The Impact of Regulations upon the Startup of New Businesses

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ABSTRACT

The objective of this paper is to show the impact of regulation upon the start up of new businesses in the European Union. The study uses some of the components of the Ease doing business index elaborated by the World Bank. The methods used are the correlation analysis and ordinary least squares for an unbalanced data panel with 26 cross-sections (European Union member states) and time periods from 2005 to 2012. The regression equation is composed of one dependent variable, represented by the New Business Registration Density per 1000 people and 18 independent variables gathered from components of Ease of Doing Index. The results of this research show that the influence of regulatory factors is very strong. This paper is addressed to entrepreneurs, managers of public institution, specialists and all interested readers.

KEYWORDS: new business registration, entrepreneurs, regulations, doing business.

JEL CLASSIFICATION: C23, L26, M10, M13.

INTRODUCTION

In order to have an economic growth, an economy must have a healthy business environment, which must stimulate the entrepreneurial capacity of the population and financial investors (Levin, 1998) to develop new businesses. The performances of the business environment are influenced by multiple factors, one of them is represented by the public institutions who can regulate companies' activities throughout the implementation of regulations, norms, taxes and so on (Dawson, 2006). According to Rodrik (2002), Hall and Jones (1999), the legislative institutions have a high influence on the economic growth. Loayza, Oviedo & Serven (2005) consider that highly regulated economies are characterized by "bottlenecks to the economic growth". Every economy has barriers which can discourage the entrepreneurs to start up a business or to enter a new market. Some of these entry barriers (Porter, 2008) are represented by the legal system of every country, which can be represented by regulations, taxes, norms. But the performance of business regulations can also be described by using the efficiency, which is represented by the number of procedures, the time and the costs required to obtain permissions to conduct economic activities, protection against the illegal business activity or the level of corruption

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(Djankov, 2002). Andre van Stel et al. (2005) considers that there is a negative relation between the young business formation and the minimum capital required needed to start a business, but also other factors such as procedures, time and cost start a business do not have a statistical significant relation.

The World Bank developed a country ranking business index system using the methodology of the Ease of doing business index. The Ease doing business index is composed of the following indicators (World Bank):

- Starting a new business: procedures (number), time (days), cost (% of income per capita), Paid-in Min capital (% of income per capita);
- Dealing with construction permits: procedures (number), time (days), cost (% of income per capita);
- Getting electricity: procedures (number), time (days), cost (% of income per capita);
- Registering property procedures (number), time (days), cost to register a real estate (% of income per capita);
- Getting credit: Credit registry coverage (% of adults), Credit bureau coverage (% of adults), Strength of legal rights index (0-10), Depth of the credit information index (0-10);
- Protecting investors: Extent of disclosure index (0-10), Extent of director liability (0-10), Ease of shareholder suits index (0-10), Strength of investor protection index (0-10);
- Paying taxes: Payments (number per year), Time (hours per years), Profit tax (%), Labor tax and contribution (%), Other taxes (%), Total tax rate (%);
- Trading across border: Documents to export (number), time to export (days), cost to export (USD per container), documents to import (number), time to import (days), cost to import (USD per container)
- Enforcing contracts: Cost (% of claim), Procedures (number), Time (years)
- Resolving insolvency: Cost (% of the estate), Outcome (0 as piecemeal sale and 1 as going concern), Recovery rate (%), Commencement of proceedings index (0-3), Management of the debtor's assets index, Reorganization proceedings index (0-3), Creditor participation (0-4), Strength of insolvency framework index (0-16)

According to the Ease doing business index, Romania ranks 50 places in 2014 in the world top, having a score of 68.48. For the individual indicators, Romania takes the 37th position as Starting a new business, the 139th position for Dealing with Construction Permits, the 171st position for Getting Electricity, the 62nd position of Registration Property, rank 5 for Getting a Credit, the 40th position for Protecting Minority Investors, the 128th position for Paying Taxes, position 68 for Trading Across Borders, rank 52 for Enforcing Contracts and position 45 for the Resolving Insolvency.

The Ease of doing business index is used by many specialists, like Klapper & Love (2010), Hanusch (2012), Djankov (2006), in order to investigate the activity of public institution upon the efficiency of the private sector, the economic growth. One of the critics of the Ease of doing business index is that the cross-company comparison cannot identify the country nuances. The Ease of doing business covers the analysis for all types of businesses, from the huge multinational corporations to the small and middle enterprises. Also it exists a huge discrepancy between the Index of Ease of Doing Business (Figure 1) and New businesses density (Figure 2), for example, Germany has higher value for the Index than

France, Italy, Spain and Romania but has a smaller density of new business registration. The country that has the highest density in New business is Cyprus with 22.5119 <u>businesses</u>/1000 people in 2014, being followed by Latvia with 11.6308 businesses /1000 people and Bulgaria with 6.4083 businesses/1000 people, according to the World Bank.



Figure 1. Ease of Doing Business Index *Source*: Made by authors with data from World Bank Data Base



Figure 2. New businesses density (new registrations per 1,000 people ages 15-64) Source: made by author with data from World Bank Data Base

1. METHODOLOGY

The empirical methodologies used for this research are represented by the correlation analysis using the Pearson's product-moment coefficient and the ordinary least square method for an unbalanced data panel using EVIEWS 7. The data panel is composed of 26 cross-section representing 26 member states of the European Union and a time series set between 2005 and 2012 resulting a total of 195 observations. The two member states that were excluded are Malta and Estonia, because of limited data regarding the variables. The panel is unbalanced because not all of cross-countries had data that cover the entire analyzed period, but all selected countries have at least five consecutive years (Cyprus, Luxemburg, Poland with five years and Greece and Portugal with six years). Data was collected from the World Bank – Bankdata and the Doing Business' database, main criterion selection variables were the number of data provided for each country in the studied period.

The hypothesis is whether the efficiency of the regulations has an influence over the new business registrations or not. The endogenous variable is represented by the New business density (new business registrations per 1,000 people ages 15-64), while the exogenous variables are the following:

- ✓ Total tax rate (% of commercial profits) -TAX
- ✓ Cost of business start-up procedures (% of Gross National Income per capita) CBS
- ✓ Start-up procedures to register a business (number) RP
- ✓ Paid-in minimum capital (% of income per capita) PMC
- ✓ Procedures to register property (number) PRP
- ✓ Procedures to enforce a contract (number) CEP
- ✓ Procedures to build a warehouse (number) WP
- ✓ Documents required to export (number) EDC
- ✓ Documents required to import (number) IDC
- \checkmark Time required to build a warehouse (days) WD
- \checkmark Time required to enforce a contract (days) -CED
- ✓ Time required to register property (days) RPD
- ✓ Time required to start a business (days)- RD
- ✓ Time to resolve the insolvency (years) ISVD
- ✓ Time to prepare and pay taxes (hours) TD
- \checkmark Time to export (days) ED
- ✓ Time to import (days) -ID

The other variables, used by the World Bank in calculating of Ease of Doing Business Index, were not taken into consideration in this research because these have a poor cover of data for the analyzed cross-country or were introduced in 2013.

	Mean Median Maximum Minimum Std. Dev.										
NBRD	4.80	4.02	32.31	0.47	4.19						
CBS	6.39	5.00	22.50	0.00	6.17						
CED	553.28	512.00	1390.00	235.00	261.53						
CEP	32.09	32.00	43.00	21.00	5.42						
EDC	4.21	4.00	7.00	2.00	1.03						

	Mean	Median	Maximum	Minimum	Std. Dev.
ED	12.99	10.00	28.00	6.00	5.30
IDC	4.82	5.00	15.00	2.00	1.70
IDR	12.28	11.00	28.00	5.00	5.28
ISVDR	2.12	2.00	9.20	0.40	1.33
TAX	43.52	44.00	76.80	20.00	13.07
TD	242.21	215.00	930.00	59.00	149.97
WD	202.34	191.00	678.00	64.00	114.44
WP	13.27	12.00	24.00	6.00	5.21
RP	6.28	6.00	15.00	2.00	2.76
RPD	61.33	31.50	956.00	1.00	98.10
RPP	5.43	5.00	11.00	1.00	2.06
RD	17.92	15.50	70.00	4.00	13.19
PMC	32.97	26.10	237.90	0.00	37.24

Source: made by the author using the World Bank Data

2. RESULTS

In order to observe that exogenous variables are independent one from each other, the Pearson product-moment correlation coefficient (Mittelhammer, 1992) was used. From the Appendix 1, it is observed that the relations of variables that have high correlation coefficients are the Time to Import with the Time to Export (0.95**) and the relation between the Documents required to import and the Documents required to export (0.80**). These relations have a high correlation coefficient mainly because data was collected from European Union member states where the imports and export regulations are more standardized than outside the Union. Because the correlation coefficients were so high, some items were excluded from regression equation: the Time to Import and the Document required to Import which have higher correlation coefficients with the rest of variables than the Time to Export and Document required to Export. The variables that have medium correlation coefficients (0.3-0.8) were not excluded from the regression equation.

Corr.	NBRD	CBS	CED	CEP	EDC	ED	IDC	ID	ISVD	TAX	TD	WD	WP	RP	RPD	RPP	RD	PMC
Prob.																		
NBRD	1.00																	
	-																	
CBS	-0.14	1.00																
	0.05	-																
CED	-0.10	0.49	1.00															
	0.15	0.00	-															
CEP	0.16	0.52	0.38	1.00														
	0.03	0.00	0.00	-														
EDC	0.19	0.18	0.01	0.35	1.00													
	0.01	0.01	0.93	0.00	-													
ED	-0.25	0.43	0.54	0.44	0.42	1.00												
	0.00	0.00	0.00	0.00	0.00	-												
IDC	0.20	0.17	0.14	0.27	0.80	0.50	1.00											
	0.01	0.02	0.05	0.00	0.00	0.00	-											
ID	-0.28	0.42	0.52	0.31	0.40	0.95	0.49	1.00										
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-										
ISVD	-0.07	0.11	0.10	0.13	0.36	0.55	0.39	0.57	1.00									
	0.36	0.12	0.15	0.06	0.00	0.00	0.00	0.00	-									
TAX	-0.46	0.30	0.14	0.07	-0.27	0.14	-0.13	0.21	0.00	1.00								
	0.00	0.00	0.05	0.34	0.00	0.05	0.06	0.00	1.00	-								

Table 1. Correlation analysis

Corr.	NBRD	CBS	CED	CEP	EDC	ED	IDC	ID	ISVD	TAX	TD	WD	WP	RP	RPD	RPP	RD	PMC
TD	-0.13	0.31	0.25	0.23	0.20	0.58	0.29	0.62	0.72	0.15	1.00							
	0.07	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.03	-							
WD	0.43	0.37	0.34	0.40	0.36	0.26	0.34	0.17	0.18	-0.25	-0.03	1.00						
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.65	-						
WP	-0.11	0.30	0.04	0.04	0.48	0.51	0.42	0.54	0.49	-0.18	0.56	0.11	1.00					
	0.13	0.00	0.53	0.59	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.13	-					
RP	-0.28	0.68	0.29	0.36	0.09	0.41	0.18	0.38	0.25	0.13	0.32	0.21	0.19	1.00				
	0.00	0.00	0.00	0.00	0.19	0.00	0.01	0.00	0.00	0.07	0.00	0.00	0.01	-				
RPD	-0.14	0.13	0.35	0.06	0.28	0.37	0.28	0.32	0.16	-0.13	0.08	0.29	0.25	0.15	1.00			
	0.05	0.06	0.00	0.38	0.00	0.00	0.00	0.00	0.02	0.07	0.25	0.00	0.00	0.04	-			
RPP	0.08	0.17	0.13	0.06	0.13	0.13	0.22	0.16	0.05	-0.07	-0.04	0.16	0.07	0.21	0.13	1.00		
	0.27	0.02	0.08	0.38	0.07	0.06	0.00	0.02	0.53	0.35	0.58	0.03	0.32	0.00	0.07	-		
RD	-0.22	0.45	0.16	0.26	0.11	0.26	0.14	0.26	0.16	0.07	0.28	0.04	0.07	0.58	0.23	-0.06	1.00	
	0.00	0.00	0.03	0.00	0.13	0.00	0.05	0.00	0.03	0.35	0.00	0.58	0.36	0.00	0.00	0.44	-	
PMC	-0.32	0.42	0.18	0.12	0.18	0.22	0.03	0.23	0.16	0.03	0.32	0.06	0.37	0.39	0.16	0.06	0.32	1.00
	0.00	0.00	0.01	0.10	0.01	0.00	0.64	0.00	0.03	0.66	0.00	0.39	0.00	0.00	0.02	0.41	0.00	-

Source: Calculated by authors with data from the World Bank

The next phase is to identify what variable are stationary by using the summary unit root test for the data panel' variables. In order to stress the stationarity of the variables we conducted all tests related to unit root studies, namely in the *level*, *first difference and second difference*, for the situation where the constant and trend exist or not. The test types used are the Levin, Lin & Chu test; ADF –Fisher Chi- square; PP – Fisher Chi-square; Im, Pesaran and ShinW-stat (if equation includes an intercept), Breitung t-stat (if equation test includes an intercept and a trend). There will be considered as stationary the variables that will have the probability value under 0.05 for all unit root tests.

The majority of the exogenous variables (Cost of startup Business, Procedures to enforce a contract, Time to Export, Time to resolve an insolvency, Time to registrate a business, Procedures to registrate a property, Time to registrate a business, Procedures to registrate a property, Time to prepare and pay taxes, Payed minimum capital) are stationary in the level and do not need to include a constant in the unit root test, while the dependent variable, New Registered Business Density (NBRD), and Total tax rate(TAX) are stationary only if include an intercept in the unit root test equation.

Variables	Levin, Lin	& Chu test	ADF - Fishe	r Chi-square	PP - Fisher	Chi-square
	Statistic	Prob.	Statistic	Prob.	Statistic	Prob.
CBS	-2.050	0.0202	75.628	0.0011	192.130	0.0000
CEP	-3.071	0.0011	27.306	0.0382	56.917	0.0000
ED	-2.414	0.0079	37.602	0.0203	57.759	0.0000
ISVD	-3.071	0.0011	22.369	0.0133	33.491	0.0002
RD	-2.358	0.0092	114.027	0.0000	177.266	0.0000
RP	-3.649	0.0001	60.229	0.0005	84.5781	0.0000
RPD	-2.207	0.0136	95.129	0.0000	122.905	0.0000
PRP	-2.956	0.0016	42.277	0.0010	57.415	0.0000
TD	-2.288	0.0110	73.169	0.0001	96.715	0.0000
РМС	-8.620	0.0000	159.805	0.0000	196.704	0.0000

Table 2. Summary Panel unit root test without individual intercept

Source: made by the authors

Variables	Levin, Li	in & Chu	ADF - Fis	her Chi-	PP - Fish	er Chi-	Im, Pesaran and					
	test		square		square		ShinW-stat					
	Statistic	Prob.	Statistic	Prob.	Statistic	Prob.	Statistic	Prob.				
NBRD	-11.490	0.0000	90.257	0.0008	80.046	0.0075	-3.248	0.0006				
TAX -11.695 0.0000 96.267 0.0001 104.902 0.0000 -2.672 0.0038												
Source: made by the author												

Table 3. Summary	Panel	unit	root	test	with	indiv	idual	interce	pt

Exogenous variables that needed to be stationarized by using the first difference without including an intercept in the equation were the Number of procedures needed to build a warehouse(WP), Time to build a warehouse (WD), while Documents needed to export(EDC) and the Time needed to enforce a contract (CED) require an intercept in the equation.

Table 4. Summary Panel unit root test without individual intercept in the first difference

Variables	Levin, Lin	& Chu test	ADF - Fis	sher Chi-square	PP - Fisher Chi-square		
	Statistic	Prob.	Statistic	Prob.	Statistic	Prob.	
D(WD)	-2.451	0.0071	47.695	0.0000	30.239	0.0026	
D(WP)	-4.522	0.0000	17.811	0.0013	18.327	0.0011	

Table 5. Summary Panel unit root test with individual intercept in the first difference

Variables	Levin, Lin & Chu		ADF - Fisher Chi-		PP - Fish	er Chi-	Im, Pesaran and		
	test		square		square		ShinW-stat		
	Statistic	Prob.	Statistic	Prob.	Statistic	Prob.	Statistic	Prob.	
D(CED)	-16.033	0.0000	23.028	0.0106	22.961	0.0109	-2.596	0.0047	
D(EDC)	-4.281	0.0000	7.143	0.0281	7.143	0.0281	-1.649	0.0495	

After the study of the stationarity of the variables was completed, the suggested regression equation for the Ordinary Least Square method was:

 $NBRD = C(1) + C(2) \times CBS + C(3) \times CEP + C(4) \times D(CED) + C(5) \times D(EDOC) + C(6) \times D(EDOC) +$ $ED + C(7) \times ISVD + C(8) \times RD + C(9) \times RP + C(10) \times RPD + C(11) \times PRP + C(12) \times TAX + C(13) \times D(WD) + C(14) \times D(WP) + C(15) \times TD$

(1)

Table 6. Panel Data Ordinary Least Square for the New Business Registrations

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	9.545340	2.027237	4.708547	0.0000
CBS	0.217653	0.064791	3.359303	0.0010
CEP	0.194442	0.052207	3.724435	0.0003
D(CED)	0.004775	0.006960	0.686129	0.4937
ISVD	0.338523	0.275283	1.229726	0.2207
RD	-0.009241	0.023776	-0.388659	0.6981
RP	-0.530070	0.133282	-3.977057	0.0001
RPD	-0.002731	0.003611	-0.756141	0.4507
PRP	0.178634	0.123323	1.448500	0.1495
TAX	-0.149620	0.019454	-7.691014	0.0000
D(WD)	0.010472	0.018200	0.575391	0.5659

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(WP)	-0.345839	0.320333	-1.079622	0.2820
TD	0.005069	0.002514	2.016299	0.0455
D(EDC)	-0.742400	0.654194	-1.134831	0.2582
ED	-0.324072	0.069560	-4.658877	0.0000
PMC	-0.032448	0.007589	-4.275726	0.0000
R-squared	0.522134	Mean depe	endent var	4.812281
Adjusted R-squared	0.475285	S.D. deper	ndent var	3.867241
S.E. of regression	2.801322	Akaike inf	fo criterion	4.987948
Sum squared resid	1200.653	Schwarz c	riterion	5.284270
Log likelihood	-405.4816	Hannan-Q	Hannan-Quinn criter.	
F-statistic	11.14492	Durbin-W	0.267480	
Prob(F-statistic)	0.000000			

Source: made by authors

The independent variables explain the evolution of the dependent variable in a proportion of 52.21%, according to the R-squared. Adjusted R-squared value of 47.52 reveals that the data are average fitted to the model. Durbin-Watson Stat value is 0.26748, which less 2, meaning that the errors are not correlated. The constant is statistic significant for a confidence level of 99%, because their probability value is less than 0.01. The variables that are statistic significant for a confidence level of 99% are the Cost of business start-up procedures (CBS), Procedures to enforce a contract (CEP), Time to export, Start-up procedures to register a business (RP), the Total tax rate (TAX) and Paid-in minimum capital (PMC). The Time to prepare and pay taxes (TD) can be significant only for a confidence level of 95%. From the regression, it results that the statistic significant variables which have a positive relation with the dependent variable NBRD are the: CBS, CES and TD. This can seen in the economies that will spend 1% more from their GNI, the New Business Registration Density will grow with approximately 0.2176 new businesses/1000 people. The Procedures of Enforcing a Contract has also a positive relationship, mainly because the newer business are more vulnerable to take a disadvantageous contract, resulting that the more procedures are needed to enforce a contract the higher the protection against enforcement of disadvantageous contract is. If the number of procedures to enforce a contract will grow with 1 more, the density of new business will grow with 0.1944 new business/1000 people. Time to prepare and pay taxes has a coefficient value of 0.0050, meaning that if this variable will increase with one day, the density would increase with 0.0050/1000 businesses. This relation is somehow contradicted by the idea that entrepreneurs do not want to spend more time with paying tax procedures. The statistic significant variables that have the negative relationship the dependent variable are ED, RP, TAX and PMC. The Time of Export (ED) has a negative relationship with NBRD by -0.3240, resulting that if the Time of Export would grow with one day the density of new business registration will decrease will 324 businesses. The number Start-up procedures to register a business had a coefficient value of -0.5300, which mean that if the number of procedures will increase with one more, the NBRD would decrease with 0.5300 businesses/1000 people. The increase of the total tax rate with one percent of the entire commercial profits, it will decrease the density of new business registration with 0.1496 business/1000 people. The Paid-in minimum capital (PMC) had a negative relation to the density of new business with -0.0324 business/1000 people.

(3)

The regression model equation is:

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\begin{split} NBRD &= 9.5453 + 0.2176 \times CBS + 0.1944 \times CEP + 0.0047 \times D(CED) + 0.3385 \times ISVDUR - \\ 0.00924 \times RD - 0.5300 \times RP - 0.0027 \times RPD + 0.1786 * RPP - 0.1496 \times TAX + 0.0104 \times \\ D(WD) - 0.3458 \times D(WP) + 0.0050 \times TD - 0.7423 \times D(EDOC) - 0.3240 \times EDUR - 0.0324 \times \\ PMC \end{split}
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Because the model has many variables that are statistically insignificant for confidence level of 99%, 95% and even 90%, the regression equation was revisited until it resulted a linear regression equation with all variables statistically significant for at least a level of confidence of 95%.

The equation used in the regression equation is:

$$\begin{split} NBRD &= C(1) + C(2) \times CBSUP + C(3) \times CEP + C(4) \times EDUR + C(5) \times ISVDUR + C(6) \times \\ RP + C(7) \times PRP + C(8) \times TAX + C(9) \times PMC \end{split}$$

Variable	Coefficient	Std. Error	t-Statistic	Prob.						
С	7.694495	1.852628	4.153287	0.0000						
CBS	0.185583	0.057196	3.244692	0.0014						
CEP	0.247579	0.049569	4.994587	0.0000						
ED	-0.303163	0.056055	-5.408344	0.0000						
RP	-0.508171	0.111293	-4.566053	0.0000						
TD	0.006187	0.001853	3.338132	0.0010						
TAX	-0.152487	0.017778	-8.577306	0.0000						
PMC	-0.036609	0.006748	-5.425501	0.0000						
PRP	0.267761	0.109897	2.436480	0.0158						
R-squared	0.507523	Mean dep	endent var	4.800652						
Adjusted R-squared	0.486341	S.D. deper	ndent var	4.189120						
S.E. of regression	3.002342	Akaike in	fo criterion	5.081717						
Sum squared resid	1676.615	Schwarz c	5.232779							
Log likelihood	-486.4674	Hannan-Q	5.142880							
F-statistic	23.96032	2 Durbin-Watson stat 0.26980								
Prob(F-statistic)	0.000000									

Table 7. Revisited Panel Data Ordinary Least Square for the New Business Registrations

Source: made by authors

Even if there were excluded nine variables, R-square decreased only with 0.015, from 0.5075 to 0.4349, meaning that the regression model is explained in proportion of 50.75% by the current variables. Adjusted R-square has increased its value to 0.4863, meaning that redundant variables were excluded. Durbin-Watson stat value remain under 2, which mean that the errors are not correlated. The new variable that became statistic significant is represented by the Procedures to register property (PRP) which has a positive relation with New business registered density, by 0.2521, meaning that if a new procedure is introduced the NBRD will increase with 0.2521 businesses/1000 people. The constant decrease has a value of 7.6944, but remain statistically significant. The Cost of business startup procedures (CBS) had decreased its coefficient to 0.1282. While the relation of the CEP

with NBRD increased to 0.2475. The Procedures of register new business still maintain the lead position as the main negative influence over the new business registration density with -0.5081. Time to export represents the second variable that has a coefficient with a strong negative influence. The total tax rate has slightly increased the its negative relation, meaning that an increase of the rate it will have a negative impact of density with -0.1524 business/1000 people.

The resulted regression equation is:

 $NBRD = 7.6944 + 0.1855 \times CBS + 0.2475 \times CEP - 0.3031 \times ED - 0.5081 \times RP + 0.0061 \times TD - 0.1524 \times TAX - 0.0366 \times PMC + 0.2677 \times RPP$ (4)

CONCLUSIONS

The main conclusion is that the regulatory factors-have an influence on the stimulation of entrepreneurs to develop new businesses. The study showed in a proportion of 50.75%, the relation between the creation of new business and the legal factors like the Cost of startup of new business, the Procedures to enforce a contract, Time to export, Time to prepare and pay taxes, Paid-in minimum capital, Procedure to register a business, Procedure to register property, the Total tax rate in the commercial profits. These variable describe the capital that the entrepreneur must have in order to start a business and the time consumed by the public institution procedures required to create a business. Even the rest of the factors do not have coefficients statistical significance, they can have an influence on the entrepreneur's decision to start up a new business if they are too restrictive or perturb the business potential performance.

The limits of this study are represented by the use of a limited number of variables that are included in the World Bank' index or other institutions, the small number of data (26 countries and 8 years), the selected countries are from the same economic union, meaning that the model cannot be representative for the entire globe.

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