center, 2013). Having a consumer base of more than 600 million with a combined GDP of almost \$2.5 trillion, ASEAN as a single entity is now one of the largest economies in Asia and the world. In this context, the economic cooperation is definitely a key component in the US rebalancing strategy towards Asia (Petri and Plummer 2016). However, courting Washington without hurting Beijing can be a big dilemma for ASEAN countries. Therefore, reaching an economically satisfactory relationship might be time-consuming and unpredictable in the context of abolished Trans-Pacific Partnership deal and Trump's focus on making America great again.

The cost of property registration and time needed for contract enforcement are the last two issues in discussing the governance-entrepreneurship nexus. The governance performance is very much intertwined with this frontline of entrepreneurship development for ASEAN+3 countries in order to protect investors. Statistical evidence, as mentioned above, indicates the more stable the political situation is the lesser degree to which the property registration cost is perceived among entrepreneurs across ASEAN countries, China, Japan and South Korea. Similar remarks can be

made as to why the rule of law plays a critical role in keeping down the time needed for contract enforcement.

Khorshed (2005) while studying the convergence of per capita GDP across ASEAN countries has shown that corruption is severely undermining development objectives in some of the ASEAN countries. It hinders economic growth, reducing efficiency, acting as a disincentive to potential investors, and above all, it diverts critical resources meant for economic growth and poverty alleviation (Friedman 2011). In our research, control of corruption has reached expected goals of reducing the costs of property registration and time needed for enforcing the contract with a negative impact. These are the two main hindrances for entrepreneurship development. However, control of corruption goes against our expectation because of its exertion of positive impacts on Cost of Starting a Business; Costs of Import and Export. This is reflected in our finding that the more Control of Corruption is perceived, the more cost of starting a business and costs of import and export are perceived to be borne by entrepreneurs across ASEAN countries China, Japan and South Korea. More effort should be made by the community of scholars with the aim at creating a level playing field for the private sector as far as governance is concerned (Transparency International, 2009; Friedman Cox and Tribunella, 2010).

VI. Conclusions

Entrepreneurship is important in the ASEAN+3 markets and to its member countries' competitiveness (Friedman, 2011). ASEAN+3 are closing the income gap with advanced economies, but governance in the region has lagged behind its economic achievements (ADB, 2013). Therefore, they should work out the essential elements of governance at specific stages of

their own development. It has been indicated that governance in the 21st century requires the revitalization of the public service which should be geared toward stirring up entrepreneurship development and thus creating sustainable growth in the region (ADB 2013; World Bank 2016). Better public service delivery would assist ASEAN countries in creating a favorable business environment for entrepreneurs to be prosperous, thereby, reducing the costs and time concerned. In essence, this aims to remove the constraints and develop the entrepreneurship in the region.

This paper has found a diverse impact of governance on the constraints for entrepreneurship, thereby contributing a better knowledge to explain the governance-entrepreneurship nexus in ASEAN+3 context. However, intervening variables that underlie the above-mentioned relationship must be identified in more detail, so as to increase entrepreneurship given the lagging governance performance in ASEAN countries and China while South Korea and Japan are the champions of the good governance. The limitation of our research lies in the fact that the level of entrepreneurship development is indirectly measured in terms of costs and time facing the entrepreneurs. Therefore, the generalization of the research results must be taken with due care. Also, Singapore known as one of the best countries in terms of having excellent world governance indicators, has been put into the ASEAN block. This very inclusion has blurred the true picture of entrepreneurship and governance in ASEAN region, On top of this, longitudinal research may be needed to ascertain the impacts of governance on entrepreneurship over time. Future research can also incorporate a more comprehensive array of variables such as determinants of entrepreneurships as often used by Global Entrepreneurship Monitor (GEM).

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