

Effect of Ease of Doing Business to Economic Growth among Selected Countries in Asia

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Abstract - *Economic activity requires a streamlined regulatory environment and effectual policies that are transparent and accessible to all. The study aimed to explain the effect of ease of doing business to economic growth among selected economies in Asia for the year 2014. The study covered 29 economies in East Asia, Southeast Asia, and South Asia. Ease of doing business is determined by the ten Doing Business indicators (DBI) of the World Bank. In the study, Gross Domestic Product (GDP) was used as the proxy variable for economic growth. Descriptive research was the research design used. Multiple regression determined the effect of doing business to economic growth.*

Compared to other economies, Singapore has the best regulatory performance. It achieved the easiest to do business to five indicators, namely, Starting Business, Registering Property, Protecting Investors, Trading Across Borders, and Enforcing Contracts. In addition, China showed the highest economic growth. The study found out that the variations in ease of doing business was explained by dealing with construction permits, getting credit, registering property and trading across borders. Dealing with construction permits and getting credit have negative effect to Gross Domestic Product while registering property and trading across borders have positive effect. Trading across borders greatly affect gross domestic product among selected countries in Asia.

The research proposed inputs to policy which may increase the awareness of local government units of different economies on the simplification of the policies of the different components used in measuring doing business.

Keywords - *Asia, doing business, economic growth, Gross Domestic Product*

INTRODUCTION

Entrepreneurial activity is a support to economic growth. Entrepreneurship is fundamental for the continued enthusiasm of the modern market economy and a higher entry rate of new businesses can cultivate competition and innovation [1]. The entry of new firms into an economy creates jobs that contribute to the development of the private sector and economic growth.

To uphold private sector growth, many economies have aimed of simplifying the business registration process. These efforts have been encouraged by the World Bank, most especially through its Doing Business project. Each year, the Doing Business project tracks reforms in "Starting a Business" (and nine other topics). It also ranks economies on the overall ease of registering a business, based on their rankings on the cost, time, procedures, and minimum capital required to complete the process.

International benchmarking has proved to be a dominant means for mobilizing the public to demand superior public services, enhanced political accountability, and to guide policymakers in the formulation and implementation of better economic policies. In order to encourage improvement and competitiveness, a number of world rankings are being done by different agencies. They evaluate the performance of each economy using identified variables and compare among others.

Different countries participated in the IFC and World Bank's project that measures the ease of doing business in different economies. 'Doing Business' ranking measures business regulations for local firms. The project focuses on small and medium-size companies working in the largest business city of an economy. It aims to persuade economies to continue implementing reforms that boost local firms' ability to do business, with transparency and access to information. The Doing Business Project provides

objective actions of business regulations and their enforcement across different economies and selected cities at the subnational and regional level [2]. SMEs are the focus since they are the key drivers of competition, growth and job creation.

Furthermore, up to 65% of outputs in these economies are formed in the informal sector regularly because of too much bureaucracy and regulation. Informal sector firms lack access to the opportunities and protections that the law provides but even firms operating in the formal sector might not all have equal access to these opportunities and protections [3]. Efficient business regulations are keys for a blooming private sector and are important for overall development. Doing Business provides quantitative measures of regulations for ten indicators such as starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts and resolving insolvency.

By gathering and analyzing comprehensive quantitative data to compare business regulation environments across economies and over time, Doing Business encourages countries to participate towards more efficient regulation; offers quantifiable benchmarks for reform; and serves as a resource for academics, journalists, private sector researchers and others interested in the business climate of each country [2]. As an economy achieves a better performance as compared to others, it will be seen as more attractive for new investors.

Doing business was originally authored by Simeon Djankov. He discussed in his study entitled “The Regulation of Entry” the indicators of Doing Business. As mentioned in the study of Klapper and Love [1], a methodology for measuring the effectiveness of the regulatory framework for firm registration was developed by Djankov, La Porta, Lopez-de-Silanes, & Shleifer [4]. Since 2003, the World Bank’s annual Doing Business report has used this methodology to quantify the registration process in over 170 countries in its “Ease of Starting a Business” section. The choice of indicators for Doing Business has been guided by economic research and firm-level data. Leading academics joined forces in the development of the indicators, ensuring academic rigor. Eight of the background papers underlying the indicators have been

published in leading economic journals. Other indicators were added later such as Registering Property, Dealing with Licenses (later named to Dealing with Construction Permits), Paying Taxes, Trading Across Borders and Protecting Investors. The choice of indicators added was informed by enterprise surveys conducted in more than 100 countries which ask firms to rate what they consider the biggest obstacles to their business activity.

A mounting body of academic research tells that particular areas of business regulation are associated with critical social and economic outcomes including firm creation and productivity. Economies that have efficient business registration be likely to have a higher entry rate by new firms.

Good governance is predominantly essential for businesses. Transactions costs are lower when regulations are simple, transparent and predictable. Entrepreneurs do not have to waste valuable resources on red tape, thus, enabling anyone to do business without having to resort to connections or informal payments.

Asia is the fastest growing economic region and the largest continental economy by GDP PPP in the world. Meanwhile, China is the largest economy in Asia and the second largest economy worldwide. According to IMF, as mentioned in Global Economy [5], Asian economies will direct world growth in 2015 despite China slowdown.

The research aimed to determine the economically meaningful relationship between distance to frontier in doing business and economic growth.

Doing Business focuses on the regulatory environment for small and medium-size enterprises. These enterprises are key drivers of competition, growth and job creation, mostly in developing economies. Doing business is concerned on regulations significant to the life cycle of a small to medium-sized domestic business in the most populous city of an economy. The methodology for calculating each indicator is transparent, objective and easily replicable.

OBJECTIVES OF THE STUDY

Generally, the study aims to determine the effect of Ease of Doing Business to Economic Growth among selected countries in Asia in the year 2014.

Specifically, this aims to describe the status of the indicators of Doing Business among selected countries in Asia; to know the level of economic growth among selected countries in Asia; to determine the effect of Ease of Doing Business to Economic Growth and to verify which among the indicators of Ease of Doing business greatly affect the economic growth

MATERIALS AND METHODS

This includes the research design, data gathering procedures, data analysis and assumptions of the study.

Research Design

This study was conducted to determine the effect of ease of doing business to economic growth.

This study used the descriptive method. According to Calmorin [6], descriptive method focuses at the present situation (what is). The purpose is to find truth. Descriptive method describes and interprets what is concerned with conditions and relationships that exist, opinions that are held, processes that are going on, effects that are evident or trends that are developing. It is primarily concerned with the present, although it often considers past events and influences as they relate to current conditions [7]. This was used to know if doing business affects economic growth among selected countries in Asia.

Data Gathering Procedure

The researchers chose first the variables needed in the study wherein the indicators of Doing Business being utilized by World Bank include starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts, and resolving insolvency. Likewise, Gross Domestic Product (GDP) among selected countries in Asia was considered. Data for Ease of Doing Business were obtained from World Bank while data for economic growth were obtained from Trading Economics. Ease of Doing Business indicators used data on distance to frontier. An economy's distance to frontier score is indicated on a scale from 0 to 100, where 0 represents the lowest performance and 100 the frontier. Gross Domestic Product of each economy is measured in terms of billion US dollars. The study used secondary data and obtained them from the online access of the

mentioned offices. Other information was obtained from government and non-government offices.

The researchers used E-views program to regress data and for statistical interpretation.

Data Analysis

The data was gathered and treated statistically using the following tools.

The study presented the status of the indicators of Ease of Doing Business and GDP. Ease of doing business can use two aggregate measures: the ease of doing business ranking and the distance to frontier score. The ease of doing business ranking compares economies with one another while the distance to frontier score benchmarks economies with respect to regulatory best practice, showing the absolute distance to the best performance on each Doing Business indicator. The proxy variable for economic growth was Gross Domestic Product. Gross Domestic Product is the market value of all final goods and services produced within an economy in a given period of time. It is a single statistic for capturing how well the economy is performing [8]. The study used multiple regressions to show the effect of Ease of Doing Business to Economic Growth. Also, backward step-wise regression was used. In addition, the study test the validity of the model using normality test, autocorrelation, multicollinearity and heteroskedasticity, structure and stability.

The econometric model used in this part of the study was:

Econometric Model

$$GDP = \alpha + \beta_1 SB + \beta_2 DCP + \beta_3 GE + \beta_4 RP + \beta_5 GC + \beta_6 PI + \beta_7 PT + \beta_8 TAB + \beta_9 EC + \beta_9 RI + \varepsilon$$

Whereas:

GDP = Gross Domestic Product

α = slope

β = regression coefficient

SB = Starting a Business

DCP = Dealing with Construction Permits

GE = Getting Electricity

RP = Registering Property

GC = Getting Credit

PI = Protecting Investors

PT = Paying Taxes

TAB = Trading Across Borders

EC = Enforcing Contracts

RI = Resolving Insolvency

ε = Error (other factor affecting doing business).

Assumptions of the Study

The study assumed that the secondary variables gathered are valid and reliable for statistical treatment and analysis. The use of E-views in regression helps justified its reliability. The model is under the *ceteris paribus* assumption or holding other variables constant.

RESULTS AND DISCUSSION

Status of Ease of Doing Business indicators among selected countries in Asia

This part of the study presented the Ease of Doing Business indicators among selected countries in Asia. The indicators were in terms of distance to frontier. It allows seeing the gap between a particular economy's performance and the best performance at any point in time. A scale of 100 represents the frontier.

Indicators of ease of doing business among selected countries in South Asia, Southeast Asia and East Asia were used. Compared to other economies, the best regulatory performance in terms of Starting a Business was Singapore (96.48); Hong Kong (95.03) in terms of Dealing with Construction Permits; Taiwan (93.38) in terms of Getting Electricity; Singapore (84.8) in terms of Registering Property; Cambodia (80) in terms of Getting Credit; Singapore (80) in terms of Protecting Investors; Hong Kong (98.51) in terms of Paying Taxes; Singapore (96.76) in terms of Trading Across Borders; Singapore (89.54) in terms of Enforcing Contracts; and Taiwan (78.42) in terms of Resolving Insolvency.

Singapore has placed its innovation landscape globally as a favorable entrepreneurial ecosystem. Ranked first in the list of 'Most Innovative Cities in Asia Pacific', as mentioned in the study by Solidiance [9], Singapore outperforms others in the region by its global integration, government and regulatory system [10]. Also, Singapore is often ranked as one of the easiest countries in the world in which to do business. There are rules but they are visibly laid out and easy to track [11].

Economic Growth among Selected Countries in Asia

Economic growth among selected countries in South Asia, Southeast Asia and East Asia is expressed in terms of billions of US dollars of their Gross Domestic Product. The economy with the highest level of GDP was China with 9,240.27USD. Next,

was India (1,876 billion USD) and third was Indonesia (868.35 billion USD). The economy which produced the lowest GDP was Maldives with 2.3 billion USD.

The Chinese economy experienced surprising growth in the last few decades that placed the country to become the world's second largest economy. Since the introduction of the economic reforms in 1978, China has become the world's manufacturing center, where the secondary sector (comprising industry and construction) represented the largest share of GDP [12]. In spite of its slowdown, mainland China is still a main driver of global GDP expansion, accounting for a larger share of world economic growth than the rest of Asia combined, the IMF said, as mentioned in Global Economy of 2015[5].

To determine the effect of Ease of Doing Business to economic growth

The study used multiple regression analysis in which the econometric model was derived. The regression model was tested for normality test, multicollinearity, heteroskedasticity, autocorrelation, structural test and stability test. This was done to ensure that any interface from the result was valid.

Analyzing the distribution of errors, the researcher included the probability of the Jarque- Bera. This gives the p-value of 0.511713 which is greater than the level of significance of 0.05. Therefore, the study deemed that the errors are normally distributed.

Another test prepared by the researcher is the presence of multicollinearity in the model using correlation matrix. To verify if autocorrelation exists, the study used the Breush-Godfrey Serial Correlation LM Test. Obtaining the probability value of the f-stat of 0.8951 which is greater than 5 percent significant level; the null hypothesis of no autocorrelation is accepted.

Additionally, the study tested the occurrence of Heteroskedasticity. It used White Heteroskedasticity Test (no cross term). Since the probability value of F-statistics is 0.6088 which is greater than 5 percent level of significance indicates that there is no heteroskedasticity in the model.

Lastly, the study tested the model specification of error. It applied the Ramsey-reset Test to conclude whether the findings can be used for policy making when the p-value of F-statistics is greater than 0.05. Looking at the result of Ramsey Reset test, p-value of F-stat, the model has 0.064454 which is greater than

0.05. This means that the error does not exist and can be used for policy making.

Table 1 shows the regression result for the effect of the indicators of Ease of Doing Business to Economic Growth.

Table 1. Effect of the Indicators of Ease of Doing Business to Economic Growth Among Selected Countries in Asia

Variable	Coefficient	Std. Error	t-Statistic	Prob.	VI
C	14.98622	5.457880	2.745795	0.0252	HS
LOGDCP	-5.382884	1.666560	-3.229937	0.0121	HS
LOGEC	0.212081	2.034203	0.104257	0.9195	NS
GC	-0.077560	0.028136	-2.756647	0.0248	HS
GE	-0.047340	0.028271	-1.674511	0.1326	NS
PI	0.022491	0.047340	0.475101	0.6474	NS
PT	-0.002598	0.027759	-0.093587	0.9277	NS
RI	0.005374	0.043714	0.122939	0.9052	NS
RP	0.098926	0.041690	2.372891	0.0450	HS
SB	0.029705	0.035446	0.838053	0.4263	NS
TAB	0.123473	0.028751	4.294638	0.0026	HS
R-squared	0.832036				
Adjusted R-squared	0.622081				
S.E. of regression	1.218903				
F-statistic	3.962922				
Prob(F-statistic)	0.031474				

Legend:

- LOGGDP - Gross Domestic Product
- C - Constant
- LOGDCP - Dealing with Construction Permits
- LOGEC - Enforcing Contracts
- GC - Getting Credit
- GE - Getting Electricity
- PI - Protecting Minority Investors
- PT - Paying Taxes
- RI - Resolving Insolvency
- RP - Registering Property
- SB - Starting a Business
- TAB - Trading Across Borders
- HS - Highly Significant
- NS - Not Significant

As shown from the table, the p-value of the F-Statistics is 0.031474 which is less than the level of significance of 0.05. This signifies that the whole model is significant and Ease of Doing Business has significant effect to Economic Growth. As to standard error, the lower the standard error of the regression,

the higher is its precision. The standard error of the model is 1.218903 which is closer to zero (0) which indicates that model is more precise.

Moreover, the R-squared value of 0.832036 means that the model is moderately good fit since it is greater than 0.50. This also indicates that 83 percent of the total variation in the economic growth can be explained by the changes in the indicators of ease of Doing Business specifically dealing with construction permits, getting credit, registering property and trading across borders.

Using the coefficient of the variables, the research came up with the econometric model which is:

$$\text{LOGGDP} = 14.98622 - 5.382884\text{LOGDCP} - 0.077560\text{GC} + 0.098926\text{RP} + 0.123473\text{TAB} + 1.218903$$

Referring on the constant, there is a p-value of 0.0252 which is less than 5 percent level of significance, thus the constant or the intercept is highly significant. The coefficient of the intercept is 14.98622. This signifies that if the distance to frontier of doing business indicators such as dealing with construction permits, getting credit, registering property and trading across borders is equal to zero, the value of the Gross Domestic Product is 14.98622 billion US dollars.

Taking a closer look at the specific indicator of the ease of doing business, dealing with construction permits has a p-value of 0.0121 which is less than 0.05 level of significance. This implies that dealing with construction permits has significant effect to gross domestic product. Considering its coefficient, dealing with construction permits has -5.382884 which implies that in every 10 percent increase in the dealing with construction permits among selected countries in Asia, there is corresponding decrease of 5.382884 billion US dollars in gross domestic product. Hence, the researchers concluded that dealing with construction permits has negative effect to gross domestic product.

In terms of getting credit, it has a p-value of 0.0248 which is less than the level of significance of five (5) percent. Therefore, the study rejected the null, meaning there is significant relationship between getting credit and gross domestic product. To determine the effect of getting credit to gross domestic product, the study relied to its coefficient which is -0.077560. This signifies that getting credit has

negative effect to gross domestic product. This also connotes that in every one percent increase in getting credit, there is corresponding 0.077560 billion US dollar decrease in gross domestic product.

For registering property, it has a p-value of 0.0450 which is less than the level of significance of five (5) percent. Hence, the study rejected the null, meaning there is significant relationship between registering property and gross domestic product. To determine the effect of registering property to gross domestic product, the study relied to its coefficient which is 0.098926. This explains that registering property has positive effect to gross domestic product. This also connotes that in every one percent increase in registering property, there is corresponding 0.098926 billion US dollar increase in gross domestic product.

Trading across borders has a p-value of 0.0026 which is less than 0.05 level of significance. This implies that trading across borders has significant effect to gross domestic product. Considering its coefficient, trading across borders has 0.123473 which implies that in every 10 percent increase in the trading across borders among selected countries in Asia, there is corresponding increase of 0.123473 billion US dollars in gross domestic product. Hence, the researchers concluded that trading across borders has positive effect to gross domestic product.

On the other hand, other indicators of doing business such as enforcing contracts, getting electricity, protecting investors, paying taxes, resolving insolvency, and starting a business have p-values which are greater than 0.05 level of significance. This indicated that the aforementioned indicators have no significant effect to gross domestic product. This implies that even if it is easy to do business under these indicators, it has nothing to do with gross domestic product if it is just based on the covered year.

Indicators of Ease of Doing Business which greatly affect Gross Domestic Product

To attain this objective, the study used backward step-wise regression. Table 2 presents the result of backward step-wise regression. Based on the table, trading across borders signify most based on its probability of t-statistics. Given that the p-value of trading across borders is 0.0479 which is less than 0.05 level of significance, therefore trading across borders significantly affect Gross Domestic Product.

Table 2. Indicator of Ease of Doing Business that Greatly affects Gross Domestic Product

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.236722	1.781239	0.694304	0.4969
TAB	0.051631	0.024222	2.131586	0.0479

CONCLUSION AND RECOMMENDATION

Based from the results drawn, Singapore has the easiest to do business and has the best regulatory performance in doing business among selected economies in Asia. Also, China produces the highest level of Gross Domestic Product. Ease of Doing Business has significant effect to Economic Growth. Eighty-three percent of the total variation in the economic growth can be explained by the changes in the indicators of ease of Doing Business specifically dealing with construction permits, getting credit, registering property and trading across borders. When distance to frontier of doing business indicators such as dealing with construction permits, getting credit, registering property and trading across borders is equal to zero, the value of the Gross Domestic Product is 14.98622 billion US dollars. Dealing with construction permits and getting credit have negative effect to Gross Domestic Product while registering property and trading across borders have positive effect. In addition, trading across borders greatly affect gross domestic product among selected countries in Asia.

Based on the conclusions drawn, the research proposed inputs to policy which may increase the awareness of local government units of different economies on the simplification of the policies of the different indicators used in measuring doing business.

For recommendation, another study may be conducted to cover all countries in Asia and other parts of the world, as the present study covered only South, East and Southeast Asia. Other studies may use the ranking of countries as variable for each indicator of Doing Business as the current study utilized distance to frontier value. Other measure of economic growth other than GDP can also be used. Also, a further investigation related to doing business and economic growth can be done covering a different time duration.

REFERENCES

- [1] Klapper, L., & Love, I. (2010). The Impact of Business Environment Reforms on New Firm

- Registration. *World Bank Policy Research Working Paper Series Number 5493* .
- [2] *About Us: Doing Business*. (2014). Retrieved March 8, 2014, from Doing Business Web site: <http://www.doingbusiness.org>
- [3] *About doing business: measuring for impact*. (2014). The World Bank.
- [4] Djankov, S., La Porta, R., Lopez-de-Silanes, F., Shleifer, A. (2000). The Regulation of Entry. *National Bureau of Economic Research Global Economy*. (2015, May 7). *South China Morning Post* .
- [6] Calmorin, L. P. (2010). *Research and Statistics with Computer*. Mandaluyong City: National Bookstore.
- [7] Research in Education, (2003). In J. W. Best, & J. V. Kahn, *Research in Education*. Prentice Hall.
- [8] Mankiw, G. (2010). *Macroeconomics, 7th ed*. Worth Publisher.
- [9] Rosenberg, M., Polland, J. The 16 Most Innovative Cities in Asia. (2013, April 19). *Business Insider*.
- [10] Tan, C. S. (2015, March). *Start-up Ecosystem in Singapore*. Retrieved June 30, 2015, from Netherlands Enterprise Agency: <http://www.rvo.nl>
- [11] Scott, A. (2015, February 25). How Singapore Became an Entrepreneurial Hub. *Harvard Business Review* .
- [12] *China Economic Outlook: Focus Economics*. (2015, June 23). Retrieved June 30, 2015, from Focus Economics: www.focus-economics.com

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