

# EVALUATING THE RELATIONSHIP BETWEEN GOVERNMENT POLICIES AND ENTREPRENEURSHIP PROMOTION IN DEVELOPING AND DEVELOPED ECONOMIES

**Dr. Niyungeko Antoine**

Department of Business Administration,  
Horizons University, Paris, France.  
E-mail: niyungantoine@yahoo.fr

## Abstract

*Policies developed by government can stimulate or discourage entrepreneurial intention to start a business activity. Entrepreneurial policies effect on entrepreneurial activity are not neutral. Entrepreneurship tends to increase where business environment is favorable. The primary objective of this study was to investigate the relationship between government policies and entrepreneurship promotion in developing and developed economies. Specifically, the paper examines the correlation between starting business formalities and easy business doing (EBD) and gross national income per capita (GNIC) in developing and developed economies. The correlation analysis was performed on 192 countries on one hand. On the other hand, countries were divided in low middle-income (LMI), upper middle-income (UMI), and high-income (HI) economies to test whether the strength and the direction of the correlation remains the same in those groups. Starting business formalities was measured by cost of business start-up procedures (CBSP), and start-up procedures to register a business (SPRB), and time to register a new business (TR). The study also investigated the relationship between EBD and gross national income (GNI). Pearson, and Spearman correlation were performed to evaluate the strength and the direction of correlation. The results show a very strong, and negative correlation between EBD and CBSP, SPRB, TR. A strong and positive correlation between EBD and GNI is identified. The strength of the correlation reduces in low middle-income, and upper middle-income economies. All countries should reduce CBSP, SPRB, and TR as they are negatively related to easy doing business.*

**Keywords:** Entrepreneurship, Business, formalities, business register.

## INTRODUCTION

Entrepreneurial policies developed by government stimulate or discourage entrepreneurial intention to start a business activity. Prior studies have identified the relationship government policies between entrepreneurial activity. Based on the phases of a business, some policies were found more favorable than others, Akinyemi and Adejumo (2018). Legislation had positive influences on opportunity to startup as indicated by Davari and Farokhmanesh (2017). Government regulations for entrepreneurship were found to have a positive moderating effect between business start-up and entrepreneurship development Li, Ahmed, Qalati, Khan and Naz (2020). Nevertheless, prior literature supported the fact that entrepreneurship can contribute positively to economic growth (González, Portillo, and Casero, 2020). Entrepreneurship is seen as essential drivers of the economic growth because its lead to the development of new jobs, to new opportunities for employment, to the emergence of new technologies, but also to the stimulation of competition and productivity Stoica, Roman and Rusu (2020). Entrepreneurship contributes to job creation and the improvement of the living conditions of people in various societies (Ndofirepi 2020). Prior studies have focused on the determinant of entrepreneurial intention (Ojiaku, Nkamnebe, Nwaizugbo, 2018; Mirjana, Ana and Marjana, 2018; Darren, 2017). Defining procedures of starting a company including time and money required to opened a new company is the government responsibility. However, the relationship between all these procedures and easy doing business did not get much attention. Nevertheless, higher company start-up costs reduce aspiring entrepreneurs from setting up businesses and deciding to become workers as an alternative, thus constraining job growth, and increasing the number of people struggling for a job (World Bank, 2020).

However, the report of the W.B. did not indicate how cost, procedures, and time of starting business affect easy doing business. Moreover, the report did not test the strength, and the direction of the relationship between cost, procedures, and time of starting business and easy doing business, and gross national income per capita. The report did not indicate whether the relationship between those variable holds true no matter the stage of the development of a country. The primary question of this study is what is the relationship between government policies and entrepreneurship promotion in developing and developed Economies?

The research questions for this study are as following:

- ✓ What is the correlation between easy doing business and gross national income per capita?
- ✓ What is the correlation between easy doing business and cost of business start-up procedures?
- ✓ What is the correlation between easy doing business and start-up procedures to register a business?

- ✓ What is the correlation between easy doing business and time to register a new business (TR)?
- ✓ Does the strength and the direction of the correlation depend on the stage of development of an economy?

The purpose of this study. The general objective of this study is to analyze the correlation between starting business formalities and easy business doing and gross national income per capita in developing and developed economies. Specifically, the study analyzes: 1) the correlation between easy doing business and gross national income per capita; 2) the correlation between easy doing business and cost of business start-up procedures; 3) the correlation between easy doing business and time to register a new business (TR); 4) the previous relationship in upper middle-income, middle-income, and high-income economies.

## MATERIAL

Secondary data were collected on the World Bank official web site (<https://data.worldbank.org/indicator>) to answer the research questions. Annual data 2019 collected are related to easy business doing (EBD), gross national income per capita (GNIC), cost of business start-up procedures (CBSP), start-up procedures to register a business (SPRB), and time to register a new business (TR). The study also investigated the relationship between EBD and gross national income (GNI). The number of countries analysed were 192. To analyse whether the results remain the same for all economies, countries were divided in low middle-income, upper middle-income, and high-income economies. Lower-middle-income (LMI) economies are made by countries in which 2010 GNI per capita was between \$1,006 and \$3,975. Upper-middle-income (UMI) economies are made by countries in which 2010 GNI per capita was between \$3,976 and \$12,275. High-income (HI) are made by countries in which 2010 GNI per capita was \$12,276 or more (World Bank, 2020). The number of LMI countries was 33, UMI 50, and HI 109. To depict the relationship between variables, Pearson and Spearman correlation analysis were performed. According to Todd and Karen (2007) parametric tests are used when data are normally distributed, with equal variance and same standard deviation. Finally, data must be continuous. The correlation was first performed with 192 observations. Correlation was also performed by group (MLI, UMI, and HI).

## VARIABLE DEFINITION

*Government policies* are measured by business start-up procedures, cost of business start-up procedures, business start-up procedures, and time required to start a business for female. *Entrepreneurship Promotion* is measured by easy business doing. *Start-up procedures* denotes all procedures required to start a company, including interactions in order to obtain the requisite licenses and permits and to complete all registrations, verifications and start-up business activities. *GNI per capita* measures in current international \$ refers to the amount of value added by all resident producers plus all taxes on goods (less subsidies) that are not included in the production valuation plus net primary income receipts (employee wages and property income) from abroad. *Cost of business start-up* procedures as percentage of GNI per capita is normalized expenses of registering a new company. *Time required to start a business* denotes the number of calendar days needed to complete the procedures to legally operate a business. *Ease of doing business* score as the performance is close to zero it means lowest performance, but when it is near 100 it indicates best performance. The score indicates how away an economy is from the frontier constructed from the best performances across all economies and across time. The distance from the frontier score shows an economy's distance from the frontier, which represents the best performance observed in all economies and years since 2005 on each Doing Business subject. The ease of doing business score shows an economy's absolute position relative to the best regulatory performance. Moreover, higher company start-up costs reduce aspiring entrepreneurs from setting up businesses and deciding to become workers as an alternative, thus restricting job growth and increasing the number of people vying for a job (World Bank, 2020).

## RESULT

Before presenting the results of correlation analysis, descriptive statistics are presented in Table 1. They provide an overview of the variables under study. According to measuring descriptive statistics is a crucial first step and should often occur before making inferential statistical as they provide the foundation for comparing variables with inferential statistical tests (Kaur, Stoltzfus & Yellapu, 2018). The result of the pairwise correlation will then be presented.

**Table 1 : Descriptive Statistics**

	GNIC	EBD	CBSP	TR	SPRB
Valid	192	192	192	192	192
Mean	21566.533	64.376	17.155	17.351	6.531
Median	14530.000	63.760	7.950	12.000	6.308
Std. Deviation	20468.346	12.502	25.871	18.954	2.620
Skewness	1.263	-0.300	3.464	4.205	0.535
Minimum	1060	32.686	0.000	0.500	1.000

**Table 1 : Descriptive Statistics**

	GNIC	EBD	CBSP	TR	SPRB
Maximum	94170	86.765	179.700	173	16

Source: Extrapolated from World Bank data 2019.

The Table 2 presents the results of pairwise correlation between the analysed variables with 192 countries. As it can be seen on the Table 2, there is a negative and statistically significant correlation between EBD and CBSP; EBD and TR, EBD and SPRB. However, there is a positive and significant correlation between EBD and GNIC.

**Table 2 : Correlation Analysis**

		Pearson		Spearman			
		R	p	rho	p		
EBD	- CBSP	-0.575	***	<.001	-0.719	***	<.001
EBD	- TR	-0.390	***	<.001	-0.517	***	<.001
EBD	- SPRB	-0.478	***	<.001	-0.483	***	<.001
EBD	- GNIC	0.688	***	<.001	0.756	***	<.001

\* p < .05, \*\* p < .01, \*\*\* p < .001

Source: Extrapolated from World Bank data 2019.

The Table 3 presents the results of the correlation analysis in 33 low middle-income economies. The results show that there is a negative and statistically significant relationship between EBD and CBSP. However, the relationship between EBD and TR is negative, but not statistically very significant. EBD and SPRB are negatively correlated, but the correlation is weak. EBD and GNIC are positively correlated. But, the correlation is not statistically significant.

**Table 3: Correlation Analysis in LMI**

		Pearson		Spearman			
		r	p	rho	p		
EBD	- CBSP	-0.483	**	0.004	-0.361	*	0.040
EBD	- TR	-0.368	*	0.035	-0.230		0.199
EBD	- SPRB	-0.199		0.268	-0.153		0.396
EBD	- GNIC	0.330		0.061	0.313		0.076

\* p < .05, \*\* p < .01, \*\*\* p < .001

Source: Extrapolated from World Bank data 2019.

The Table 4 shows the correlation results among the analyzed variables in 50 upper middle-income. Pearson correlation indicates a negative insignificant relationship between EBD and CBSP, EBD and TR, and EBD and SPRB. A positive correlation was found between EBD and GNIC. The Spearman correlation analysis indicates a weak negative correlation between EBD and CBSP, EBD and TR, and EBD and SPRB.

**Table 4: Correlation Analysis in UMI**

		Pearson		Spearman			
		r	p	rho	P		
EBD	- CBSP	-0.249		0.082	-0.354	*	0.012
EBD	- TR	-0.262		0.067	-0.355	*	0.011
EBD	- SPRB	-0.276		0.053	-0.279	*	0.050
EBD	- GNIC	0.341	*	0.015	0.354	*	0.012

\* p < .05, \*\* p < .01, \*\*\* p < .001

Source: Extrapolated from World Bank data 2019.

The Table 5 presents the results of the correlation analysis in 109 HI economies. A very strong and negative correlation was found between EBD and CBSP, EBD and TR, and EBD and SPRB. However, a very strong and positive correlation was found between EBD and GNIC.

**Table Correlation Analysis in HI**

		Pearson	Spearman
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	r	p	rho	p
EBD - CBSP	-0.619	*** < .001	-0.646	*** < .001
EBD - TR	-0.491	*** < .001	-0.592	*** < .001
EBD - SPRB	-0.609	*** < .001	-0.605	*** < .001
EBD - GNIC	0.566	*** < .001	0.630	*** < .001

\* p < .05, \*\* p < .01, \*\*\* p < .001

Source: Extrapolated from World Bank data 2019.

## RESULTS DISCUSSION

This study tends to answer the following research questions. The main research question is related to finding the relationship between government policies and entrepreneurship promotion in developing and developed economies. Specifically, the study identified the correlation between easy doing business and gross national income per capita; the correlation between easy doing business and cost of business start-up procedures; the correlation between easy doing business and time to register a new business; the correlation between easy doing business and start-up procedures to register a business; and analysed whether the strength and the direction of the correlation is influenced by the stage of development of an economy.

Regarding the correlation between easy doing business and gross national income per capita, the correlation coefficient was very statistically significant and positive when the correlation analysis is performed on the 192 countries and high-income economies. The Pearson correlation coefficients were respectively 0.688 and 0.566. All these coefficients were significant at .001. But the strength of the correlation reduces when the stage of the economy is considered. The Pearson correlation coefficients are 0.330 in LMI and 0.341 in UMI economies. The correlation coefficient was significant at 061 in LMI and 015 in UMI. The median of EBD for 192 countries is 63.760, 73.41584 in HI, 59.63315 in the UMI, and 51.40019 in LMI. The higher the easy business position, greater is the correlation between easy doing business and gross national income per capita. These finds are consistent with the World Bank (2020) hypothesis. Economies with high score in doing business will have higher levels of entrepreneurial activity. By increasing entrepreneurship, it will generate better employment opportunities, higher government tax revenues, and improved personal incomes. Finally, the World Bank concluded there is a positive relationship between greater ease of doing business, and higher levels of entrepreneurship.

Concerning the correlation between easy doing business and cost of business start-up procedures, when countries are considered together, there is a negative and significant correlation. The correlation was found significant and negative in LMI and HI economies also. Pearson correlation coefficient is -0.575 for all countries. This correlation is significant at .001. The correlation is -0.483 significant at .01 in LMI. The Pearson correlation is -0.619 and statistically very significant at .001 in HI. The coefficient is -0.249 and not statistically significant in UMI. The median cost for business start-up procedures is 7.950 for 192 countries, four in HI, 13.15 in UMI, and 34 in LMI.

Relating to the correlation between easy doing business and time to register a new business. A very strong and negative correlation was found in general with 192 countries and in high-income economies. The Pearson correlation coefficients were -0.39 in 192 countries, -0.368 in LMI, -0.491 in HI, and -0.262 in UMI. The correlation was not significant in UMI. The significance level was .001 in 192 countries, .035 in LMI, .001 in HI, and .067 in UMI economies. The median time for registering a new business for all countries is 12, 10.5 in HI, 16.25 in UMI, and 15 in LMI.

Finally, the correlation between easy doing business and start-up procedures to register a business was analysed. The Pearson correlation coefficients were -0.478 in 192 countries, significant at .001; -0.199 in LMI, significant at .268; -0.276 in UMI, significant at .053; and -0.609 in HI significant at .001. The Spearman correlation coefficient shows that in UMI the negative correlation is significant. The median time for registering a new business for all countries is 6.308, 6 in HI, 7.125 in UMI, and 7 in LMI.

## CONCLUSION

This study analysed the correlation between easy doing business and gross national income per capita using 192 countries. The results of the correlation analysis showed a positive relationship between easy doing business and gross national income per capita. The findings are consistent with the studies that concluded entrepreneurship contributes positively to economic growth (González, Portillo, and Casero 2020). Ease of doing business contributes positively on business creation Canare (2018). A negative correlation was identified between easy doing business and cost of business start-up procedures. This means when cost of business start-up procedures increases, easy doing business decreases. This study found also a negative correlation between easy doing business and time to register a new business. For all indicators of easy business doing, when countries are divided in low middle-income, upper middle-income, and high-income economies; the direction of the correction does not change. However, the strength of the correlation changes in low middle-income and upper middle-income. Nevertheless, the direction and strength of the correlation did not change in high-income economies comparatively to the strength and direction of the correlation found using 192 countries. These findings indicate that high-income economies are very sensitive to the variation of the indicators analysed. In all countries, they should continue to reduce cost of business start-up

procedures, start-up procedures to register a business, time to register a new business as they are negatively related to easy doing business.

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## Appendix

**High income economies:** Dominica, South Africa, Paraguay, Peru, St. Vincent and the Grenadines, Sri Lanka, Fiji, Ukraine, IBRD only, Albania, Azerbaijan, Gabon, Armenia, Equatorial Guinea, Brazil, Georgia, St. Lucia, Arab World, Colombia, Suriname, Lebanon, Caribbean small states, Barbados, Bosnia and Herzegovina, Libya, Grenada, China, Botswana, North Macedonia, Upper middle income, Middle East & North Africa, Maldives, Late-demographic dividend, Serbia, Dominican Republic, Thailand, Costa Rica, Belarus, Mexico, Small states, Uruguay, Antigua and Barbuda, Argentina, Montenegro, Other small states, Bulgaria, Kazakhstan, Chile, Puerto Rico, St. Kitts and Nevis, Mauritius, Trinidad and Tobago, Turkey, Russian Federation, Oman, Malaysia, Seychelles, Croatia, Panama, Greece, Latvia, Romania, Poland, Hungary, Slovak Republic, Portugal, Bahamas, The Lithuania, Estonia, Cyprus, Slovenia, Czech Republic, Malta, Israel, Spain, New Zealand Korea Republic, , Bahrain, Italy, Japan, European Union, OECD members, United Kingdom, Saudi Arabia, Euro area, France, Canada, Finland, Australia, Post-demographic dividend, High income, Belgium, Sweden, Germany, Austria, Netherlands, Iceland, Denmark, North America, Hong Kong SAR, China, United States, Brunei Darussalam, Ireland, Norway, United Arab Emirates, Switzerland, Luxembourg Singapore, and Qatar.

**Upper middle-income economies:** Sudan, Sao Tome and Principe, Tajikistan, Cambodia, Kenya, Papua New Guinea, Kiribati, Timor-Leste, Kyrgyz Republic, IDA blend, Myanmar, Nigeria, Bangladesh, Pakistan, Cote d'Ivoire, Mauritania, Nicaragua, Ghana, Honduras, Djibouti, Angola, Samoa, South Asia, Belize, Lower middle income, India, Cabo Verde, Pacific island small states, Uzbekistan, Morocco, Vietnam, Eswatini, Lao PDR, El Salvador, Guatemala, Bolivia,

Namibia, Jamaica, Guyana, Philippines, Jordan, Tunisia, Iraq, Mongolia, Ecuador, Algeria, Egypt, Arab Republic, Indonesia, Middle income, and Kosovo.

**Low middle-income economies:** Central African Republic, Malawi, Congo Democratic Republic, Niger, Mozambique, Liberia, Chad, Madagascar, Sierra Leone, Togo, Haiti, Uganda, Burkina Faso, Guinea-Bissau, Rwanda, Gambia, The, Ethiopia, Afghanistan, Solomon Islands, Mali, Low income, Guinea, Tanzania, Zimbabwe, Congo Republic, Comoros, Lesotho, Vanuatu, Benin, Senegal, Zambia, Nepal, and Cameroon.