

INFLUENCE OF BUSINESS ENVIRONMENT AND SUSTAINABILITY ON FOREIGN DIRECT INVESTMENT

Ibadete DAKU⁶⁰

Egla MANSI⁶¹

Abstract:

The purpose of this research paper is to analyze the influence of business environment and sustainability on foreign direct investment in European Union countries. Our focus is based on the improvement of business regulations to enable an environment for investors that offers security and prosperity but makes allowances for the investors' sustainable choices. Beside our main purpose which is the impact indicators of Doing Business on inward foreign investment of the host country, a comparison between two groups of countries is also conducted their business environment. Dealing with construction permits and resolving insolvency are seen to have a strong positive relationship, while paying taxes and starting a business impact positively FDI but were found insignificant. In addition, investors' attention is drawn more to economies whose carbon emissions are lower, which underlies the sensibilization for a "cleaner" environment.

Keywords: Foreign direct investment, Ease of doing business, Sustainability

JEL classification: F21

Introduction

As the main focus of many investors and policymakers, the environment of investment with its dynamic features, due to the advent of globalisation, compelled organisations to succeed in better business models. The intersection of human resources, materials, and external ones, allows businesses the persistence in operations, but also, this complexity attracts the need for better business model policies and strategies (Oginni, 2010). A business climate characterised by an extension of corruption and inadequate policies is thought less pleasurable for business people to put money into it, thus, it harms influencing foreign direct investment. As it is mentioned, FDI can be defined as the purchase of an interest in a company by an investor located in another country (Rathburn, 2023). Improvement in the business climate to attract more domestic investors and foreigners are crucial for the economy, and a way to make beneficial changes is by comparing the business environment with other economies (Svejnar, 2015). Therefore, researchers have conducted studies related to the regulatory environment and foreign direct investment, as it is thought that better legal systems accompanied by preferable policies in the simplicity of documents to start and operate a business in foreign countries draw foreign investors' attention.

Great attention has been addressed to projects who embedded the idea of sustainability, and also, the focus of many authors is the outperformance of those traditional investments whose main intention is to get the high profit due to the rise of business ideas with the aim of more sustainability and better regulatory environment (Lingnow et al., 2022). Amidst the yields of investments, reliable

⁶⁰ Bachelor's degree in finance, Banking and Finance Department, Epoka University, Tirana, Albania. Email: Idaku20@epoka.edu.al.

⁶¹ Master of Science in Economics Business Administration Department, Epoka University, Tirana, Albania

procedures are seen to allocate the funds through the low-carbon economy and more inclusive ones (Popescu et al., 2021,13). As a role of catalyst in economic development, foreign direct investment initiates technological advancement, better contribution to resources of the host country, integration in international trade, and enhancement in human capital (Olival, 2012). The determinants of attracting foreigners to invest in the host country and analysis on their impact have been conducted for the past decades, by considering mostly the macroeconomic variables. Many of those authors concluded inflation as a negative coefficient while explaining FDI, as higher prices in host countries imply a lower value in the currency of foreigners. Also, gross domestic product per capita results in the rise of economic scale, influencing more foreigners to invest in host countries (Dornean et al., 2021). Their intentions were conducted by using explanatory variables such as exchange rate, as it is thought organisations buy cheaper goods in countries where their home currency is highly appreciated. As time evolves, many authors have changed their attention mostly to business regulation and sustainability, as a consequence of business people's preferences for more simplicity and security where they put money in the host country. Besides the fact that macroeconomic factors play a key role in attracting more inward FDI, also the regulatory system and sensibility of people towards more "clean" environments have drawn attention to project managers.

We intend to analyse the influence of the regulatory environment and sustainability in inward foreign direct investment, by using the Doing Business indicators and Carbon dioxide per capita as variables of our interest. There are arguments that the key role of institutions is the rise of security and reduction of uncertainty, by implementing all the rules and regulations that define property rights (North, 1990, 4). The World Bank provided the report of Doing Business, which can be defined as an explanation of understanding the business climate of a country. This research paper considers areas of regulation such as Starting a Business, Dealing with construction permits, Paying taxes, and Resolving insolvency. We aim to provide the impact of these areas in inward foreign direct investment, therefore, perceiving some conclusion for better decision-making related to countries where investors tend to invest their money. Also, a comparative analysis of developed countries and developing ones, particularly in the European Union, is conducted to achieve one of our aims, that the developed economies represent an improvement in the regulatory system, encouraging more investment compared to the developing countries. The overall ease of doing business score is taken as the variable of our interest, also with the proxy for sustainability which is the carbon dioxide emission per capita. In addition, our research paper is a contribution to the literature for very important characteristics of business models, also it helps for a better understanding of reforms undertaken by governments during the time we have studied, and their impact on the attractiveness of more foreigners. These research papers consist of several chapters. The second chapter summarises the theoretical background and empirical work conducted by other authors. The third chapter describes the way of data collection and methodology we used. The fourth chapter reports all the diagnostic tests, and the interpretation of the results. Then the last chapter refers to some conclusions related to the policy implication and limitations.

2. LITERATURE REVIEW

This part of this paper summarises the relevant literature conducted by other authors in this topic of study. It has evaluated most of the literature related to the ease of doing business and the macroeconomic determinants of FDI in host countries. The first part of this is related to theoretical background, and the second part summarises empirical evidence based on research papers written by other authors.

2.1 Theoretical framework

The theory of internationalism of products, as the basic idea of it, is penetrating foreign markets to capture the interest of the foreign demand by producing beyond their domestic market to reach the habits and tastes of all their customers. Through diversification, the supply of new product lines or activities has been growing over the last few years. In economic literature, and as the purpose of many research papers, Ownership, Location, and Internationalisation, have become the theory that is mostly used. As it is one of the most accepted ones, the OLI model has its roots in the advantages of companies due to its ownership benefits and the convenience of the location of products produced (Dornean et al., 2021). To prove the significance of ownership and location-specific variables on the sales of U.S. companies, Dunning (1980) aimed to seek empirical evidence for the eclectic theory of international products. Proxies used for the OIL components were the institutional variables that highlighted that for a good economy, with more sustainability and more social well-being, the need for good governance is crucial. A study conducted using OLI models in emerging countries and developed ones concluded that investors are attracted more to an environment with a better business climate and to an effective regulatory system (Donaubauer et al., 2016).

2.2 Empirical evidence

Institutional variables of Doing Business have shown an important growth in explaining the inward foreign direct investment, as their report expresses the business environment in a country. A better-rate business environment attracts more innovation, and more FDI, especially in developing countries (Olival, 2012). The author analysed 144 developing countries and 33 developed countries, trying to get a link between a business environment and FDI. He found that institutional quality and better business practices promote investment, as a result, it increases the economic growth of the country, helping in more employment opportunities, and a better standard of living. The second conclusion retrieved from this study is that explanatory variables have a greater impact on explaining FDI, especially in emerging countries, maybe due to the possibility that raw materials are cheaper and less strict regulation attracts more profitability (Olival, 2012). Piwoski (2010) researched the impact of Ease of Doing Business on FDI and came to the conclusion that if the ease of doing business's rank is increased by one level, the foreign direct investment is increased by 44 million USD. He used a multivariate regression model, and found a strong positive relationship between FDI and rankings of countries taken as measure of doing business. An insignificant impact of EoDB ranking is shown in Sub-Saharan African countries and OECD countries, whereas a considerable difference of impact is seen in developing countries across the globe (Gillanders, 2022). According to another study, improvement in ease of doing business, particularly in developing countries, do attract more foreign investors. A better record of doing business, determining a higher FDI, is seen in developing countries while a drop of FDI is seen in developed countries. A comparison between these two groups of countries, has concluded that the increase in FDI in emerging countries has come as a consequence of better implementation of doing business variables (Bayraktar, 2023). Better institutional variables play an important role in FDI and have a positive impact on it, but when these are combined with poor macroeconomic variables, create a negative influence on FDI. The deterioration of institutional indicators will result in a bad regulatory environment, creating insecurity for foreigners about their investments (Azan et al., 2010). Described as efforts from the government to simplify business regulation, doing business indicators are essential to create a decent business climate (Anggraini & Inaba, 2020). Anggraini and Inaba researched the impact of ease of doing business indicators in separate samples based on the country's income, and concluded that EDB score ranking from the worst to best has a positive significant impact on inward direct foreign investment in all the groups. Starting a business, in high-income countries, is the most important indicator of Doing Business explaining FDI, while paying taxes has the most significance in middle-income countries. In low-income countries, where funds to finance the investment are very scarce,

getting credit is the most significant factor (Anggraini & Inaba, 2020). Dealing with construction, has been included as an explanatory variable in many papers, to show if there is a relationship with FDI. According to the study, if construction permits increase by 1%, the inward foreign direct investment will increase by 0.34%, influencing in a positive way (Mahmuni & Bonga, 2017). According to research done in EU countries, using three categories of countries, developed countries, frontier and emerging ones, dealing with construction permits is seen to have a positive and a strong significant impact on inward FDI in all three categories (Dornean et al., 2021). Investors with innovative and new business ideas, must consider taxes as their crucial role in evaluating the profitability of investment (Fahmi, 2012). According to middle income countries, paying taxes is the most significant indicator explaining FDI, which increased by 1.2% for each percent increase in paying taxes (Anggraini & Inaba, 2020). Paying taxes in developed countries have sought no influence on FDI (Dornean et al., 2021), while in a research paper conducted in the transition economy of the EU, this variable has a negative impact (Haliti & Merovci, 2019). In agreement with a study conducted in 6 emerging European countries, using panel data with a time frame of ten years, fiscal policy plays a great role in attracting foreign direct investment as it creates a friendly business environment, with less tax fraud and tax avoidance, and more transparency (Göndör, 2022). Social media, as part of people's free time, has been promoting in general the healthy lifestyle during those last years. As the consequences of local pollutants and global ones have gotten worse, traffic noises creating hypertension, cardiovascular disease, risk of losing hearing whereas carbon dioxide, NOX and sulphur dioxide destroying the beautiful nature, investors are looking for investment with more sustainability development (Chipalkatti, 2022). Attention to the growth of sustainability of investment has influenced business performance, to cut down carbon emissions, while promoting a clean environment for people to live in more economic development and opportunities (Wang & Zhang, 2022). According to an article made by one of the greatest banks in the world, JP. The Morgan pandemic has been a forewarning hint for sustainability development since pollution created mostly by the business environment has increased producing many infections, risking people's lives, and destroying the environment for the new generations (Morgan, 2020).

Even though there are few studies conducted regarding the relationship between carbon emissions and foreign direct investment, a strong relationship is found to influence foreign direct investment to be more responsible for the environment. A research paper conducted in three samples of European countries, based on the economies of countries, stated that an increase in pollution will decrease the FDI stocks by 29 units in emerging countries, 62 units in developed countries, and 36 units in developing countries *ceteris paribus* (Dornean et al., 2021). Environmental degradation, as a concern for economic growth, has shown a significant negative impact on private and public investment in Pakistan. Not only this variable but also, technological innovation, trade openness, and real GDP growth rate reduce the environmental quality, increasing the degradation of the habitat of many human lives (Chunling & Memon, 2021).

Hypothesis 1: *Better business climate attract more investors as it provides more technical, institutional assistance for investment;*

Hypothesis 2: *Countries with the concern of sustainability are more likely to captivate more investors, due to sensibilization for a "clean" country.*

Hypothesis 3: *Developed countries are expected to attract more foreign direct investment compared to developing ones.*

3. DATA AND METHODOLOGY

3.1 Data collection

This study uses annual data, consisting of a period from 2010 to 2020, to analyse the inward FDI in the host country, because of the business climate and sensibilization for "clean" activities with more sustainability. Based on the FTSE classification of countries, we cover panel data for 12 developed countries, part of the European Union. Hence, the developed countries to be investigated will be Austria, Denmark, France, Belgium, Germany, Italy, Luxembourg, Finland, Netherlands, Italy,

Ireland, Sweden, and Spain. Also, to make a comparison between developed and developing countries of the EU, we have retrieved secondary data for countries such as Estonia, Cyprus, Slovenia, Romania, Bulgaria, Hungary, Greece, Czechia, Poland, and Portugal (FTSE Russell, 2023). To begin with, our study intends to analyse if non-resident companies are attracted more to those countries where sustainability awareness is higher, so their activities will less harm the environment. Taking this into consideration, one of our independent variables is going to be carbon dioxide emissions per capita (CO2PC) extracted from the World Bank. Due to regulations taken by the government concerning the quality of the business environment, such as obtaining a construction permit, time to prepare and pay taxes, obtaining a worker's contract, number of procedures to start up a business, may influence the decisions of a company to invest in the host country (Djankov et al., 2002). A questionnaire to 10.000 legal practitioners was distributed due to their experience with regulation routinely. The EDB has ten indicators since 2019, and part of this research will be four indicators, which will be used as explanatory variables in explaining the business regulatory environment's impact on inward FDI.

3.2 Empirical strategy

As it is mentioned before, the aim of our empirical study is to investigate the relationship between Ease of Doing Business indicators and sustainability with inward FDI stock. The estimation will be carried out by using R statistical software. A relevant econometric method to investigate this relationship will be by making allowances for some country-specific characteristics that can drive variation in FDI stock, causing our regression of some endogeneity problems (Olival, 2012). Those country-specific variables can be unobservable and can be correlated with the regressor, and one of the key assumptions in regression analysis is that the covariance of the error term and regressors is equal to zero. Therefore, the best method to fight these problems is using a fixed-effect model. Besides this, a method such as random-effects is always more efficient. Nonetheless, despite their efficiency, fixed effects give more consistent results (Olival, 2012). On the other hand, pooled OLS can't be considered an appropriate estimation model because it estimates an inconsistent coefficient and does not give a specific effect once the fixed-effect model is available. Thus, the Hausman test is conducted to guide us for the appropriate method to be used, as also the random-effect model can be a choice.

Hausman Test

<i>Hausman Test</i>	<i>Coefficient</i>
<i>Chi-square test value</i>	112.74
<i>P-value</i>	2.2e-16
<i>Degree of freedom</i>	8

Along with this, another assumption must be considered besides the one of the maximum efficiency possible of the coefficients, such that the idiosyncratic error should have a constant variance (Olival, 2012). Breusch-Pagan test is conducted to test for the assumption with the null hypothesis of homoscedasticity. Rejecting the null hypothesis, allows us to fix this problem by using two methods: fixed effects with the robust standard error or the one with clustered standard error. As well, the assumption of no autocorrelation of the idiosyncratic error is tested by using the Breusch-Godfrey test. If we fail to reject the null hypothesis, we can conclude that there is no serial correlation, but unfortunately, in most cases, this assumption does not hold (Wooldridge, 2002, 910). This issue can be solved the same as the problem of heteroscedasticity with robust standard error.

Breusch-Pagan test

Degree of freedom	8
p-value	2.362e-06

Breusch-Godfrey test

Degree of freedom	1
p-value	2.2e-16

Furthermore, the Maddala-Wu Unit-Root Test is conducted for the stationarity of variables. In case of non-stationarity, we can adjust our econometric model by transforming it into a log form. The alternative hypothesis implies stationary, meaning in case the p-value is greater than 0.05, we fail to reject the null. Non-stationarity data are the ones that change over time, and are unpredictable and can't be modelled or forecasted.

Unit root test for all variables

<i>Unit root test</i>			
Variables	Alternative hypothesis	p-value	
Fdi stock	Stationarity	0.998	Non-stationary
EDB	Stationarity	0.1291	Non-stationary
Start	Stationarity	0.087	Non-stationary
Constr	Stationarity	1	Non-stationary
Taxes	Stationarity	0.967	Non-stationary
Inflation	Stationarity	1.872e-09	Stationary
Labor	Stationarity	0.348	Non-stationary
Per Capita	Stationarity	0.897	Non-stationary
CO2	Stationarity	0.995	Non-stationary

*** Alternative hypothesis: Stationarity

4. EMPIRICAL EVIDENCE AND DISCUSSION

4.1 Descriptive statistics of variables

Table 4.1 represents the summary of our variables in developed countries by showing the average for each variable, the maximum and minimum, and also the standard deviation. FDI inward stock measured in millions of USD has seen the maximum in the Netherlands in 2019 according to our sample. Not surprisingly, as the Dutch policy is defined by a strong international orientation and a liberal policy towards the foreign direct investment, the value reached 2.7 trillion dollars. Most Dutch companies are multinational, creating a country characterised by a very competitive fiscal policy, advanced infrastructure and a strategic location (Standard Bank, 2023). Finland, on the other hand, registered the lowest FDI stock value, with around 72 billion dollars in 2018. A typical country regarding our sample has 520 billions USD total value in inward FDI stock. The ease of doing business score with the highest value of 85.29 is seen in Denmark in 2020.

A fact about Denmark is that it is recorded among the European countries as the easiest economy to operate a business and ranked fourth in the world (Ministry of Foreign Affairs in Denmark, 2020).

The lowest score for ease of doing business is recorded in Italy, at the beginning of our period, as expected, because Italy is one of the European countries that is still below the EU average score (CT Corporation Staff, 2020).

The average score for the 12 countries of the EU part of this sample, is 76.10. The four indicators of EDB vary also in countries. Resolving insolvency has the lowest value of 35.42 in Luxembourg in 2017, while the highest value is recorded in Finland in the same year with a value of around 93.89. A typical country will have a value of resolving insolvency of about 77.68.

A significant variation in paying taxes is recorded with a minimum of 56.08 in Italy, in 2010 and a maximum of 94.62 in Ireland in 2016. Dealing with construction permits, a key indicator of doing business, has a minimum of its value 64.21, in Ireland in 2012. The country with the highest score in construction permits is Denmark in 2019. On average, in our sample, a country has a score of 75.21 corresponding to procedures, time, cost of building a warehouse, licences, and permits.

The biodiversity of Luxembourg experienced a depressing situation during the beginning of our chosen period, consequently of the density of transportation infrastructure, and urban and suburban development, resulting in higher carbon dioxide emissions (BIDOLI, 2015).

Therefore, the highest carbon dioxide emission was detected in Luxembourg, in 2010. Despite the sensibilization for lower emissions growing, and many countries are following policies to reduce pollution, Sweden is one of the EU countries that has always considered the value of the ecosystem, and as expected, the lowest carbon dioxide emission was seen there with a value of 3.405. A typical country has on average 7.957 carbon dioxide emissions per capita. The country with the highest prices in general is Belgium in 2012, while the lowest inflation rate is seen in Italy, in 2012. On average, the inflation rate is -0.90221. The highest value in the labour force is 83.13 while the lowest is 73.91. The gross domestic product per capita varies from 25,754 to 123,679, with an average of 52,478 in general. In total, in this investigation, there are 120 observations.

Table 4.1

Summary table of variables			
Variables	Mean	Min	Max
<i>FDI</i>	520,223	72,072	2,719,474
<i>EDB</i>	76.10	65.81	85.29
<i>Insolvency</i>	77.68	35.42	93.89
<i>Start</i>	68.69	88.74	94.67
<i>Taxes</i>	82.61	56.08	94.62
<i>Construct</i>	75.21	64.21	87.91
<i>Carbon dioxide</i>	7.957	3.405	21.757
<i>Inflation</i>	-0.9221	1.2478	3.5321
<i>Labour force</i>	73.91	62.02	83.13
<i>Per capita</i>	52,748	25,754	123,679

4.2 Results and discussions

Table 4.2 shows the results using business indicators, the proxy for sustainability, and macroeconomic factors as explanatory variables to investigate the variation in the inward total value of FDI stock. The conduction of the Hausman test resulted in a p-value lower than 0.05, therefore rejecting the null hypothesis that the random-effects model is preferred. On account of this, the Hausman test leads us to conclude that a fixed estimator will be used to interpret the results against

the random effects. The Hausman test is represented in Table A.1. Moreover, the Breusch-Pagan test was conducted to test for homoscedasticity in Table A.3. With a p-value lower than 0.05, the use of a fixed-effect model with robust standard error is necessary. Also, to fix the problem of serial correlation, this method is the most appropriate way to get the most efficient coefficient for our regression analysis. Unit root test is presented in Table B.2 leading us to a transform in logarithmic form and no correlation between the explanatory variables in Table A.2 was found. A more detailed explanation regarding the coefficient results is interpreted below:

Resolving insolvency shows a positive significant impact on FDI, at a 1% level of significance. According to the empirical study, an increase in resolving insolvency by 1 percent, will increase the FDI by 0.635 percent *ceteris paribus*. This coefficient and its significance justify that the legislative system related to bankruptcy by getting improved lowers the cost of the resolution process, also the burden of charges taken as a cause of failure, giving companies more opportunity to figure out the liquidity problems and helping the extension of daily operations (Lee et al., 2011). The results are consistent with previous studies such as Anggraini and Inaba (2020) and Gillanders and Corcoran (2015).

Starting a business, an indicator of ease of doing business emerges to harm FDI but is insignificant at any level of significance. As a consequence, in this investigation, we may conclude that there is no influence of such variables in a variation of our dependent variable. It was expected that advancement in procedures, and documentation of obtaining a licence would encourage investors to put money into ideas that are easy to produce. But the results did not meet our expectations, also it opposed the results of Olival (2012); Bayraktar (2023) which stated that better policies in procedures and lower cost and time to start a business influence foreigners to invest in the host country. On the other hand, Corcoran and Gillanders (2012) stated foreign direct investment is not influenced by better institutional variables.

Table 4.2

Regression analysis for developed countries

Dependent Variable	FDI stock			
Variables	Estimate	Std. Error	T-value	P-value
<i>log (insolvency)</i>	0.635	0.209787	3.0283	0.0031***
<i>log (start)</i>	0.4925	0.475016	-1.0370	0.3022
<i>log (construct)</i>	1.8018	0.541688	3.3264	0.0012***
<i>log (taxes)</i>	0.1567	0.394831	0.3971	0.6921
<i>Inflation</i>	-0.0331	0.012026	-2.7537	0.0070***
<i>log (CO2)</i>	-1.5772	0.154470	-3.7371	0.0003***
<i>log (labour)</i>	-1.4625	1.137707	-1.2856	0.2015
<i>log (per capita)</i>	0.3388	0.154958	2.1868	0.0310**
<i>F- statistic</i>	11.4679			
<i>Observation</i>	130			
<i>R- squared</i>	0.47847			

***p ≤ .01. **p ≤ .05. *p ≤ 0.1

Also, advancement in regulations and procedures to start a business is a good indicator for an economy, but is not one of the main influences on attractiveness of foreigners (Independent Doing Business Report Review Panel, 2013), but, contrarily, Zhang (2007) stated that if the cost of starting a business are decreased especially in heavily regulated countries, than more inward investment from foreigners will be conducted. Dealing with construction permits shows a significant and a positive link in relation with FDI, by increasing it by 1.802 %, for each percentage increase of construction permit. As the quality of construction is strengthened, being evaluated as a strong secured building, with insurance regimes and professional certification requirements, it attracts investors more to invest in the host country (TheWorld, 2020). Many researchers have concluded that a better index of construction permits has always increased foreign direct investment in host countries. This strong impact on FDI was found by many other authors such as Junior et al., (2016), Anggraini and Inaba (2020).

Another sub-indicator showing a positive impact on FDI is paying taxes but is statistically insignificant. Based on our regression analysis, we may conclude that there is no impact of this indicator on explaining the variation of our dependent variable. Improvements in tax incentives were thought to charm business people with higher profits due to tax deductions. According to Hassan et al., (2018), the insignificant impact of taxes on inward FDI can be explained by corruption and its influence on the economy. If we take into consideration the global average corruption index is around 43, implying that two-thirds of the world has been impacted by corruption. Corruption not only reduces the collection of tax revenue but also hinders economic growth and impacts future tax collection (Transparency International, 2017). The coefficient regarding paying taxes was found to have the same results as (Dornean et al., 2021), (Olival, 2012) for their specific chosen samples.

As mentioned, the concern of economic growth, municipal waste, and carbon dioxide emissions, has led to broadening the education of people for less harmful activities. If the carbon dioxide emissions are increased by one percent, we expect the foreign direct investment to fall by 1.57 percent *ceteris paribus*. In other words, if the host country abuses its environment, resulting in degradation, business people's satisfaction to invest there is decreased. We can prove our hypothesis, countries with the concern of sustainability are more likely to captivate more investors, due to sensibilization for a "clean" country. This results that many projects are leading towards green movements for lower pollution emissions to save the place for future generations.

Regarding the macroeconomic variables, inflation and gross domestic product per capita has a significant impact while labour force participation seems to not influence at all. A general increase in prices in host countries, while causing the foreign direct investment to fall by 0.031 percent *ceteris paribus*. Appropriately, investors seek to invest in places with lower costs of production, recording more profits on their investments. On the other hand, if the gross domestic product per capita increases by 1 percent we expect the FDI to increase by 0.34 percent *ceteris paribus*. Overall, as the standard of living increases, more investors are willing to put money to have better quality because FDI is attracted as citizens of the host country live more comfortably and they become more educated and better at helping in the production of new products and investment. Overall, with an R-squared of around 47 percent, we can conclude that our explanatory variables explained the variation of FDI.

CONCLUSION

5.1 Overall conclusion

The enhancement of reforms regarding the regulatory system of a business environment implies the establishment of security of organisations to invest in the host country. Using panel data for the European Union countries, this research paper concludes that the overall ease of doing business has a great impact on attraction of inward foreign direct investment in the host country. In addition,

dealing with construction permits and resolving insolvency, can be concluded as strong sub-indicators on impacting the FDI. Based on the sample used, starting a business and paying taxes were thought to have a positive effect in our dependent variable but found to be insignificant in any level of significance. In general, based on the first regression model, we can conclude that improvement in the reforms of regulations drives more foreigners to invest in the host country.

Secondly, the relationship between sustainability and inward foreign direct investment was another aim of this study. As the global temperature has risen in the last two decades, the sensibilization of people to prevent this global issue has been injected to people in early ages. As a result many organisations are aiming for projects that do not harm the environment. The proxy used for sustainability, was found to have a negative impact on driving more inward FDI. If the carbon dioxide emissions are increased by one percent, we expect the foreign direct investment to fall by 1.57 percent *ceteris paribus*. This results in that overall, carbon emissions are not preferable while investing in foreign industries. Also, **Table 4.1** represents the minimum and the maximum of carbon emission. Based on the period of time from 2010 to 2020, the carbon emissions have been falling in almost all countries of our sample. Many governments have taken responsibility for putting restrictions on activities of citizens so they can reduce the carbon footprint.

5.2 Policy implementation

As it was mentioned, not all the sub-indicators of Doing Business had an impact on the dependent variable. However, the centre of attention for each economy must be all the indicators, so there will be an improvement even in other sub-indicators that were found insignificant. Based on the Doing Business report, it takes into account all its components, therefore, a decrease in one of the indicators results in a reduction in the overall ease of doing business score. Governments should attempt to advance the regulation of all components, sending signals to investors for investing in their country.

Starting a business in a host country is a process requiring many steps. For better implementation of this indicator, a reduction in the minimum capital requirement, also the execution of documentation online simplifies the inescapable process. The case of Austria can be mentioned, for its contribution to lowering the minimum capital required to start a business, while Belgium chose to eliminate the whole of it (TheWorldBank, 2020). Concerning the process of paying taxes, an organisation would not like to invest in countries with dual taxes but prefers simplification of this process having the possibility of online access to fill and pay the taxes. Finland was one of the first countries to allow online access to each business for paying taxes (TheWorldBank, 2020). Besides this, decides to lower the overall income tax. Also, procedures for setting up a business and the release of whole documents, and licences should be reduced so the companies who are putting money in the host might find fewer difficulties. Denmark helped the investor by removing the fees for building permits, by making it cheaper to invest, while Norway lowered the time needed to obtain a building permit (TheWorldBank, 2020). Dissemination of information about the reforms in the business environment and regulations is crucial, especially for new investors. Governments should give more opportunities to business people, and educate them more, especially the new ones, as they are not aware of the investment climate and the impact on what they yield.

5.3 Limitation of the study

As it was concluded, most of our explanatory variables were found significant and positively influencing the dependent variables. Even though the results were as we expected, still they might be considered. Each economy has its characteristics, some might be wealthy due to their natural resources, while others to human capital. This characteristic defines the economy of a country and might influence foreign direct investment. Although a country might be known for the best regulatory system and with the awareness of sustainability, it still may not be the desired destination for investors to invest due to some specific features of itself.

Bibliography

- Abid, M. (2016, August). Impact of economic, financial, and institutional factors on CO2 emissions: Evidence from Sub-Saharan Africa economies. *Utilities Policy*, 41, 85-94. Retrieved May 1, 2023, from <https://www.sciencedirect.com/science/article/abs/pii/S0957178716301552?via%3Dihub>
- Ali, M. (2021, September 10). (PDF) *The Impact of Public-Private Partnership Investment in Energy and Technological Innovation on Ecological Footprint: The Case of Pakistan*. ResearchGate. Retrieved June 3, 2023, from https://www.researchgate.net/publication/354495850_The_Impact_of_Public-Private_Partnership_Investment_in_Energy_and_Technological_Innovation_on_Ecological_Footprint_The_Case_of_Pakistan
- Anggraini, R., & Inaba, K. (2020, September). The Impact of the Ease of Doing Business on Foreign Direct Investment. *THE RITSUMEIKAN ECONOMIC REVIEW*, 69(3), 93. Retrieved April 3, 2023, from http://ritsumeikeizai.koj.jp/koj_pdfs/69305.pdf
- Bayraktar, N. (2015, January 19). (PDF) *Foreign Direct Investment and Investment Climate*. ResearchGate. Retrieved April 2, 2023, from https://www.researchgate.net/publication/273865539_Foreign_Direct_Investment_and_Investment_Climate
- BIDOLI, A. (2015, February 18). *Luxembourg country briefing - The European environment — state and outlook 2015*. European Environment Agency. Retrieved May 16, 2023, from <https://www.eea.europa.eu/soer/2015/countries/luxembourg>
- Blonigen, B., & Piger, J. (2011). Determinants of Foreign Direct Investment. *NBER Working Paper*.
- Camarero, M., & Montolio, L. (2019). *What drives German foreign direct investment? New evidence using Bayesian statistical techniques | Request PDF*. ResearchGate. Retrieved May 11, 2023, from https://www.researchgate.net/publication/335818502_What_drives_German_foreign_direct_investment_New_evidence_using_Bayesian_statistical_techniques
- Chipalkatti, N. (2022). *Sustainability and Society: Do Environmental, Social, and Governance Factors Matter for Foreign Direct Investment?* MDPI. Retrieved May 1, 2023, from <https://www.mdpi.com/1996-1073/14/19/6039>
- CT Corporation Staff. (2020, January 7). *Denmark continues to be the easiest place in Europe to do business*. Invest in Denmark. Retrieved May 16, 2023, from <https://investindk.com/insights/denmark-continues-to-be-the-easiest-place-in-europe-to-do-business>
- DJANKOV, S., LA PORTA, R., LOPEZ-DE-SILANES, F., & SHLEIFER, A. (2002). *THE REGULATION OF ENTRY*. THE QUARTERLY JOURNAL OF ECONOMICS.
- Doing business indicator*. (2020). Economy and Finance. Retrieved April 1, 2023, from https://economy-finance.ec.europa.eu/eueconomyexplained/graphs-economic-topics/doing-business-indicator_en

Donaubauer, J., Meyer, B., & Nunnenkamp, P. (2016, February 27). Aid, Infrastructure, and FDI: Assessing the Transmission Channel with a New Index of Infrastructure. *World Development*, 78, 230-245. <https://www.sciencedirect.com/science/article/abs/pii/S0305750X15002375>

Dornean, A., Irina, C., & Rusu, V. (2021, December 10). (PDF) *Linking FDI and Sustainable Environment in EU Countries*. ResearchGate. Retrieved April 3, 2023, from https://www.researchgate.net/publication/357346930_Linking_FDI_and_Sustainable_Environment_in_EU_Countries#pdf

Dunning, J. (1980). *Toward an Eclectic Theory of International Production: Some Empirical Tests*.

Ebero, E., & Begum, M. (2016, March 05). The desirability of Doing Business and Flow of Foreign Direct Investment nexus: The Case of Ethiopia. *International Research Journal of Engineering and Technology*, 03(05), 2049-2057. Retrieved May 18, 2023, from <https://www.irjet.net/archives/V3/i5/IRJET-V3I5421.pdf>

Fahmi, M. R. (2012). *ANALYSING THE RELATIONSHIP BETWEEN TAX HOLIDAY AND FOREIGN DIRECT INVESTMENT IN INDONESIA*. CORE. Retrieved April 16, 2023, from <https://core.ac.uk/download/pdf/60541191.pdf>

FTSE Russell. (2023, March 20). *Equity Country Classification*. FTSE Russell. Retrieved May 16, 2023, from <https://www.ftserussell.com/equity-country-classification>

Gillanders, R., & Corcoran. (2015, December 2). (PDF) *Foreign Direct Investment and The Ease of Doing Business*. ResearchGate. Retrieved April 3, 2023, from https://www.researchgate.net/publication/241767916_Foreign_Direct_Investment_and_The_Ease_of_Doing_Business

Gizam, G., Kefelegn, H., Minwuye, B., & Berihun, D. (2023). Impact of business regulations on foreign direct investment inflows and economic growth in East African countries. *Cogent Economics & Finance*, 11(1).

Göndör, M. (2022, November 3). (PDF) *Fiscal Policy and Foreign Direct Investment: Evidence from some Emerging EU Economies*. ResearchGate. Retrieved April 6, 2023, from https://www.researchgate.net/publication/275542053_Fiscal_Policy_and_Foreign_Direct_Investment_Evidence_from_some_Emerging_EU_Economies

Haliti, B., Merovci, S., & Hetemi, A. (2019). The Impact of the Ease Doing Business Indicators on Foreign Direct Investment in the European Transition Economies. *Ekonomika*, 98(2), 19-32. Retrieved April 3, 2023, from <https://www.journals.vu.lt/ekonomika/article/view/14566/14509>

Hassan, Z., Hossain, M., Basit, A., & Shafiq, S. (2018, July 25). (PDF) *Ease of Doing Business and Its Impact on Inward FDI*. ResearchGate. Retrieved April 1, 2023, from https://www.researchgate.net/publication/326588273_Ease_of_Doing_Business_and_Its_Impact_on_Inward_FDI

Independent Doing Business Report Review Panel. (2013, June 24). *Independent Panel Review of the Doing Business report June 2013*. World Bank. Retrieved May 21, 2023, from <https://thedocs.worldbank.org/en/doc/237121516384849082-0050022018/original/doingbusinessreviewpanelreportJune2013.pdf>

Junior, A. a., Ekwelle, E. M., & Njei, G. (2016). *The Impact of Business Climate on Foreign Direct Investment in the CEMAC Region*. CORE. Retrieved May 21, 2023, from <https://core.ac.uk/download/pdf/234647707.pdf>

Klazar, S. (2002). *Tax Competition for FDI in Central-European Countries*. EconStor. Retrieved April 2, 2023, from <https://www.econstor.eu/handle/10419/76066>

Lee, S.-H., Yamakawa, Y., & Peng, M. W. (2011). How do bankruptcy laws affect entrepreneurship development around the world? *Journal of Business Venturing*, 26(5), 505-520. <https://www.sciencedirect.com/science/article/abs/pii/S0883902610000546#:~:text=An%20automatic%20stay%20of%20assets%20specified%20by%20bankruptcy%20laws%20will,increase%20the%20cost%20of%20financing.>

Lee, S.-H., Yamakawa, Y., & Peng, M. W. (2011). How do bankruptcy laws affect entrepreneurship development around the world? *Journal of Business Venturing*, 26(5), 505-520. <https://www.sciencedirect.com/science/article/abs/pii/S0883902610000546#:~:text=An%20automatic%20stay%20of%20assets%20specified%20by%20bankruptcy%20laws%20will,increase%20the%20cost%20of%20financing.>

Longnow, V., Fuchs, F., & Beham, F. (2022, May). The link between corporate sustainability and willingness to invest: new evidence from the field of ethical investments. *Management control*, 33, 335-369. <https://doi.org/10.1007/s00187-022-00340-z>

Mahmuni, K., & Bonga, W. (2017, February 28). (PDF) *Nexus Between Doing Business Indicators and Foreign Direct Investment for Zimbabwe: A Time Series Analysis*. ResearchGate. Retrieved April 2, 2023, from https://www.researchgate.net/publication/314095383_Nexus_Between_Doing_Business_Indicators_and_Foreign_Direct_Investment_for_Zimbabwe_A_Time_Series_Analysis

Ministry of Foreign Affairs in Denmark. (2020). *Denmark continues to be the easiest place in Europe to do business*. Invest in Denmark. Retrieved May 16, 2023, from <https://investindk.com/insights/denmark-continues-to-be-the-easiest-place-in-europe-to-do-business>

Morgan, J. (2020, July 1). *Why COVID-19 Could be a Major Turning Point for ESG Investing*. J.P. Morgan. Retrieved May 1, 2023, from <https://www.jpmorgan.com/insights/research/covid-19-esg-investing>

North, C. (1990). Institutions, Institutional Change and Economic Performance by Douglass. *Journal of Policy Analysis and Management*, 11, 4.

Oggini, B. (2010). *Business organic management*.

Olival, A. (2012). *The influence of Doing Business' institutional variables in Foreign Direct Investment*. GEE. Retrieved April 2, 2023, from https://www.gee.gov.pt/RePEc/WorkingPapers/GEE_PAPERS_48.pdf

Piwonski, K. (2010, April). *Does the 'Ease of Doing Business' In a Country Influence its Foreign Direct Investment Inflows?* Bryant Digital Repository. Retrieved April 2, 2023, from https://digitalcommons.bryant.edu/cgi/viewcontent.cgi?article=1012&context=honors_finance

- Popescu, I. S., Hitaj, C., & Bennetto, E. (2021, September 10). Measuring the sustainability of investment funds: A critical review of methods and frameworks in sustainable finance. *Journal of Cleaner Production*, 314. <https://www.sciencedirect.com/science/article/pii/S0959652621022344>
- Rathburn, P. (2023, March 27). *Direct Foreign Investment (FDI): What It Is, Types, and Examples*. Investopedia. Retrieved May 30, 2023, from <https://www.investopedia.com/terms/f/fdi.asp>
- Saucedo, E., & Zamora, H. (2020). *The effect of FDI on low and high-skilled employment and wages in Mexico*. https://www.researchgate.net/publication/342900505_The_effect_of_FDI_on_low_and_high-skilled_employment_and_wages_in_Mexico_a_study_for_the_manufacture_and_service_sectors
- Standard Bank. (2023). *Foreign direct investment (FDI) in the Netherlands - Standard Bank TradeClub*. Trade Club. Retrieved May 16, 2023, from <https://www.tradeclub.standardbank.com/portal/en/market-potential/netherlands/investment#>
- Svejnar, J. (2015, May 13). (PDF) *Explaining the performance of firms and countries: What does the business environment play?* ResearchGate. Retrieved May 30, 2023, from https://www.researchgate.net/publication/46449613_Explaining_the_performance_of_firms_and_countries_What_does_the_business_environment_play
- TheWorldBank. (2020). *Business reforms made in the Dealing with Construction Permits*. Doing Business. Retrieved June 3, 2023, from <https://archive.doingbusiness.org/en/reforms/overview/topic/dealing-with-construction-permits>
- Transparency International. (2010). *Headline Headline Headline Headline Head-line Headline Headline*. Transparency International. Retrieved May 21, 2023, from https://www.transparency.org/files/content/corruptionqas/228_Exploring_the_relationships_between_corruption_and_tax_revenue.pdf
- Tsaurai, K. (2018). Investigating the Impact of Inflation on Foreign Direct Investment in Southern Africa. *Acta Universitatis Danubius*, 14(4), 597-611. <https://www.ceeol.com/search/article-detail?id=734022>
- United Nations. (1987). *Sustainability*. <https://www.un.org/en/academic-impact/sustainability>
- Wang, Q., & Zhang, Q. (2021, May). Foreign Direct Investment and Carbon Emission Efficiency: The Role of Direct and Indirect Channels. *Energy Economics*, 97. <https://www.sciencedirect.com/science/article/abs/pii/S0140988321001171>
- Wooldridge, J. (2002). *Introductory Econometrics: A Modern Approach*.
- The World Bank. (2020). *CO2 emissions (metric tons per capita) | Data*. World Bank Data. Retrieved May 9, 2023, from <https://data.worldbank.org/indicator/EN.ATM.CO2E.PC>
- The World Bank. (2023). *Ease of doing business score (0 = lowest performance to 100 = best performance) | Data*. World Bank Data. Retrieved May 9, 2023, from <https://data.worldbank.org/indicator/IC.BUS.DFRN.XQ>
- Zhang, H. (2012, October). Regulations, Business Taxes, and Foreign Direct Investment. *Transnational Corporations Review*, 4, 23.