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Opportunities and challenges for doing business in vietnam via a multi factor model impacts

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Abstract: Currently, FDI inflows in Vietnam has been increasing, during impacts from Covid 19 and China-US commerce war which facilitates opportunities for US and Chinese firms to enter Vietnam market to attract qualified labor sources at competitive salary.
From this fact, it is the time for us to consider to evaluate impacts from multi factors on Doing Business score (DB score) in the country.Authors use both qualitative, analytical and synthesis methods, combined with OLS regression method. Research results show us that in a 4 factor model, Export and FDI registration and export have positive correlation with DB score, while CPI and Import have negative correlation with DB score. Next, we recognize that CPI and FDI registration have higher coefficient and impact on DB score.
Therefore, The authors propose recommendations for improving DB score in Vietnam from ex-import and FDI attracting policies. The model can be expanded and applied to other emerging markets.
JEL: E61, F21, M20

Keywords: FDI flows; Doing business score; Vietnam; ex-import; policies

INTRODUCTION

Measuring effects of vaious factors on DB score in markets such as Vietnam is good to increase FDIs capital.
According to the World Economic Forum, the income gap of Vietnamese people compared with the average of developing countries in Asia is increasingly widening.
World Bank (2020) also clarify what Doing Business means in DB report 2020:

Indicator set	What is measured
Starting a business	Procedures, time, cost, and paid-in minimum capital to start a limited liability company for men and women
Dealing with construction permits	Procedures, time, and cost to complete all formalities to build a warehouse and the quality control and safety mechanisms in the construction permitting system
Getting electricity	Procedures, time, and cost to get connected to the electrical grid; the reliability of the electricity supply; and the transparency of tariffs
Registering property	Procedures, time, and cost to transfer a property and the quality of the land administration system for men and women
Getting credit	Movable collateral laws and credit information systems
Protecting minority investors	Minority shareholders' rights in related-party transactions and in corporate governance
Paying taxes	Payments, time, and total tax and contribution rate for a firm to comply with all tax regulations as well as postfiling processes
Trading across borders	Time and cost to export the product of comparative advantage and to import auto parts
Enforcing contracts	Time and cost to resolve a commercial dispute and the quality of judicial processes for men and women
Resolving insolvency	Time, cost, outcome, and recovery rate for a commercial insolvency and the strength of the legal framework for insolvency
Employing workers	Flexibility in employment regulation
Contracting with the government	Procedures and time to participate in and win a works contract through public procurement and the public procurement regulatory framework

Fig.1: 12 areas of business regulations (source WB Doing Business report 2020)

Note: contracts with government not included in DB2020
We see and compare descriptive statistics of multi factors as follows: std.deviation of export and import are the highest numbers while std.deviation of CPI and GDP growth are lowest numbers.

	DBSCORE	CPI	G	EX	IM	FDI_REGIS
Mean	66.07333	0.032200	0.066167	201.9650	198.5450	29.52667
Median	66.17500	0.035350	0.068000	195.8500	193.9000	30.13000
Maximum	69.80000	0.047400	0.070800	264.1900	253.0700	38.00000
Minimum	62.10000	0.006300	0.057300	150.2000	147.9000	20.20000
Std. Dev.	3.037023	0.014254	0.005382	46.27416	42.11210	7.774282
Skewness	-0.065890	-1.000147	-0.777085	0.214543	0.124679	-0.067675
Kurtosis	1.450447	2.962951	2.116343	1.476120	1.459141	1.192951
Jarque-Bera	0.604620	1.000637	0.799073	0.626581	0.609106	0.820936
Probability	0.739109	0.606338	0.670631	0.731037	0.737453	0.663340
Sum	396.4400	0.193200	0.397000	1211.790	1191.270	177.1600
Sum Sq. Dev.	46.11753	0.001016	0.000145	10706.49	8867.143	302.1973

Fig.2: Descriptive statistics of multi factors and DBscore

We will organize this paper with introduction, literature review, method and data, then discussion and conclusion and policy implications.

LITERATURE REVIEW

First, Delgado et al (2012) relates cost of input components to competitiveness of the country to attract global capital.

And Messaoud and Teheni (2014) gave evidence showing that factors of rules do not relate so much to economic growth in the case of Africa.

Troilo and Collins (2015) emphasizes mind of innovation and creativity in small and medium enterprises and competitiveness of the nation is affected by knowledge level. Next, Vogiatgioglou (2016) found that in ASEAN nations, it is necessary to revise rules and business regulations in order to increase FDIs capital.

Moorthy and Jason (2016) showed us that DB ease of World Bank can affected, negatively by GDP per capita.

In addition to, Issah et al (2017) pointed in a model that previous year macro factors have certain effects on this year business ROA.

Then, Carane (2018) found out that business or start ups may be mainly affected by cost of finance, with more impacts than cost of administration.

Vasylieva et al (2018) used trade openness and FDIs as variables for Cobb-Douglas formula.

Moreover, Rusu and Roman (2018) said that for C.E.E nations, CPI and worker productivity are main drivers of competitiveness of the country.

Beside, Bonga and Kenneth (2018) mentioned that corruption has affected much on GDP growth.

Last but not least, Cepel et al (2019) valued roles of state bank and evaluated much more on partial analysis of economic components, rather than overall analysis of environment.

METHOD AND DATA

We use both qualitative analysis (synthesis, analytical, explaining methods) and OLS regression model.

All data we collect from reliable sources such as DBscore from Doing Business report of World Bank, other data from Bureau statistics, National Custom Office, Ministry of Investment and Planning. All data collected for OLS regression during the period 2014-2019.

MAIN RESULTS

First, we look at the below figure and see that all multi factors have positive correlation with DB Score in Vietnam for 2014-2019 period.

Correlation Matrix						
	DBSCORE	CPI	G	EX	IM	FDI_REGIS
DBSCORE	1.000000	0.237817	0.774205	0.929293	0.915814	0.929485
CPI	0.237817	1.000000	0.639737	0.032109	-0.005055	0.042489
G	0.774205	0.639737	1.000000	0.705010	0.698308	0.765462
EX	0.929293	0.032109	0.705010	1.000000	0.997999	0.961846
IM	0.915814	-0.005055	0.698308	0.997999	1.000000	0.970033
FDI_REGIS	0.929485	0.042489	0.765462	0.961846	0.970033	1.000000

Fig.3: Correlation matrix of multi factors and DB score

Second, we find out from below figure that, FDI registration has positive correlation with DB score in the below equation:

Y = 0.36*FDI_REGIS + 55.3, R-squared = 0.86, SER = 1.25

Dependent Variable: DBSCORE
Method: Least Squares
Date: 01/24/21 Time: 11:14
Sample: 1 6
Included observations: 6

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FDI_REGIS	0.363103	0.072047	5.039786	0.0073
C	55.35210	2.187905	25.29914	0.0000

R-squared	0.863943	Mean dependent var	66.07333
Adjusted R-squared	0.829929	S.D. dependent var	3.037023
S.E. of regression	1.252459	Akaike info criterion	3.549296
Sum squared resid	6.274613	Schwarz criterion	3.479883
Log likelihood	-8.647888	F-statistic	25.39944
Durbin-Watson stat	1.957481	Prob(F-statistic)	0.007283

Fig.4a: Single factor regression

Third, we find out from below figure that, Both FDI registration and CPI have positive correlation with DB score in the below equation, in which CPI has higher coefficient:
Y = 0.35*FDI_REGIS + 42.3*CPI + 54.1, R-squared = 0.9, SER = 1.21

Dependent Variable: DBSCORE
Method: Least Squares
Date: 01/24/21 Time: 11:15
Sample: 1 6
Included observations: 6

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FDI_REGIS	0.359806	0.070182	5.126718	0.0144
CPI	42.33222	38.27830	1.105907	0.3495
C	54.08638	2.417442	22.37339	0.0002

R-squared	0.903346	Mean dependent var	66.07333
Adjusted R-squared	0.838911	S.D. dependent var	3.037023
S.E. of regression	1.218937	Akaike info criterion	3.540689
Sum squared resid	4.457426	Schwarz criterion	3.436569
Log likelihood	-7.622067	F-statistic	14.01934
Durbin-Watson stat	1.160818	Prob(F-statistic)	0.030049

Fig.4b: Two factor regression: CPI and FDI registration impacts

Fourth, we find out from below figure that, Both FDI registration and CPI have positive correlation with DB score, while GDP growth has negative correlation with DB score in the below equation, in which GDP growth and CPI has higher coefficient:
Y = 0.73*FDI_REGIS + 210.3*CPI - 731*G + 86, R-squared = 0.97, SER = 0.7

Dependent Variable: DBSCORE
Method: Least Squares
Date: 01/24/21 Time: 11:15
Sample: 1 6
Included observations: 6

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FDI_REGIS	0.734275	0.147666	4.972556	0.0381
CPI	210.3133	67.42823	3.119069	0.0892
G	-731.3435	277.2687	-2.637670	0.1187
C	86.01111	12.18397	7.059366	0.0195

R-squared	0.978419	Mean dependent var	66.07333
Adjusted R-squared	0.946048	S.D. dependent var	3.037023
S.E. of regression	0.705429	Akaike info criterion	2.374700
Sum squared resid	0.995260	Schwarz criterion	2.235873
Log likelihood	-3.124100	F-statistic	30.22477
Durbin-Watson stat	2.152512	Prob(F-statistic)	0.032196

Fig.5: Three factor regression: CPI, GDP growth and FDI registration impacts

Fifth, we find out from below figure that, Both FDI registration and export have positive correlation with DB score, while Import has negative correlation with DB score in the below equation, in which FDI registration has higher coefficient:

Y = 0.3* Export -0.4*Import + 0.5*FDI_REGIS + 62.1, R-squared = 0.98, SER = 0.62

Dependent Variable: DBSCORE
Method: Least Squares
Date: 01/24/21 Time: 11:17
Sample: 1 6
Included observations: 6

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EX	0.386565	0.104245	3.708246	0.0656
IM	-0.450185	0.128982	-3.490289	0.0732
FDI_REGIS	0.515482	0.161489	3.192059	0.0857
C	62.16222	2.596330	23.94234	0.0017

R-squared	0.983157	Mean dependent var	66.07333
Adjusted R-squared	0.957892	S.D. dependent var	3.037023
S.E. of regression	0.623205	Akaike info criterion	2.126838
Sum squared resid	0.776768	Schwarz criterion	1.988011
Log likelihood	-2.380513	F-statistic	38.91402
Durbin-Watson stat	2.033203	Prob(F-statistic)	0.025158

Fig.6: Three factor regression: , Export, Import and FDI registration impacts

Sixth, we find out from below figure that, Both FDI registration and export have positive correlation with DB score, while CPI and Import has negative correlation with DB score in the below equation, in which CPI and FDI registration have higher coefficient:

Y = 0.4* Export -0.5*Import + 0.5*FDI_REGIS - 19.3* CPI + 64.4, R-squared = 0.98, SER = 0.78

Dependent Variable: DBSCORE
Method: Least Squares
Date: 01/24/21 Time: 11:18
Sample: 1 6
Included observations: 6

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EX	0.461733	0.196206	2.353304	0.2558
IM	-0.546218	0.247173	-2.209858	0.2705
FDI_REGIS	0.591248	0.250772	2.357712	0.2554
CPI	-19.31836	37.52296	-0.514841	0.6973
C	64.43268	5.486839	11.74313	0.0541

R-squared	0.986686	Mean dependent var	66.07333
Adjusted R-squared	0.933429	S.D. dependent var	3.037023
S.E. of regression	0.783592	Akaike info criterion	2.225051
Sum squared resid	0.614016	Schwarz criterion	2.051517
Log likelihood	-1.675152	F-statistic	18.52700
Durbin-Watson stat	2.244617	Prob(F-statistic)	0.172312

Fig.7: Four factor regression: CPI, Export, Import and FDI registration impacts

DISCUSSION

In order to enhance the model robustness, we might consider to add public debt, tax rates, etc. Into our regression equation.

We might note that CPI and import have negative correlation with DB score in Vietnam; therefore, we need to control CPI well, not increasing too much.

CONCLUSIONS AND POLICY IMPLICATIONS

It is a good sign to see GCI of one of active emerging markets in Asia, Vietnam has increased up to 67th place (3.5 scores) in 2019.

Because export and FDI registration have positive correlation with DB score in Vietnam as shown in the above equation, government agencies, Bank system, Ministry of Trade and Industry need to stimulate export and take advantages of FDI inflows from US, China, Europe, Japan, etc. to increase DB score.

Limitation of this research: We need to add more factors to enhance the strength of regression model, as well as expanding the model for other emerging markets.

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REFERENCES

1. Acemoglu, D., Johnson, S., & J. A. Robinson. (2005). Institutions as the Fundamental Cause of Long-Run Growth, in Philippe Aghion and Steven Durlauf, eds. Handbook of Economic Growth. The Netherlands: Elsevier Science. 2005
2. Aghion P and Howitt P. (1992). A Model of Growth through Creative Destruction, Econometrica, 60(2): 323-351
3. Bonga, Wellington G., & Mahuni, Kenneth. (2018). Assessing the Impact of Ease of Doing Business and Corruption on Economic Growth for Africa Free Trade Zone (AFTZ) Member States, MPRA Paper 88932.
4. Canare, T. (2018). The Effect of Ease of Doing Business on Firm Creation, Annals of Economics and Finance, 19(2): 555–584.
5. Cepel, M., Belas, J., Rozsa, Z., & Strnad, Z. (2019). Selected economic factors of the quality of business environment, Journal of International Studies, 12(2), 228-240. doi:10.14254/2071-8330.2019/12-2/14
6. Delgado, M., Ketels, C.H.M., Porter, M.E., & Stern, S. (2012). The Determinants of National Competitiveness, . Retrieved from: https://www.researchgate.net/publication/236903847_The_Determinants_of_National_Competitiveness
7. Huy, D. T.N., Loan, B. T., & Anh, P. T. (2020). 'Impact of selected factors on stock price: a case study of Vietcombank in Vietnam', Entrepreneurship and Sustainability Issues, vol.7, no.4, pp. 2715-2730. https://doi.org/10.9770/jesi.2020.7.4(10)
8. Huy, D.T.N. (2012). Estimating Beta of Viet Nam listed construction companies groups during the crisis, Journal of Integration and Development, 15(1): 57-71.
9. Issah, M., Antwi, S., & McMilan, D. (2017). Role of macroeconomic variables on firms' performance: Evidence from the UK, Cogent Economics & Finance, 5(1). https://doi.org/10.1080/23322039.2017.1405581
10. Messaoud, B., & Teheni, Z.E.G. (2012). Business regulations and economic growth: What can be explained?, International Startegic Management Review, 2(2). https://doi.org/10.1016/j.ism.2014.03.001
11. Moorthy, V., & Jason, A.A. (2016). The Ease of Doing Business Rank: An Assessment of its Macroeconomic Relevance, EDB Working Paper 521.
12. Rusu, V.D., & Roman, A. (2018). An empirical analysis of factors affecting competitiveness of C.E.E. countries, Economic research, 31(1). https://doi.org/10.1080/1331677X.2018.1480969
13. Troilo, M., & Collins, J.M. (2015). National factor effects on firm competitiveness and innovation, Journal of Global Competitiveness, 25(4). DOI: 10.1108/CR-02-2015-0009
14. Vasylieva, T., Lyeonov, S., Lyulyov, O., & Kyrychenko, K. (2018). Macroeconomic Stability and Its Impact on the Economic Growth of the Country, Montenegrin Journal of Economics, 14(1): 159-170.
15. Vogiatzoglou, K. (2016). Ease of Doing Business and FDI Inflows in ASEAN, Journal of Southeast Asian Economies, 33(3): 343-363. https://www.jstor.org/stable/44132410
16. World Bank Doing Business Report (2020). Retrieved from: https://openknowledge.worldbank.org/bitstream/handle/10986/32436/9781464814402_Ch01.pdf?sequence=5&isAllowed=y