FOREIGN DIRECT INVESTMENTS IN THE CIS COUNTRIES AND THEIR RELIANCE ON THE WORLD BANK'S DOING BUSINESS INDICATORS

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Abstract. Foreign direct investment (FDI), especially inflows, has been seen as an important source of technology spillover, improvement in efficiency and growth from the recipient country point of view. FDI plays very significant role for the development of countries of Commonwealth of Independent States (CIS) since they help to reduce the economic and social costs of transformation. There are many different factors which are considered as possible determinants of FDI. The Doing Business (DB) indicators provided by the World Bank are one of the groups of the comprehensive factors for attracting FDI.

The aim of the paper is to identify the most relevant DB sub-indices essential for the investment attractiveness of CIS countries and to prove their significance to FDI performance in those countries. The research methods used in this paper are scientific abstraction, comparative analysis, statistical methods including correlation and regression analysis.

The paper concentrates mostly on empirical issues and presents the results of analysis of the trends of FDI inflows to the CIS countries comparing with the world as a whole, the results of correlation analysis between DB overall index, FDI inflows and FDI inward stock per capita in the CIS countries, the results of regression analysis using the most relevant DB sub-indices and FDI inward stock per capita in the CIS countries. Using correlation and regression analysis the author established that there is a strong link between DB sub-indices "Resolving insolvency", "Protecting minority investors" and FDI inward stock per capita in the CIS countries at the post-crisis period (2016-2018).

The findings may help CIS countries to improve their business climate in terms of the particular areas of ease of doing business, in order to attract more FDI. It advances understanding of the determinants of the FDI inward stock and may be particularly useful to international organizations seeking to do business in the CIS countries. A proposed logical framework of the analysis might be useful for the conducting similar studies.

Keywords: *Foreign direct investment, Doing Business indicators, Pearson Correlation value, linear regression.*
JEL code: F21, F23, F36

Introduction

The importance of FDI for recipient countries cannot be underestimated. Foreign direct investment flows have increased with the economic globalization and technological advances in the fields of information, communication and transportation since 1980s. They played a key role in rapid growth of some countries (Bayar and Ozel, 2014). From the point of view of the recipient country FDI contributes to at least four things of value: financial capital, management skills, technology, and access to export markets, and therefore helps to sustain growth (Baniak, 2003). FDI, especially inflows, has been seen as an important source of technology spillover, improvement in efficiency and growth. Thus, FDI has been studied extensively in the literature.

Different factors are considered as possible determinants of FDI such as labor costs, level of human capital, returns to investment, trade openness, financial openness, the size of countries, natural resources endowment, macroeconomic and political determinants, taxes, as well as investment climate in recipient countries (Bayraktar, 2013)

One of numerous definitions of FDI is given in the Balance of Payments Manual of the International Monetary Fund (1993): Foreign direct investment refers to an investment made to acquire lasting interest in enterprises operating outside of the economy of the investor. Further, in cases of FDI, the investor's purpose is to gain an effective voice in the management of the enterprise. From the other side, World Bank's Doing Business indices intend to show how friendly the business environment is for starting and successfully performing the economic activities in particular country.

Based on this definition, Doing Business indicators and "ease of doing business" must be one of the important factors motivating higher inflows of FDI. The environment in which firms feel more secure in terms of doing business should be able to help attract more foreign investment to this country (Bayraktar, 2013).

Despite the existence of numerous papers the link between Doing Business indices and FDI performance of recipient has not been studied properly. One of unexplored areas is the understanding of relationship mentioned above for CIS countries. The distinctive feature of these countries is that the inflow of foreign capital was considered as one of the main factors making it possible to reduce the economic and social costs of transformation. And all the governments of CIS countries (excluding Turkmenistan) tend to set ambitious goals in order to get better Doing Business rankings.

Therefore, the author sets forward the aim of the research: to identify the most relevant DB sub-indices essential for the investment attractiveness of CIS countries and to prove their significance to FDI performance in those countries.

According to the research aim, the author intends to study the recent research findings of relation between countries' FDI performance and their progress in DB indices raising. In order to achieve above-mentioned aim, the following tasks are set out:

- to study the methodology of the similar relationships analysis;
- to reveal recent trends in FDI globally and in the CIS countries in particular;
- to test the link between DB overall indices and FDI (inflows and inward stock per capita) in the CIS countries;
- to make a multiple regression model on the base of the most relevant DB sub-indices influenced on attracting FDI to the CIS countries;
- to develop general recommendations, required for the enhancement of investment and business climate at the CIS countries.

In the analysis presented in this paper the author focuses mostly on three research gaps: taking into account specific features of the influence of DB indicators at FDI in the CIS countries, studying the link between scores of DB indices and FDI inward stock per capita, and finding the most significant DB sub-indices for FDI performance in that countries. These relationships appear to be of great importance when governments make decisions concerning the enhancement of investment climate. Furthermore, the author intends to demonstrate that increased business and legal instability leads to adverse selection of the investors and prove that in order to expect significant inflow of long-term non-speculative foreign capital a stable economic and legal environment is needed.

This research is based on a comprehensive review of the literature focusing on FDI reliance on DB indices and utilises the applied methods of scientific abstraction; comparative analysis; statistical tests including correlation and regression analysis. The paper focuses mostly on empirical outlook using the proper methodology.

This paper's theoretical and methodological underpinnings are data provided by the United Nations Conference on Trade and Development (UNCTAD), the World Bank, research, conducted by scientists from both developing and developed countries, and Internet sources.

Literature review

A growing number of studies in the economic literature have been focusing on the role of the investment climate, concerning both foreign investment regime and general investment environment, as an important factor in attracting FDI inflows to the developing countries and transition economies.

A favorable business environment is believed to be important for both domestic and foreign investment and for the development of private sector. This is supported by a growing consensus in economic literature that, specifically, the attractiveness of a given country as a host to foreign investors is determined not only by its comparative advantages in international production but also by its domestic investment climate (Nnadozie and Njuguna, 2011).

Despite the fact that there is no general agreement on which factors affect FDI attractiveness, the importance of business climate is gaining ground in recent years. Although the motivation of reforming the business environment is not limited only to FDI attraction, it is a fact that 119 countries implemented at least one regulatory reform between 2016 and 2017 in order to make the processes of creation and operation of businesses easier (World Bank, Doing Business 2018).

The "Doing Business" is an annual survey comprising of numerous "ease of doing business" indicators. There are different variables defining "ease of doing business". The World Bank provides comparable measures of several elements of business regulations: starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts and resolving insolvency. The indicators are available for 190 countries. They are updated on an annual basis and addresses the concerns any organization might have prior to make an investment decision in a foreign nation (Hossain et al, 2018).

Methodology of the database is based on the survey conducted in collaborations with academic professionals. Each question is based on the scenario how a firm would react to the improvement of business climate. The survey is distributed annually to nearly 8 000 local experts per economy, such as lawyers, consultants, accountants, supply chain professionals, government officials, and other businesspeople routinely administering or consulting foreign firms. The methodology also includes direct contacts with the professionals (World Bank, Doing Business 2018).

There are some empirical studies focusing on the link between FDI and "doing business" indicators. Piwonski (2010) for example shows that by increasing their country's Ease of Doing Business rank one level, a government can attract in over USD 44 million as FDI. Using a multivariate regression model, the study uses the rankings of countries as a measure of doing business. The researcher finds that there is a strong link between the ranks of countries and FDI inflows.

Morris and Aziz (2011) study the relationship between factors that affect business initiation and the inflow of FDI to Sub-Saharan Africa and Asian countries (57 countries in total). They focus on correlation coefficients between the sub-indices of Doing Business and FDI inflows. They find that two indicators, "registering property" and "trading across borders," were related to FDI inflows. Their paper provides empirical support to the hypothesis that FDI is related to business climate. However, their research did not rely on sophisticated statistical analysis, like regression for example.

Nnadozie and Njuguna (2011) investigate the link between investment climate, in particular the prevailing business regulations, and FDI in the Africa region. After running regressions which use business regulations as one of the independent variables, they find that business rules and regulations are important for successful FDI attraction.

Similar papers often suggest that higher Doing Business rankings will be associated with more foreign investment, which is believed to create jobs, bring in new technologies and processes and have other beneficial collateral effects on the real economy. And many senior government officials have suggested that a better ranking for an economy implies that its investment climate is more favorable to a foreign investor (World Bank, Doing Business 2013).

Past scientific literature has advanced the understanding of the impact Doing Business indices and sub-indices on inward FDI. For example, Shahadan et al. (2014) demonstrated that starting a business, dealing with construction permits, registering property, getting credit, protecting investors, trade across borders and enforcing contracts indexes have been directly and significantly associated with FDI inflow in Asian economies.

It should be noted, that the majority of empirical studies use the comprehensive Doing Business indicators to investigate the relationship between a country's business regulatory system and the attraction of foreign investment. Some papers suggest that entry business regulation can play a critical role in determining the level of inward FDI.

Those studies assert that shorter time, smaller costs and ease in procedures required to start a company lead to higher FDI inflows (Bayraktar, 2013; Shahadan et al., 2014; Vogiatzoglou, 2016). On the other hand, another group of researchers found that improvements in some Doing Business sub-indices do not necessarily lead to higher FDI inflows, revealing an insignificant relationship between the two variables (Morris and Azis, 2011; Corcoran and Gillandres, 2015; Hossain et al., 2018).

In order to systematize the methods of analysis, samples and different approaches used by the different scientists the Table 1 has been constructed.

Table 1

Characteristics of main relevant studies

Author and year	Title	Number of countries	Dependent variable	Independent variables	Type of model
Piwonski (2010)	Does the "Ease of Doing Business" in a Country Influence its Foreign Direct Investment Inflows?	171	FDI inflow	DBI (rank)	dynamic
Morris and Aziz (2011)	Ease of doing business and FDI inflow to Sub-Saharan Africa and Asian countries	57	FDI inflow	All sub-indices (scores)	static
Bayraktar (2013)	Foreign Direct investment and Investment Climate	144	FDI, % of world flows	All sub-indices (scores)	static
Shahadan, Sarmidi, Faizi (2014)	Relationships between Doing Business Indexes and FDI Net Inflows: Empirical Evidence from Six Asian Countries (Afghanistan, Bangladesh, India, Iran, Pakistan and Sri Lanka)	6	FDI inflow	All sub-indices (scores)	panel data model
Corcoran and Gillanders (2012)	Foreign Direct Investment and The Ease of Doing Business	53	FDI inflow	All sub-indices (ranks)	static
Vogiatzoglou (2016)	Ease of Doing Business and FDI Inflows in ASEAN	9	FDI inflow	All sub-indices (scores)	static
Mahuni and Bonga (2017)	Nexus Between Doing Business Indicators and Foreign Direct Investment for Zimbabwe: A Time Series Analysis	1	FDI inflow	All sub-indices (scores)	dynamic
Hossain et al. (2018)	Ease of Doing Business and Its Impact on Inward FDI	177	FDI inflow	5 sub-indices (scores)	static

Source: author's construction based on literature review

It is possible to conclude that studies have been conducted both for small and wide ranges of countries. The prevailing objects of studies are developing countries mostly from Asia and Africa. Researchers predominantly used static regression models as well as dynamic econometric models in order to achieve their aims.

While agreeing with the majority of studies the author considers that scores of Doing Business indicators are better measures than their rankings for the purpose of regression analysis first of all due to the changing numbers of countries rated. Besides in some DB indicators the difference in scores is minimal, while the range in rankings can be more significant at the same time.

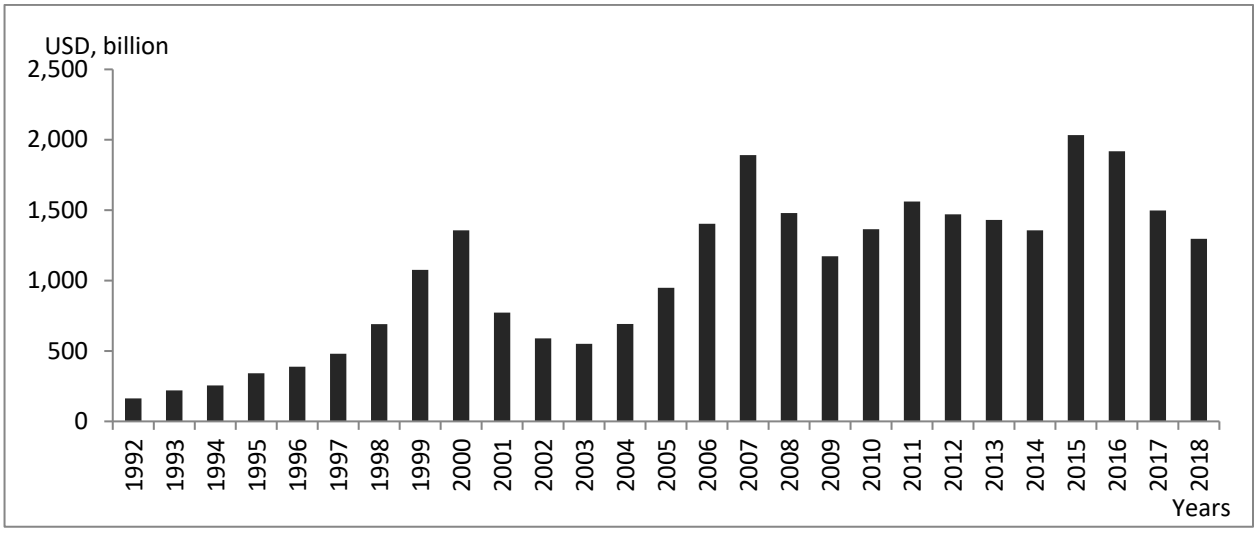
There are no studies exploring similar relationships for CIS countries or transition economies. Besides as it is shown in Table 1 there is no research which used FDI inward stock as a dependent variable. And most of the authors consider either overall DB index score/ranking or all of its sub-indices.

The following section examines trends of FDI inflows globally and in the CIS countries in particular. One of their main recent specific features is the economic crisis in the years 2014-2015 concerned with the conflict in Ukraine and sanctions towards Russian Federation.

Research results and discussion

Sub-section 1 Recent trends in FDI

The Commonwealth of Independent States was created at the end of the year 1991 and CIS countries first time separately reported about FDI in the year 1992. In order to provide data in the comparable format the analysis of the FDI inflows trends was conducted between 1992 and 2018. The Figure 1 illustrates the global FDI inflows.

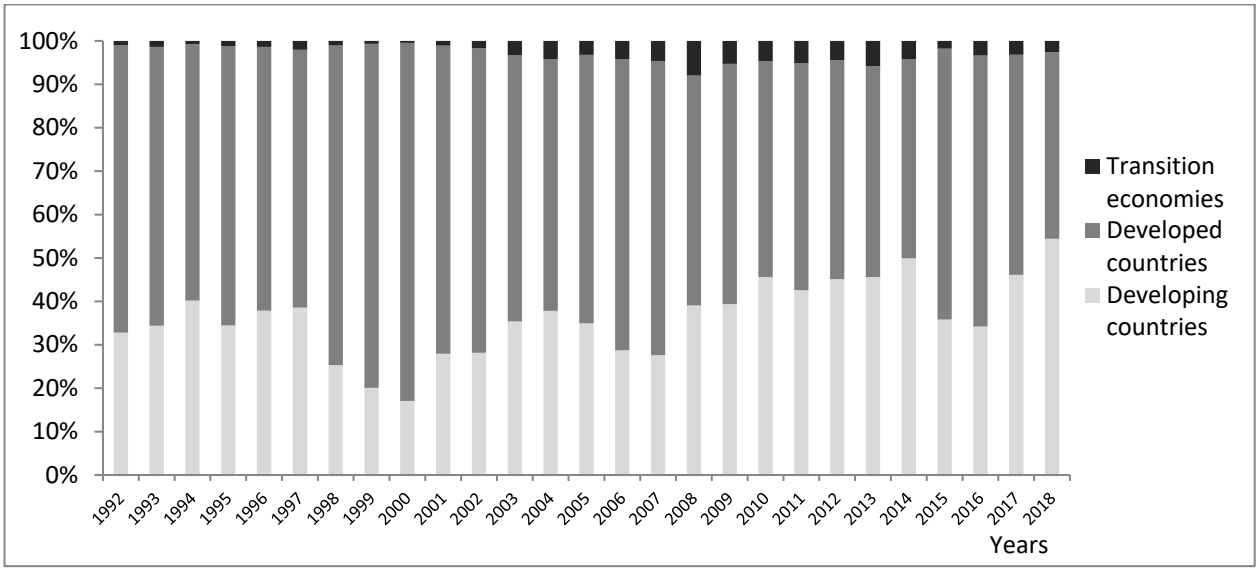


Source: UNCTADstat data

Fig.1. **The global FDI inflows**

According to this figure there have been three "peaks" in world FDI inflows in recent years: namely in the years 2000, 2007 and 2015. The historical maximum (more than USD 2 trillion) was achieved in the year 2015. The first period of significant growth of FDI global inflows was observed in the years 1997-2000. The second period of growth took place in the years 2004-2007. Then there were 6 years of instability after global financial crisis in the 2008. In 2015 the growth rate was almost 1.5 times higher to the year 2014. During the last three years there has been a significant slowdown. In the year 2018 FDI inflow has decreased to the level even lower than in the year 2010.

Next figure demonstrates the structure of world FDI inflows. According to UNCTAD classification three generalized groups of countries are highlighted: developed countries, developing countries, transition economies.



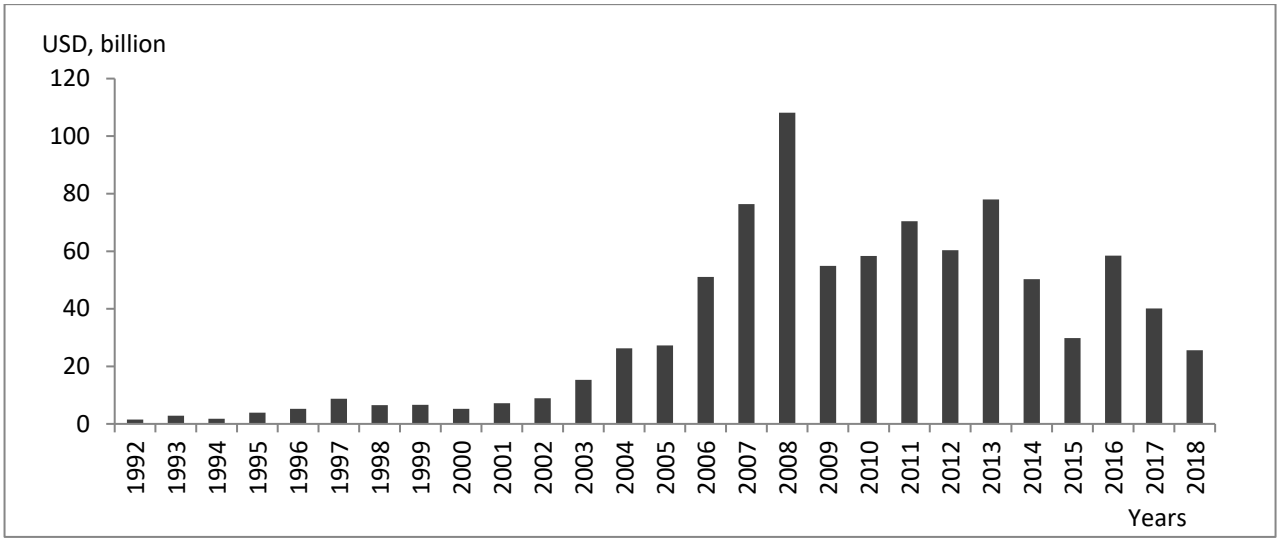
Source: author's construction based on UNCTADstat data

Fig.2. **The structure of global FDI inflows**

The figure clearly shows that "peaks" at the global FDI inflows are accompanied by the drop in the share of FDI inflows in developing countries (in the year 2000 – 17.1 %, in the year 2007 – 27.6 %, in the year 2015 - 35.8 %). From the one side this demonstrates the tendency to invest in protective assets. From the other side the growing share just mentioned above illustrates that global investors tend to take more risk. The growing share of developing countries is observed in last two years. Comparing this tendency with data on Figure 1, it might be concluded that the interest to invest in developing economies tends to be a mainstream in recent years. In the year 2018 the share of developing countries of world FDI inflows (54.4 %) first time exceeded 50 %. Also in 2018 the minimal share of developed countries was observed – only 42.9 %. One of the drivers is a growing "risk-appetite" of investors in the years 2017-2018.

The share of countries with transition economies is not so large. The most significant achievement is 8 % of the world FDI inflows in the year of 2008 mostly due to record-high growth of oil prices in the first part of this year. Then the share was unstable dropping for example even to 1.8 % in the year of 2015. It should be noted that the share of FDI inflows in the CIS countries varies from 82 % to 98 % in FDI inflows to transition economies.

There are some discussed questions in limitations of countries included in CIS. For example, Turkmenistan is an associated member of CIS. According to some sources Ukraine does not belong to CIS, but initially in December 1991 the agreement was signed by the leaders of Ukraine, Belarus and Russia. Besides in World Investment Report – 2019 "Special Economic Zones" (UNCTAD, 2019) Ukraine is included in CIS and its FDI inflows are summarized there. Georgia left CIS in 2008. Therefore, we include in our overall analysis showed at Figure 3, 11 countries: Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Moldova, Russian Federation, Ukraine, Tajikistan, Turkmenistan, Uzbekistan.

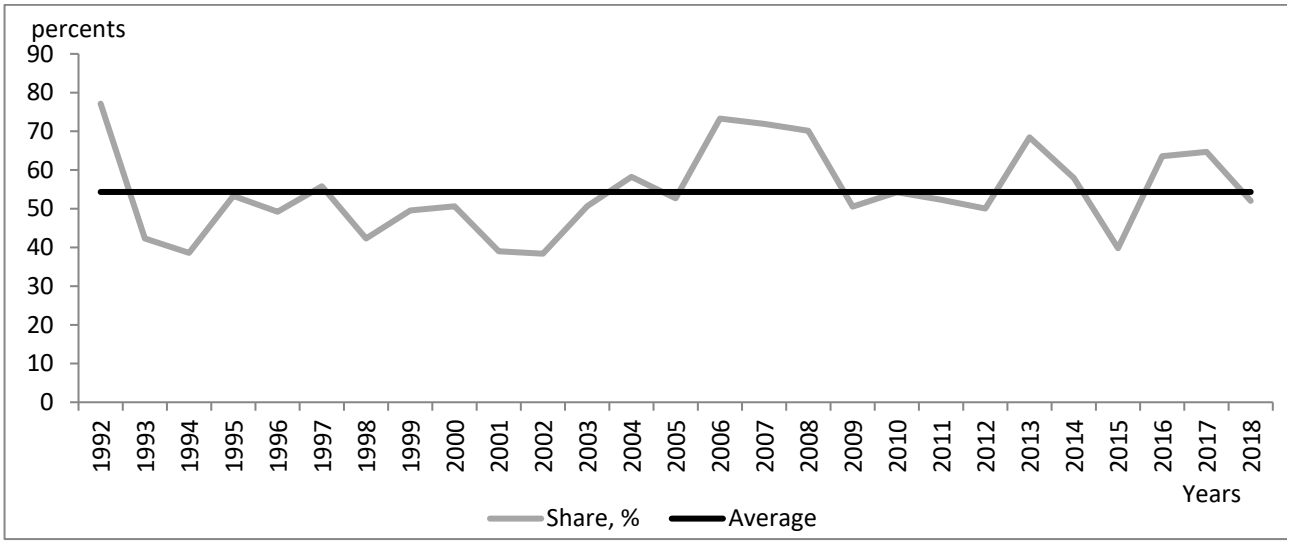


Source: author's construction based on UNCTADstat data

Fig.3. **FDI inflows in the CIS countries**

The period of significant growth of FDI inflows in CIS countries began in 2006. During that period the FDI inflow in CIS country increased nearly twice comparing to the level of previous year. Such rapid growth occurred also in the years 2007 and 2008. Comparing with the tendencies in world FDI inflows here there is only one "peak" in the year of 2008 (USD 108.1 billion). Moreover, the conflict in Ukraine, followed sanctions towards Russian Federation and dropping oil prices led to the decline of FDI inflows in the year of 2015 to USD 29.8 billion.

The Figure 4 demonstrates the role of Russian Federation in FDI inflows of CIS countries.



Source: author's construction based on UNCTADstat data

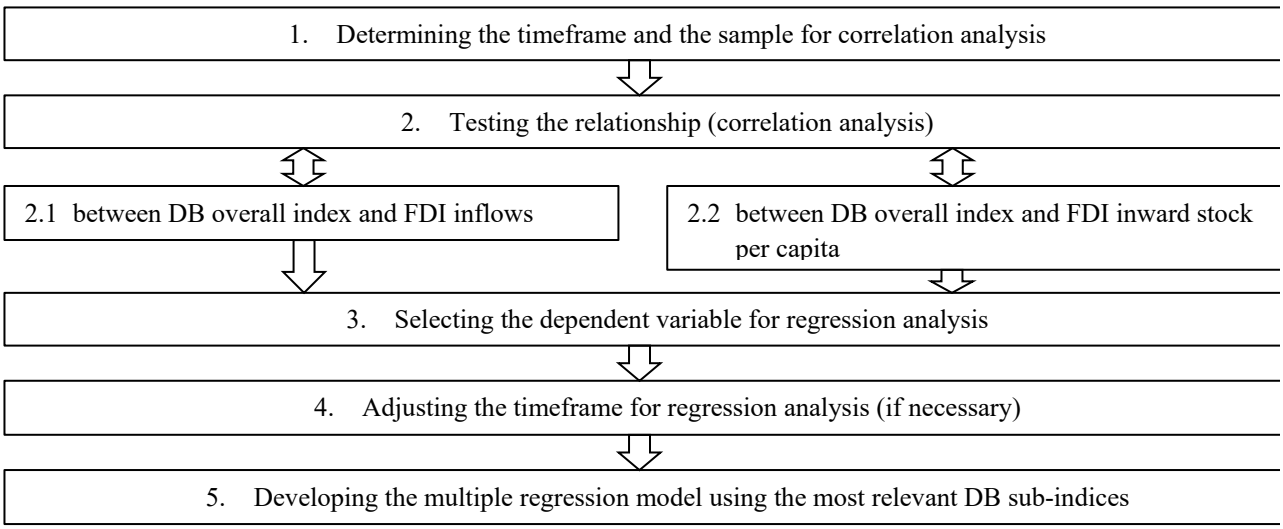
Fig.4. **The share of Russian Federation in FDI inflows to the CIS countries**

Russian Federation with average share of 54.3 % during the period of analysis remains the greatest recipient of FDI among CIS countries. The minimal share of 39.8 % was observed in the year of 2015. In the year of 2018 the rate of decline exceeds the average rate for all CIS countries.

In conclusion, recent two years (2017 and 2018) were characterized by slowing down FDI inflows in the CIS countries , which outlines the high importance to analyze deeper the institutional circumstances of attracting FDI, the role of Doing Business index and its components which are more relevant to the forming the successful business climate and investment policy.

Sub-section 2 Studying the links between Doing Business indices and FDI in the CIS countries

The logical framework of the analysis is shown at Figure 5.



Source: author's construction based on Faraway (2002)

Fig.5. **The framework of correlation and regression analysis of the link between DB indices and FDI in the CIS countries**

Taking into consideration the urgency of more detailed analysis of FDI determinants in the CIS countries it is necessary to define the sample and the timeframe for correlation analysis.

As it was mentioned above the author has chosen the overall DB index and its sub-indices as independent variables. So, the main constraint is the availability of all necessary data about them. Since the year 2014 Doing Business indices

have been calculated for 189 countries. Somalia was added in the year 2017. Unfortunately, Turkmenistan (one of the CIS country) is not among these countries. So, the sample for the correlation analysis consists of 10 CIS countries.

Limitations to the timeframe were predominantly related to the availability of DB scores for Russian Federation. These scores are available only from the year 2014. Taking into consideration the role of Russian Federation in FDI inflows to the CIS countries (see Figure 4) it is worthwhile to reduce the timeframe. Another reason for this shortening is changing of methodology of Doing Business index calculation by the World Bank which introduced improvements to all of its indicator sets. In Doing Business 2015, getting credit and protecting minority investors broadened their existing measures. These adjustments were spread by World Bank's experts also for the year 2014.

The first testing relation is the link between DB overall indices and FDI inflows (see Table 2)

Table 2

The link between DB overall indices and FDI inflows in CIS countries

Countries	2014		2015		2016		2017		2018	
	DBI	FDI inflow, mil. USD	DBI	FDI inflow, mil. USD	DBI	FDI inflow, mil. USD	DBI	FDI inflow, mil. USD	DBI	FDI inflow, mil. USD
Armenia	65.52	404	66.82	178	69.14	338	70.63	250	71.49	254
Azerbaijan	60.69	4 430	62.34	4 048	65.45	4 500	64.25	2 867	66.83	1 403
Belarus	64.49	1 828	65.67	1 668	68.73	1 238	72.62	1 279	73.58	1 469
Kazakhstan	61.83	8 489	62,71	4 057	70.92	8 511	74.85	4 669	76.88	3 817
Kyrgyzstan	58.32	248	57.82	1 142	61.27	616	61.32	-107	62.36	47
Moldova	62.41	338	66.24	228	71.39	91	72.52	163	72.73	228
Russian Federation	67.46	29 152	69.19	11 858	74.10	37 176	75.26	25 954	76.54	13 332
Tadjikistan	41.75	432	47.25	559	51.84	344	53.44	270	54.34	317
Ukraine	59.94	410	62.38	2 961	64.18	3 284	65.42	2 601	68.09	2 355
Uzbekistan	47.92	757	52.28	66	61.68	134	62.09	98	66.61	412
Pearson Correlation values	**0.419**		**0.469**		**0.506**		**0.463**		**0.514**	

Source: author's construction based on UNCTADstat data and the World Bank data catalog

The criterion for the selection dependent variable is Pearson Correlation value of 0.5 or more (at least noticeable link according to the Chaddock scale).

The results of calculations demonstrate a positive relationship between DB overall indices and FDI inflows in CIS countries in each year. But according to the Chaddock scale this link is noticeable only in the years 2016 and 2018. And even for these years the values were very close to 0.5 and did not exceed this established level of the criterion. That is why the author does not take into account the relationship between DB overall indices and FDI inflows for the further regression analysis.

The other testing relation is the link between DB overall indices and FDI inward stock per capita. The main reason to test this relationship is because all the variables reflect a cumulative effect. It is necessary to mention here that DB scores for the next year are formed in previous year and they are usually published in October-November. So, DB indices usually reflect cumulative effects for previous year. For example, DB indices in the year of 2017 reflected the actual changes in its parameters occurred in the year of 2016. That is why to be more comprehensive, the timeframe for DB indices was taken as 2014-2019, and for FDI inward stock per capita – 2013-2018. The method of comparison is just the same as it is shown in Table 2. The results are presented in Table 3.

Table 3

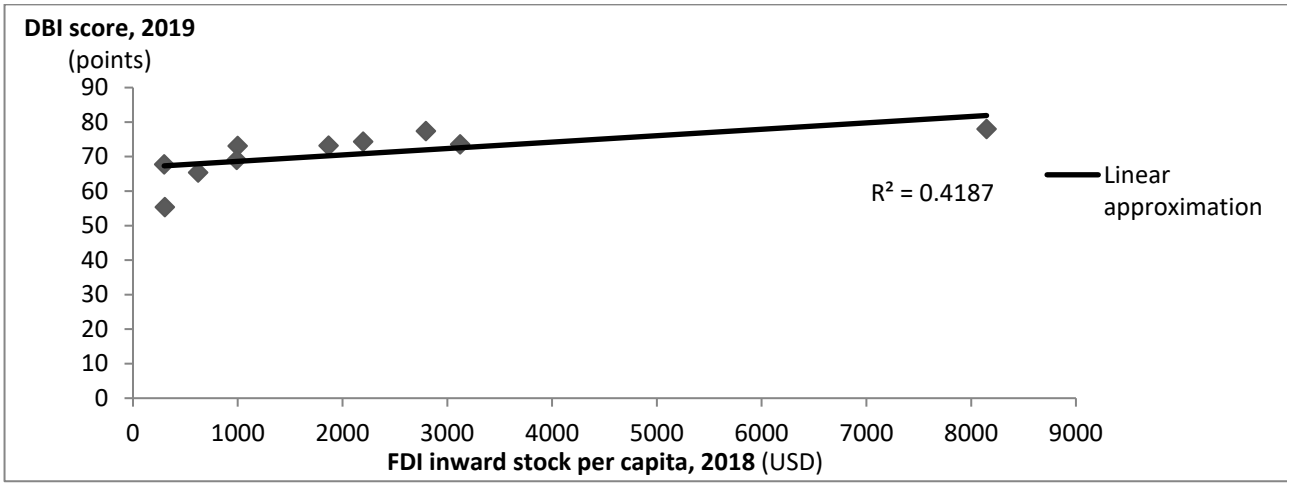
The link between DB overall indices and FDI inward stock per capita in CIS countries

Years	2014/2013	2015/2014	2016/2015	2017/2016	2018/2017	2019/2018

Pearson Correlation values	**0.452**	**0.318**	**0.452**	**0.561**	**0.607**	**0.647**

Source: author's construction based on UNCTADstat data and the World Bank data catalog

The results of this part of correlation analysis are of great interest. The crisis period (the years 2014-2015 for CIS countries) is characterized by the weak relationship between variables. But since the year of 2016 it has become stronger. The situation in the year of 2018 is shown at Figure 6.



Source: author's construction based on UNCTADstat data and the World Bank data catalog

Fig.6. **The link between DBI scores and FDI inward stock per capita in the CIS countries**

The R-squared indicates that only 41.8 % of FDI inward stock per capita variation can be explained by DB overall index score variation. That demonstrates another reason for finding some sub-indices which could more relevant to the relation on FDI inward stock per capita. According to the established criterion (Pearson Correlation value of 0.5 or more) and data presented in Table 3 there is a necessity of narrowing the timeframe for the further regression analysis. So the regression model for independent variable "FDI inward stock per capita" would better to be developed for years 2016-2018 (post-crisis period in the CIS countries).

Then according to the logical framework of the analysis (see Figure 5) the most significant DB sub-indices in terms of the relation to the FDI inward stock per capita were revealed. The table 4 shows the relationship between each DB sub-index and FDI inward stock in the CIS countries.

Table 4

Pearson Correlation values between DB sub-indices and FDI inward stock per capita in the CIS countries

DB sub-indices	Pearson Correlation values for years		
	2017/2016	2018/2017	2019/2018
Dealing with construction permits	0.600	0.397	0.438
Enforcing contracts	0.382	0.313	0.422
Getting credit	-0.186	-0.014	0.101
Getting electricity	0.325	0.321	0.376
Paying taxes	0.454	0.349	0.327
Protecting minority investors	**0.641**	**0.699**	**0.685**
Registering property	0.286	0.317	0.331
Resolving insolvency	**0.762**	**0.773**	**0.718**
Starting a business	0.159	-0.086	-0.010
Trading across borders	0.062	0.079	0.072

Source: author's construction based on UNCTADstat data and the World Bank data catalog

As it is shown in the literature review, most studies used all DB sub-indices without selecting most important of them. So the author implies here the selection rule for the independent variables according to Sakurai et al. (2009) that requires the simple correlation coefficient value as minimum as 0.5. Following this rule the chosen independent variables are DB sub-indices "Resolving insolvency" and "Protecting minority investors" (see Table 4).

The link between DB sub-index "Protecting minority investors" score and FDI inward stock per capita is noticeable (correlation coefficient is a little bit less than 0.7 during all the observing period), and the link between DB sub-index "Resolving insolvency" score and FDI inward stock per capita is even strong (correlation coefficient is a little bit more than 0.7).

To avoid multicollinearity the author uses the rule that correlation coefficient between independent variables should not exceed 0.8 (Mahuni and Bonga, 2017). The Pearson Correlation values between DB sub-indices "Protecting minority investors" and "Resolving insolvency" didn't exceed 0.616 during the observing period.

The regression model was developed using STATA for 10 countries in the period of the years 2016-2018 (30 observations). The results are shown in Table 5.

Table 5

Results of regression analysis

Independent variables	coefficients	standard error	t-statistics	probability P>|t|	beta-coefficients	R-squared	adjusted R-squared
Resolving Insolvency (RI)	101.75	23.15	4.396	0.0002	0.552	0.678	0.654
Protecting Minority Investors (PMI)	57.74	18.24	3.167	0.0038	0.397		
Constanta	-5817.52	1074.8	-5.413	0.00001	-		

Source: author's construction based on UNCTADstat data and the World Bank data catalog

F-statistics is equal 28.44 with probability 0.000003. That proved a reliable relationship between independent variables and FDI inward stock per capita in the CIS countries during the post-crisis period (2016-2018). R-squared is much more than for single independent variable – DB overall index (see Figure 5). It proved that developed multiple regression explains better the behavior of dependent variable that the DB overall index score.

Adjusted R-squared (0.645) shows that during the years 2016-2018 the independent variables mentioned above determined 65.4 % of changing the values of dependent variable – FDI inward stock per capita. Beta coefficients refer to how many standard deviations a dependent variable will change, per standard deviation increase in the predictor variable. From the model derived it is possible to see that "Resolving insolvency" has a relative contribution as 0.552 and the "Protecting minority investors" has a relative contribution as 0.397. These findings are supported by high level of significance proved by probability of t-statistics. That is good result especially in comparison with the results of similar studies. For example, Hossain et al. (2018) received the maximum beta coefficient value of 0.092 (for independent variable "Enforcing contracts").

The independent value RI (DB sub-index "Resolving insolvency" score) has a beta coefficient value of 0.552 which shows a positive impact on FDI inward stock per capita. Besides it has a significant value of 0.0002 indicating the positive significant impact which DB sub-index "Resolving insolvency" has on FDI inward stock per capita. The beta coefficient value of PMI (DB sub-index "Protecting minority investors" score) shows also a positive impact it has on FDI inward stock per capita. It also has a significant value of 0.0038 which further indicates that DB sub-index "Protecting minority investors" has a positive significant impact on FDI inward stock per capita.

It is possible to conclude that governments of CIS countries should pay more attention to such sub-indices of Doing Business index as "Resolving insolvency" and "Protecting minority investors". Results of regression analysis clearly show that these World Bank indicators are crucial in the post-crisis period (2016-2018) for effective FDI attraction in the CIS countries. But gaining the progress in improving these indicators is not so simple as for example "Starting a business" or "Registering property" indicators. This will require much deeper structural reforms.

The Doing Business indicators discussed in this paper are, of course, not the only ones in determining FDI performance. So, the perspective direction of improving the research can be making the similar analysis while

combining the DB indicators with others (for example, Global Competitiveness Index, Corruption Perceptions Index etc.). For the purpose of FDI forecasting it is better to use time-series analysis trying to find the unique trajectory for each country.

Conclusions, proposals, recommendations

The conclusions, drawn as a result of the carried out analysis, correspond in general to the opinions and views of the scientists both from developed and developing countries. The main findings of the research are:

1. The trends of FDI inflows to the CIS countries in recent years are similar to the global tendencies. Downward FDI inflows in the CIS countries during the years 2017-2018 outlines the high importance to analyze deeper the institutional circumstances of attracting FDI.
2. There is no significant relationship between overall Doing Business index scores and FDI inflows to the CIS countries during the period of 2014-2018.
3. There are two most relevant sub-indices of Doing Business index in terms of their reliance on FDI inward stock per capita during the period of 2016-2018 in the CIS countries: "Resolving insolvency" (strong link) and "Protecting minority investors" (noticeable link).
4. The regression analysis proved the high significance of the independent variables in explaining the behavior of FDI inward stock per capita in the CIS countries during the period of years 2016-2018. So, governments of CIS countries should pay more attention to the World Bank's Doing Business sub-indices "Resolving insolvency" and "Protecting minority investors" in order to enhance an investment and business climate for foreign investors. However, getting a significant progress in improving these indicators will require much deeper structural reforms.
5. In spite of that Doing Business indicators focus on small to medium-size domestic firms, the quality of the laws and regulations and the ways of its implementation may be a useful signal to foreign investors of the overall quality of the business environment.
6. Future research should be concerned with conducting the similar analysis while combining the World Bank's Doing Business indicators and other global indices.

Bibliography

Akame, A.J., Ekwelle, M.E., Njei, G.N., 2016. The Impact of Business Climate on Foreign Direct Investment in the CEMAC Region. Journal of Economics and Sustainable Development, 7(22), 66-74.

Baniak A., Cukrowski J., Herczynski J., 2003. On Determinants of Foreign Direct Investments in Transition Economies. Problems of Economic Transition, 48(2), 6-28.

Bayar Y. Ozel H., 2014. Determinants of Foreign Direct Investment Inflows in the Transition Economies of European Union. International Journal of Research in Commerce, Economics & Management, 4(10), 49-53.

Bayraktar, N., 2013. Foreign Direct investment and Investment Climate, Procedia Economics and Finance, 5, 83-92.

Bayraktar, N., 2015. Importance of Investment Climates for Inflows of Foreign Direct Investment in Developing Countries. Business and Economic Research, 5(1), 24–50.

Corcoran, A., Gillanders, R. (2015). Foreign Direct Investment and the Ease of Doing Business. Review of World Economics, 151(1), 103-126.

Faraway, J., 2002. Practical Regression and ANOVA using R. [Online] Available at: https://cran.r-project.org/doc/contrib/Faraway-PRA.pdf [Accessed 23.10.2019].

Hossain, M.T., Hassan, Z., Shafiq, S., Basit, A., 2018. Ease of Doing Business and Its Impact on Inward FDI. Indonesian Journal of Management and Business Economics, 1(1), 52-65.

International Monetary Fund, 1993. Balance of Payments Manual. 5th edition. [Online] Available at: https://www.imf.org/external/np/sta/bop/bopman.pdf [Accessed 18.10.2019].

Mahuni, K., Bonga, W.G., 2017. Nexus Between Doing Business Indicators and Foreign Direct Investment for Zimbabwe: A Time Series Analysis. Journal of Economics and Finance, 2(2), 1-8.

Moges Ebero, E., Begum, M., 2016. The Desirability of Doing Business and Flow of Foreign Direct Investment Nexus: The Case of Ethiopia. International Research Journal of Engineering and Technology, 3(5), 2049–2057.

Morris, R., Aziz, A., 2011. Ease of doing business and FDI inflow to Sub-Saharan Africa and Asian countries. Cross Cultural Management: An International Journal, 18(4), 400-411.

Nnadozie, E., Njuguna A., 2011 Investment Climate and Foreign Direct Investment in Africa,The 6th African Economic Conference United Nations Conference Centre, Addis Ababa, Ethiopia Ethiopia, October, 25-28, 2011. [Online] Available at: https://www.uneca.org/sites/default/files/uploaded-documents/AEC/2011/njuguna_and_nnadozie-investment_climate_n_fdi_in_africa_1.pdf [Accessed 21.10.2019].

Piwonski, K., 2010. Does the "Ease of Doing Business" in a Country Influence its Foreign Direct Investment Inflows? Honors Projects in Finance. Paper 13. [Online] Available at: https://digitalcommons.bryant.edu/honors_finance/13/ [Accessed 21.10.2019].

Shahadan, F., Sarmidi, T., Faizi, F. J., 2014. Relationships between Doing Business Indexes and FDI Net Inflows: Empirical Evidence from Six Asian Countries (Afghanistan, Bangladesh, India, Iran, Pakistan and Sri Lanka). Prosiding Persidangan Kebangsaan Ekonomi Malaysia, 9, 609-625. [Online] Available at: https://pdfs.semanticscholar.org/333d/4191000ec9655a20125443cb0d63600dc242.pdf [Accessed 21.10.2019].

Sakurai T., Kan, T., Fujikoshi, Y., 2009 Variable selection criteria based on multiple correlation coefficient in regression model. Journal of Statistics and Applications, 4, 218-234.

Singh, G. 2015. Relationship between Doing Business Index and Foreign Direct Investment. International Conference on Ease of Doing Business: Contemporary Issues, Challenges and Future Scope. Ahmedabad. Gujarat, India, 13-21. [Online] Available at: https://www.researchgate.net/publication/290315579_Relationship_between_Doing_Business_Index_and_Foreign_Direct_Investment [Accessed 21.10.2019].

UNCTAD, 2019. World Investment Report 2019. Special Economic Zones. [Online] Available at: https://unctad.org/en/PublicationsLibrary/wir2019_en.pdf [Accessed 19.10.2019].

UNCTAD, 2019. UNCTADstat Database [Online] Available at: https://unctadstat.unctad.org/ [Accessed 19.10.2019].

Vogiatzoglou, K., 2016. Ease of doing business and FDI inflows in ASEAN. Journal of Southeast Asian Economies, 33(3), 343-363.

World Bank, 2013. Doing Business 2013. Smarter Regulation for Small and Medium-Size Enterprises. Case study: Does Doing Business matter for foreign direct investments? [Online] Available at: https://www.doingbusiness.org/content/dam/doingBusiness/media/Annual-Reports/English/DB13-Chapters/DB13-CS-Doing-Business-matter-for-FDI.pdf [Accessed 18.10.2019].

World Bank, 2018. Doing business 2018. Reforming to Create Jobs [Online] Available at: https://www.doingbusiness.org/content/dam/doingBusiness/media/Annual-Reports/English/DB2018-Full-Report.pdf [Accessed 21.10.2019].

World Bank, 2019. The World Bank Data Catalog. Doing business [Online] Available at: https://datacatalog.worldbank.org/dataset/doing-business [Accessed 21.10.2019].