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Impact of Institutional Quality on Foreign Direct Investment Inflow: Evidence from Croatia

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Abstract

Background: Foreign direct investment (FDI) flows are unevenly distributed around the world and determined by different factors. The literature points out to economic and non-economic determinants of FDI flows, while the latter have shown to generate ambiguous effects across regions. **Objectives:** The primary goal of this paper is to examine the relationship between non-economic determinants and the FDI inflow in Croatia from 1996 to 2017, thus capturing different periods of the economic cycle. The importance of non-economic institutional determinants of FDI is analysed in parallel with the economic determinants. **Methods/Approach:** This study uses available data on FDI per capita and a set of non-economic (institutional) and economic determinants. We employed the OLS regression analysis to determine the significance of FDI inflow determinants and compare the relevance of non-economic to economic factors. **Results:** Results of this exploratory study show that institutional quality variables included in the model (regulatory quality, political stability, and government effectiveness, the rule of law and control of corruption) could not be pointed out as important determinants of the FDI inflow in Croatia. Economic variables GDP per capita and average gross wage prove to be important in determining the FDI inflow in Croatia. **Conclusions:** The research results point to a variety of FDI determinants among countries and economic cycle periods. Given the evidence from Croatia, variations, especially in institutional determinants, might be caused by the diverse FDI inflow characteristics and specificities of receiving economies.

Keywords: Croatia; economic determinants; foreign direct investment; institutional quality

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Introduction

Foreign direct investments (FDI) have been one of the key elements of globalization and international integration of developing economies in the past few decades, holding a particularly important role in the diffusion of knowledge across borders (Alguacil et al., 2011; Dasgupta, 2012). Thus, FDI is seen as a driver of growth, increasing the available capital, competition, and productivity of local firms through new technologies and human capital development. However, certain prerequisites must be met in the host country to attract FDI inflow and convert the potential benefits into positive spillovers (Crespo et al., 2007; Gorodnichenko et al., 2014).

FDI flows have been unevenly distributed between economic regions and across countries, in volume, the form of investment (greenfield and brownfield), underlying motives (market-seeking, resource-seeking, efficiency-seeking, and strategic-asset seeking) and intensity across sectors. Many developing countries have been actively seeking to attract foreign investors by creating promotion strategies and offering a variety of investment incentives. The literature on the FDI flows determinants presents both economic ("traditional") and non-economic ("non-traditional") determinants (Kahai, 2004). In the previous decades, most of the research was oriented towards economic determinants, while non-economic determinants, including the institutional quality dimension, have gained interest in recent research. A country's institutional framework, mainly leaning on good governance, is thought to stimulate the FDI absorptive capacity. The most important argument for foreign investment is that good governance and quality institutions reduce transaction costs of investing in a particular country (Brouthers et al., 2008).

Findings of the relevant literature examining the influence of institutional factors on FDI flows in different countries, discussed in the next chapter, point out to ambiguous results. There is some evidence, especially in developing countries, that countries should improve the overall business climate, including improving policies, laws, and regulation related to entrepreneurship and investments, as well as reducing administrative barriers and corruption to attract FDI (Bénassy-Quéré et al., 2007, Assunção et al., 2011; Saidi et al., 2013; Staats et al., 2012). On the other side, several empirical research show the opposite results especially regarding corruption level (Helmy, 2013; Bellos et al., 2011) or find institutional factors as statistically insignificant determinants for attracting FDI flows (Bayar et al., 2016; Abdella et al., 2017). It is important to point out that FDI determinants can change over time and theories need to be re-examined (Eicher et al., 2012).

Post-transitional Central and Eastern European (CEE) countries give a unique opportunity to test the hypothesis on FDI determinants, as before the 1990s flows to this region hardly existed and opening of these economies created a surge of capital inflow. Empirical studies on FDI inflow determinants in the CEE countries have mostly investigated the traditional determinants (Botrić and Škuflić, 2006; Kersan-Škabić et al., 2007; Derado, 2013). Only a few studies exploring the role of institutions in developing countries include several CEE countries data (Kersan-Škabić, 2013; Peres et al., 2018). Also, there is limited research encompassing the crisis period that was prolonged in most of these countries in comparison to the developed European countries, and there is almost no evidence on this nexus that includes the post-crisis period, which changed the dynamics of FDI flows globally.

Some countries tend to decrease the control of corruption in the crisis period. This was noticeable among developing countries including Croatia, which proved to be the post-transition country with the most negative changes in control of corruption and the rule of law during the last crisis (Peres et al., 2018). Also, according to UNCTAD (2018), Croatia had four new investor-state dispute settlement claims in 2017, which

made her the most frequent respondent in this field in the world for the mentioned year. Besides these negative institutional quality changes, Croatia makes a specially interesting case being usually classified both as a CEE and a South-East European (SEE) country and the second-largest recipient of FDI per capita in both of these regions, attracting mostly brownfield investments largely motivated by market-seeking activities in service industries (Jurčić et al., 2018). Others, especially Visegrad countries (Czech Republic, Slovakia, Poland, and Hungary), have attracted larger volumes of FDI to export-oriented industries, thus receiving more investment in greenfield production facilities.

This paper aims to explore institutional and economic determinants of FDI, focusing on the evidence from Croatia. Determinants are examined within the period from 1996 to 2017, encompassing a range of economic cycle periods within a single country. The research hypothesis states that both institutional factors and economic factors have a statistically significant impact on FDI per capita inflow. According to the theory, improving both institutional and economic factors would lead to an increase in FDI per capita inflow. Using OLS regression analysis, this research assesses the institutional determinants of FDI inflows but also tests the statistical significance of selected economic determinants to reach to a conclusion on the prevailing determinants in the case of Croatia. Institutional determinants include a set of governance quality measures (control of corruption, the rule of law, political stability, government effectiveness, and regulatory quality), while economic determinants include GDP per capita and average gross wage.

The purpose of this study is to point out to different findings on institutional determinants of FDI flows and show its effects in Croatia. The study sheds light on the diversity of determinants across time-periods, given the specifics of FDI inflows and economies.

The paper consists of the literature review on institutional determinants of FDI flows with a special focus on the CEE region, a description of the methodology and results of this empirical research with a discussion of the findings.

Literature review

In the past few decades, transition economies strived to attract FDI while expecting them to restructure their economies and bring prosperity and industrial upgrading. To attract FDI inflow and convert the potential benefits into positive spillovers, certain prerequisites must be met in the host country. In other words, a certain level of absorptive capacity is needed. Kalotay (2000) stresses that "absorptive capacity" shows the ability of a host country to integrate the maximum FDI stock in a particular economy in a useful way. "Absorbability" involves the realization of the FDI project and converting benefits from FDI into the capabilities of a recipient country (Nguyen et al., 2009). This research focuses on the first stage of absorption, specifically on different competitive factors that could attract FDI inflow.

Dunning (1998) through his OLI (organization, location, internalization) framework suggests that FDI decisions are driven by possibilities of increasing market power through production process ownership, location benefits and possibilities of internalizing externalities, while stressing the importance of institutional factors and their effects on three primary determinants in an extended model (Dunning et al., 2008). Furthermore, with the investment development cycle theory, Dunning (1986) attempted to explain the dynamic relationship between FDI and economic development with the analysis of determinants behind the net outflow of FDI as the postulate of the theory. By analysing investment development cycle of Croatia and other EU member states, Franc (2013) concluded that Croatia, Portugal, and the new

EU member states are at lower stages of the cycle, while the old EU member countries are at the higher level of the investment development cycle. This is following the assumptions of Dunning's model.

Traditional determinants of FDI have been broadly analysed, and most of the literature points out to following determinants within this group: market size, gross domestic product (GDP), GDP per capita, GDP growth, population, labour costs and other production costs, openness and inflation. Analysis of market-seeking determinants (GDP, GDP per capita, GDP growth, population) in the SEEC market has shown mixed results (Botrić and Škuflić, 2006; Derado, 2013), while openness has shown to be a statistically significant variable for attracting FDI inflow.

As non-traditional determinants, usually the quality of institutions, governance, human capital, and the degree of economic freedom have been analysed. Most recent relevant literature has focused on governance quality. Governance is usually defined as "the traditions and institutions that determine how authority is exercised in a country" (Kaufmann et al., 2005). The features of good governance have been highly acclaimed by different international organizations as an important precondition for economic development (Litjobo, 2008). Mukherjee et al. (2011) show that countries that invest more in governance tend to attract higher levels of FDI.

Institutional differences between the country of origin and the host country have shown to have an adverse effect on FDI flows in the previous decades (Benassy-Quere et al., 2007). The largest strand of literature on institutional determinants includes corruption, with the assumption that the higher corruption level leads to lower FDI flows. However, research has shown mixed results. Brouthers et al. (2008) point out that determinants of attracting market-seeking and resource-seeking FDI flows are not the same while emphasising a specific difference in case of corruption, showing to be statistically insignificant in market-seeking activities, but important in cases of resource-seeking activities. Abed et al. (2000) have shown that in some of the cases lower levels of corruption are beneficial for attracting FDI.

Another widely explored determinant is political stability which can be defined as "the solidity of government to political shocks, terrorism and domestic violence which can reduce the risk of doing business and deter investments"(Yerrrabati i Hawkes, 2016, 6). Presumably, foreign investors are more likely to invest in politically stable countries. Research in this field like Busse et al. (2007), Baek et al. (2011), Busse et al. (2011), Gordon et al. (2012), Arbatli (2011), Tian et al. (2017) has shown mixed results. Besides the mentioned factors, recent studies also point out the importance of regulatory restrictiveness, which is also controlled by governments (OECD, 2010).

Several studies using panel data analysis included a set of institutional quality dimensions and reached different conclusions on their importance. Not many relevant studies show a positive relationship. Saidi et al. (2013) have shown that political stability and regulatory quality can positively influence FDI inflows. Staats et al. (2012) indicate that the rule of law and judicial strength are significant FDI inflow determinants.

On the other hand, several studies, also using the panel data analysis, show a set of institutional factors as statistically non-significant for attracting FDI flows. Bayar et al. (2016) have shown that control of corruption and the rule of law had no statistically significant impact on FDI inflows. Madr et al. (2015) identify and quantify the influence of the political environment including the quality of democracy, political instability and the level of corruption on the inflow of FDI in emerging markets. Their results show that the influence of the political environment on FDI is not unambiguous in emerging markets, while political instability shows to be a statistically significant variable. Abdella et al. (2017) show that corruption has no statistically significant effect on the FDI flows in the BRIC countries (Brazil, Russia, India, and China), while trade openness and

political stability are statistically significant. Peres et al. (2018) examined the impact of institutional quality (measured by control of corruption and the rule of law indicators) on FDI in developed and developing countries. Their research has shown that institutional quality is a significant determinant of FDI in developed countries having a positive impact, while it is not a significant variable in developing countries which can be attributed to the weak institutional structure.

Some research point out unexpected results. Helmy (2013) researched the effects of corruption on FDI inflows in the Middle East and North African (MENA) countries using a panel analysis and found that FDI varies positively with corruption, GDP per capita, openness, freedom, and security of investments, while negatively with the tax and homicide rates. Helmy points out to twofold explanations of this unexpected positive connection between corruption and FDI. In this region, corruption is seen as a mean of overcoming bad or restrictive laws and behaviors, while these costs are lower than the value of economic expansion in the region and, on the other side, it might seem that the other factors that positively affect FDI inflows are more important than corruption. Bellos et al. (2011)while analysing FDI determinants of transition countries in the period from 1996-2005 also found that corruption has a positive coefficient. They concluded that competition of foreign companies is conducive to paying bribes to get business contracts, what in the end increases corruption even more. Bellos et al. (2011) suggested that corruption does not deter bilateral FDI stock.

Research of institutional determinants including the CEE countries also gives different results. Some of the studies focusing on SEE, CEE and "Eastern Europe" include Croatia in the analysis.

In one of the first studies on institutional factors effects on FDI inflow in CEE, Pournarakis et al. (2002) using panel data analysis examined the civil and political rights, freedom of the press (Freedom House indices), corruption (Corruption Perceptions Index), GNI, country risk, and economic risk and inflation effects on FDI inflows during the first decade of market economies in these countries, in the period from 1997-2000. They pointed out the business environment as a prerequisite to attract and absorb FDI inflows in these countries, which was set mainly to low tech sectors and within the category of market-seeking investments. In that period FDI inflows to CEE accounted for a relatively small share of world FDI.

Among traditional determinants, Botrić et al. (2006) distinguish market-related (GDP, GDP per capita, GDP growth) and trade-related ones (openness, external debt), but also emphasise the importance of non-traditional ones such as human capital. Their analysis of FDI flows in the SEE countries (including Croatia) in the period from 1996-2002 pointed out that FDI in SEE could not be considered as market seeking, as GDP level, GDP per capita, GDP growth, and population growth gave mixed signals in different specifications, while the only variable robust to different specifications has shown to be the increase of openness. Botrić et al. (2006) did not analyse the business climate, yet they pointed it out as very important, stressing foreign investors' initiative in Croatia striving for a better business climate, and recommended researching the business climate upon the availability of data capturing it.

Doytch et al. (2012) studied institutional determinants of FDI in three main sectors: agriculture, manufacturing, and services in twenty-one Eastern Europe and Central Asian countries in the period 1994-2008. They found that resource endowments have a positive impact on FDI in agriculture and manufacturing, while educated labour attracts FDI inflow in services sectors. Also, they point out that the institutional quality measured by democratic accountability and investment profiles of these countries has a statistically significant effect on overall FDI inflows. Democratic accountability shows to be more important for the agricultural sector, and investment profiles show

to be more important for both agriculture and manufacturing sectors, while the services sector shows to be not affected by the quality of institutions.

Kersan-Škabić (2013), while analysing economic and institutional determinants of FDI inflows in the SEE (including Croatia) in the period from 2001-2010, found that GDP per capita, inflation, corruption, large scale privatization, the development of trade and forex system and overall infrastructure reform have a statistically significant impact on FDI inflow. It is important to stress that in the SEE region institutional structures have remained embedded with ethnic and political divisions and levels of corruption remained relatively high in comparison to EU member states (Milološa, 2015).

Derado (2013) focused on Croatia while exploring "gravity-type" economic factors, but also stressed the importance of including quality of an internationally competitive business environment in further research.

Presented relevant literature shows that several studies included Croatia in the analysis, given its specific characteristics and position within SEE and CEE, but no in-depth study on the effects of institutional factors on FDI inflow in Croatia has been presented so far.

Methodology

The primary aim of this paper is to test the significance of institutional determinants of FDI in parallel with exploring whether the economic factors had a statistically significant influence on FDI flows in Croatia. The main research question addresses this nexus in the context of the Republic of Croatia in the period from 1996 to 2017, covering a range of economic cycle periods. Thus, the aim is to explore whether these variables have a statistically significant impact, as theory suggests, or will results show more similarities to recent empirical studies covering this nexus in non-developed and developing countries that were discussed in the literature review. Two separate models are employed to test the effects of both sets of determinants independently.

The dependent variable in this empirical study is FDI per capita inflow in Croatia covering the period 1996- 2017, available from the Vienna Institute for International Economic Studies (WIIW) data (2019). The FDI data include new equity investment, reinvested earnings, and debt instruments. Explanatory variables are divided into two groups: (1) institutional factors, and (2) economic factors, according to the main strands of literature dealing with this topic.

Different international institutions publish data on institutional development based on surveys and experts' rating (World Bank Ease of Doing Business Index and Worldwide Governance Indicators, EBRD Transition Indicators, Transparency International Corruption Perception Index, etc.). For the analysis in this study, Worldwide Governance Indicators (WGI) data (World Bank, 2019) are used to measure the quality of institutions on several levels. Kaufmann et al. (1999, pp. 1) define governance as "traditions and institutions by which authority in a country is exercised". The explanation of all variables and data sources used in regression analysis are given in Table 1.

Table 1
Description of Variables

Variable	Label	Measure	Description	Source
Foreign Direct Investment per Capita	FDI pc	EUR	FDI (OECD, 2008) stands for "cross-border investment made by a resident in one economy to establish a lasting interest in an enterprise that is resident in another economy" (ownership of at least 10% of the voting power of the direct investment enterprise).	WIIW
Regulatory Quality	RQ	Indicator ranging from min -2,5 to max 2,5	"Reflects perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development."	WB
Political Stability	PS	Indicator ranging from min -2,5 to max 2,5	"Measures perceptions of the likelihood of political instability and/or politically-motivated violence, including terrorism."	WB
Government Effectiveness	GE	Indicator ranging from min -2,5 to max 2,5	"Reflects perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies."	WB
Rule of Law	RL	Indicator ranging from min -2,5 to max 2,5	"Reflects perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development."	WB
Control of Corruption	CC	Indicator ranging from min -2,5 to max 2,5	"Reflects perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests."	WB
GDP per Capita	GDP pc	EUR	"Most frequently used measure for development"	WB
Average Gross Wage	AGW	EUR	"A measure of total income after taxes divided by the total number of employees employed."	WB

Source: World Bank (2019); The Vienna Institute for International Economic Studies (2019)

In the first model, we include the following independent variables: Rule of Law (RL), Control of Corruption (CC), Regulatory Quality (RQ), Government Effectiveness (GE) and Political Stability (PS). According to Rodrik and Subramanian (2003), we can categorise these independent variables into three groups encompassing the overall institutional quality. RL and CC measure the quality of market-creating institutions, RQ measures the quality of market- regulating institutions while GE and PS the quality of market-stabilizing institutions. Thus, the only institutional-quality segment that is not measured through this model are market-legitimising institutions that create favorable socio-economic systems. Selected independent variables can attain value on a scale

from -2,5 to 2,5 (World Bank, 2019). Data include the period from 1996 to 2017 with omitted data for 1997, 1999 and 2001, due to their unavailability. The regression model exploring the quality of institutions effects on FDI pc flows is defined with equation 1:

$$FDI\,pct = \beta 0 + \beta 1RQ + \beta 2PS + \beta 3GE + \beta 4RL + \beta 5CC \quad (1)$$

In the second model, we investigate two frequently analysed economic determinants of FDI inflows: GDP per capita as a market-seeking determinant, and average gross wage as a resource-seeking determinant (Botrić et al., 2006). The data were collected from The Vienna Institute for International Economic Studies (WIIW) database and included the period 1996 – 2017, thus capturing the end of the transition period, pre-crisis, crisis, and post-crisis period. The regression model exploring the traditional economic variables effects on FDI per capita flows is defined as follows:

$$FDI\,pct = \beta 0 + \beta 1GDPpc + \beta 2AGW \quad (2)$$

Regression models are presented, following the diagnostic tests to check if the underlying assumptions have been fulfilled. Thus, we test heteroscedasticity using the White's test, autocorrelation using the Breusch-Godfrey LM test and normality using the Jarque-Bera test.

Results and discussion

Ordinary least squares regression analysis was applied to examine the effects of two sets of independent variables addressing the quality of institutions and the economic factors influencing FDI per capita inflow in Croatia. Table 2 presents the summary statistics of the key variables in this study.

The average FDI per capita inflow amounted to 356.68 EUR, with a standard deviation of 221.68 EUR pointing out to relatively high variability of FDI per capita inflow over the observed period.

Table 2
Descriptive Statistics

	FDI pc	RQ	PS	GE	RL	CC	GDP pc	AGW
Mean	356.69	0.32	0.46	0.42	0.07	0.04	8531.82	862.28
St. Dev.	221.68	0.25	0.27	0.24	0.23	0.22	2471.05	206.84
Min.	57.66	-0.17	-0.04	0.00	-0.63	-0.58	4400.00	476.52
Max.	842.04	0.57	0.75	0.71	0.41	0.29	11800.00	1079.22
Count	22	22	22	22	22	22	22	22

Source: Authors' calculations

The lowest institutional quality, measured through governance quality indices, was shown within the corruption control, with a mean of 0.04, followed by the rule of law with a mean of 0.07. The highest rank within the listed institutional variables has a political stability index, amounting to a mean of 0.46. The minimum GDP per capita is 4400 EUR and the maximum GDP per capita is 11800 EUR, while the average gross wage varied from 476.52 EUR to 1079.22 EUR. Table 3 shows the results of the regression analysis conducted using STATA software, including institutional determinants (1) and a separate regression analysis including economic determinants (2).

Table 3
The summary output of regression models including institutional and economic determinant

	Model 1- Institutional determinants	Model 2-Economic determinants
Dependent	**FDI pc**	**FDI pc**
GDP pc		0.222** (0.0992)
AGW		-2.157* (1.185)
RQ	411.8 (471.7)	
PS	288.5 (633.8)	
GE	-313.4 (657.3)	
RL	192.4 (410.2)	
CC	-282.9 (457.4)	
cons	220.6* (123.2)	319.1 (237.7)
N	22	22
R2	0.206	0.357
Prob>F	0.545	0.015

Note: Standard errors in parentheses; * p < 0.1, ** p < 0.05
Source: Authors' calculations

Regression estimates of institutional determinants (1) show positive effects of improving RQ, PS, and RL on FDI per capita inflow, while CC and GE have a negative coefficient. The F-statistic equals 0,83 with a corresponding empirical significance level of 0,545, thus showing that the regression model is not statistically significant.

The results of the second regression model reveal that economic variables explain 35.7% of the variance. The empirical significance level of 0.015, shows the overall regression significance at 5% significance. As expected, parameter GDP per capita has a positive value, while AGW has a negative value. At 5% significance, independent variable GDP pc is statistically significant, while AGW is not, while at 10% significance both GDP pc and AGW have shown to be statistically significant variables.

To address the potential heteroscedasticity problem that is common in time series, we have conducted a White's test using STATA software. The results of the test are presented in table 4. The null hypothesis assumpts homoskedasticity. Given the probability of 0,670, shown in table 4, we do not reject the null hypothesis and conclude that the variance is homoscedastic.

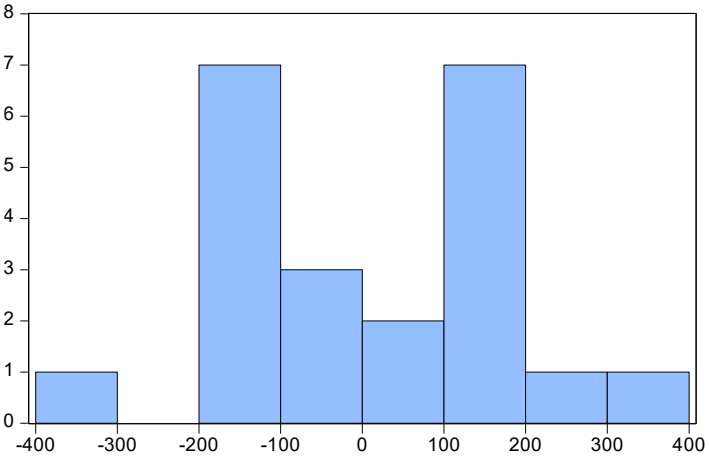
Table 4
Results of White's Test of Heteroscedasticity

White's test for H_0: homoscedasticity against Ha: unrestricted heteroscedasticity
chi2(5) = 3.19
Prob> chi2 = 0. 670

Source: Authors' calculations

The normality of distribution is tested using the Jarque-Bera test (Figure 1). As shown in figure 1 the estimated model using eVIEWS software shows JB=0.945008, with the probability of 0.623439, pointing to the conclusion that on any commonly used significance level we do not reject the null hypothesis on the normality of distribution of relation errors.

Figure 1
Results of the Jarque-Bera Test



Series: Residuals	
Sample 1996 2017	
Observations 22	
Mean	1.50e-13
Median	-4.717655
Maximum	318.7582
Minimum	-336.9057
Std. Dev.	177.7880
Skewness	0.029319
Kurtosis	1.986353
Jarque-Bera	0.945008
Probability	0.623439

Source: Authors' work

Autocorrelation has been tested using the Breusch-Godfrey LM test for autocorrelation (Table 5). With the level of significance of 10%, we can confirm the null hypothesis stating there is no autocorrelation in the model that can be accepted.

Table 5
Results of the Breusch-Godfrey LM Test for Autocorrelation

lags(p)	chi2	df	Prob>Chi2
1	3.069	1	0.0798
H0: no serial correlation			

Source: Authors' calculations

Thus, all the presumptions have been confirmed, and the results of the regression model including the economic determinants of FDI inflow per capita can be used to conclude the Croatian case. The estimated regression model is as follows:

$$FDI\,pct = 319.1835 + 0.222GDP\,pc\,t - 2.157\,AGW\,t \quad (3)$$

This empirical analysis shows that FDI inflow per capita in Croatia was not determined by the institutional quality measured with the governance quality indicators. The only determinant that was statistically significant at the 5% level of significance is GDP per capita, while at 10% significance, average gross wage also shows to be statistically significant. Results are somewhat different from prior studies. Differences might be due to several reasons: different time period of the analysis, different economic characteristics of Croatia to other countries, and the inclusion of different variables in the model, given there are diverse ways of measuring institutional quality with available quantitative measures.

Presented results of the study might also be a consequence of the fact that Croatia has received most of its FDI as a result of the privatization process and it was market-seeking, thus pointing to GDP per capita as a statistically significant determinant. Due to this fact, investors had the opportunity to compensate the costs of institutional governance shortcomings that might have caused business barriers, by using higher market prices of products, and thus had a return on their investment, as suggested by Brouthers et al. (2008). A large volume of FDI inflow in Croatia included brownfield investment. Not rarely, these investments included so-called "cherry-picking

takeovers" of monopolistic companies (Jurčić et al., 2018). Croatia, together with other CEE countries, offered "one-off" opportunities to the private sector to ensure a rapid shift towards market-economy and show the commitment to private ownership (Holland et al., 2000). Also, given the high share of FDI inflow to services sectors, the statistical non-significance of institutional determinants is following the results of Doytch et al. (2012) study, which pointed out that FDI in services sectors shows not to be affected by the quality of institutions. Furthermore, corruption control (CC) holds the lowest index level among the variables in the model and has shown negative changes during the crisis. As Helmy (2013) suggests, it might be a means of overcoming inappropriate laws and behaviours as long as the costs are lower than the value of economic expansion. Following the research results from Peres et al. (2018) pointing to CC and RL as important in determining FDI inflow in developed countries, but not important in developing countries due to weak structure of institutions, we can conclude this is true for Croatia, given the low indices of governance, especially for the two measures of quality of market-creating institutions.

Literature review and empirical research show that FDI determinants can significantly vary across countries and periods. Thus, detailed data on the FDI flows are needed to reach a broader conclusion. This study can motivate further in-depth studies which can also decompose FDI flows. Capital flows can be divided into new capital inflow, reinvested earnings and borrowings, to see if their determinants differ. More detailed analysis can also be conducted using greenfield project announcements that are available within the UNCTAD database. A detailed study encompassing different forms of investment and capturing its motives is not yet possible as macroeconomic data do not provide such information. Thus, only some additional conclusions addressing forms of investment related to motivational factors (primarily divided as resource-seeking and market-seeking) could be made through survey-based research. It is also important to understand the limitations of institutional determinants measurement. International institutions use specific methodologies that strive to quantify the qualitative institutional quality variables. Thus, it is also important to include and test different institutional quality measurements.

Conclusion

In this paper, a review of relevant literature related to non-economic determinants of FDI inflows was presented, as well as empirical evidence of this nexus in Croatia. Non-economic determinants include institutional-quality determinants which are mostly oriented towards the assessment of governance quality factors. In this paper, World Bank Worldwide Governance Indicators data are used. The quality of market regulating institutions is measured by Regulatory quality index, while market stabilising institutions are measured by Government Effectiveness and Political Stability indices. Finally, the quality of market-creating institutions is measured through the Rule of Law and Control of Corruption indices and shows the lowest values among these governance quality determinants. Besides analysing the non-economic determinants that have recently gained attention in FDI research, we also examine the importance of economic determinants addressing market-seeking activities using GDP per capita and resource seeking activities through average gross wage.

The results of the empirical analysis differ from the general belief that quality institutions attract FDI. The results indicate that institutional quality factors have not been important in determining FDI inflow per capita in Croatia. Among economic variables, GDP per capita has shown to be important being statistically significant at 5% significance, while the gross average wage has shown to be insignificant on the same significance level. At a 10% significance level, both variables have shown to be

statistically significant. Presented results might be the consequence of FDI structure that was largely oriented to takeovers of previously monopolistic companies. Thus, foreign investors might have seen the opportunity to gain ownership, and given the fact that most of them were in market-seeking activities, the potential costs of corruption and other institutional shortcomings could be compensated through higher prices on the same market. Also, the largest recipient sectors were different service industries, which have shown to be less affected by the institutional framework in the prior research.

The main limitation of this study derives from the shortcomings of institutional determinants measurement because international institutions use specific methodology while striving to capture these qualitative variables and quantify them. Therefore, it is advisable to analyze by comparing different sets of variables provided by different institutions. Also, conclusions could be widened if detailed statistical data on different forms and characteristics of FDI (brownfield/greenfield; horizontal/vertical; market-seeking/ resource seeking) would be provided. Additional research in other developing countries is needed to improve the understanding of the ambiguity of FDI flows and institutional development nexus within the same regions and across different economic cycle periods.

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