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KURUMSAL KALİTENİN DYY GİRİŞLERİ ÜZERİNE ETKİSİ FARKLILAŞIYOR MU? (FARKLI GELİR SEVİYESİ ÜLKELERİNDEN BAZI YENİ KANITLAR)

DO THE IMPACT OF INSTITUTIONAL QUALITY ON FDI INFLOWS DIFFER? (SOME NEW EVIDENCES FROM DIFFERENT INCOME LEVEL COUNTRIES)

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ÖZET
Bu çalışma; yönetişim, hukukun üstünlüğü, yolsuzluk gibi kurumsal kalite belirleyicilerinin ve ticaret, piyasa büyüklüğü, ekonomik büyüme, gecikmeli DYY (Doğrudan Yabancı Yatırım) girişleri gibi diğer belirleyicilerin DYY girişleri üzerine etkisinin Yüksek Gelirli Ülkeler, Üst Orta Gelirli Ülkeler, Alt Orta Gelirli Ülkeler ve Düşük Gelirli Ülkeler için farklılaşıp farklılaşmadığını incelemeyi amaçlamaktadır. Ayrıca bu çalışma, örneklem ülke grupları için diğer belirleyicilere nispeten kurumsal kalitenin ne ölçüde önemli olduğunu ortraya çıkarmaktadır. En Küçük Kareler Yöntemi ve Araçsal Değişkenler Yöntemi 2009-2019 dönemi için kullanılmıştır. Ortalama kurumsal kalite değişkeni, kurumsal kaliteyi ölçen yönetişim değişkenlerinden olan hukukun üstünlüğü ve yolsuzluk kontrolü kullanılarak yaratılmıştır. Bulgulara göre kurumsal kalite, piyasa büyüklüğü, gecikmeli DYY değişkeni Yüksek Gelirli Ülkeler, Üst Orta Gelirli Ülkeler ve Düşük Gelirli Ülkeler için pozitif ve anlamlı iken Alt Orta Gelirli Ülkeler için anlamsız bulunmuştur. Ekonomik büyüme (GDPpcg) ve gecikmeli DYY değişkenleri Alt Orta Gelirli Ülkeler için pozitif ve anlamlı bulunmuştur. Düşük Gelirli Ülkeler için kurumların belirleyiciliğinin ticaret ve piyasa büyüklüğünden daha yüksek olduğu bulunmuştur. Üstelik Yüksek Gelirli Ülkeler ve Orta Yüksek Gelirli Ülkeler için kurumların DYY girişleri üzerine belirleyiciliği piyasa büyüklüğünden daha yüksek seviyededir.
Anahtar Kelimeler: Doğrudan Yabancı Yatırım Girişleri, Kurumsal Kalite, Yolsuzluk Kontrolü, Hukukun Üstünlüğü, Araçsal Değişkenler Yöntemi
Jel Kodlar: C12,C14, E22, O43, C36, K15

Abstract
The present study aims to examine whether the impact of institutional quality determinants such as Governance, rule of law, corruption, and other determinants such as trade, market size, economic growth, lagged FDI inflows on FDI inflows differ for High Income Countries (HICs), Upper Middle Income Countries (UMICs), Lower Middle Income Countries (LMICs) and Low Income Countries (LICs).

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Also this study reveals what is the significance of institutional quality relative to other determinants of the FDI inflows for HICs, UMICs, LMICs and LICs. Ordinary Least Square Method and Instrumental Variables Method were used for the period from 2009 to 2019. An average institutional quality variable has been created to using rule of law and control of corruption, which are governance indicators to measure institutional quality. The findings showed that institutional quality, market size, lag FDI variables are positive and significant for HICs, UMICs and LICs but not significant for LMICs. Economic growth (GDPpcg) and lag FDI variables are positive and significant in for LMICs. The finding of the current study was that the determination of institutions on FDI inflows are more higher than trade and market size in LICs. Also the determination of institutions on FDI inflows are more higher than market size in HIC and UMICs.
Keywords: Foreign Direct Investment Inflows, Institutional Quality, Control of Corruption, Rule of Law, Instrumental Variables Method.
Jel Codes: C12,C14, E22, O43, C36, K15

1.INTRODUCTION

Foreign Direct Investment (FDI) has an important role in financing development and advancing towards sustainable development goals (UN, 2015:213). Asiedu (2002) stated that FDI flows are needed to stimulate growth and support domestic savings and that the FDI flow will provide the necessary capital for investment as well as encourage growth and development by bringing employment, management skills and technology. In 2018, FDI hit $ 1.3 trillion, the lowest level since the global financial crisis (UN, 2019:ix). It is observed that real net FDI inflows of Upper Middle Income Countries (UMICs), High Income Countries (HICs) and Low Income Countries (LICs) have been on a downward trend in recent years. A sharp decline was observed in 2019 In UMICs, HICs and LICs although real net FDI inflows in the Lower Middle Income Countries (LMICs) group have had a slight upward trend in recent years. In Figure 1. It shows trend in real FDI net inflows. Fragility of the global economy, political uncertainty for investors and rising geopolitical risks are emphasized in related to the downward trend in the FDI inflows in recent years (UN, 2015:2). In addition, permanent weakness in aggregate demand, effective policy measures to curb tax reversal agreements and declines in profits of multinational companies are also noteworthy (UN, 2016:23). Moreover trade tensions, geopolitical and financial risks have also created negative impacts for FDI (UN, 2020:x). The fragmentation in international economic policy making, and particularly in trade and investment policy highlights a shift from multilateral cooperation toward regional and bilateral solutions and increased protectionism. There is systemic competition between economic powers and a general shift towards more regulation and intervention in national economic policy making in many countries (UN, 2020:120).

Strong institutions are among the key factors in attracting private investment (UN, 2014:xxxii). Institutions are formal and informal rules that regulate social, political and economic relations. (North, 1990). the International Country Risk Guide (ICRG) indices are expressed institutional quality variables such as rule of law, corruption, quality of bureaucracy, regulatory quality, doing business, political stability and absence of violence/terrorism, voice and accıuntability, government effectiveness. Another indicator of institutional quality is governance indicators that include government efficiency, the rule of law, regulatory burden, voice and accountability, corruption and political instability and violence (Islam & Montenegro, 2002:7). Building the institutional structure is considered among the basic principles of investment policy formation for sustainable development. It is emphasized that investment policies should be placed in an institutional framework based on the rule of law, which is an institution that adheres to high public governance standards and provides predictable, efficient and transparent procedures for investors (UN, 2014:131). The G20 country group proposes that all stakeholders participate in the institutional framework based on the rule of law within the guidelines for global policy making (UN, 2017:118).

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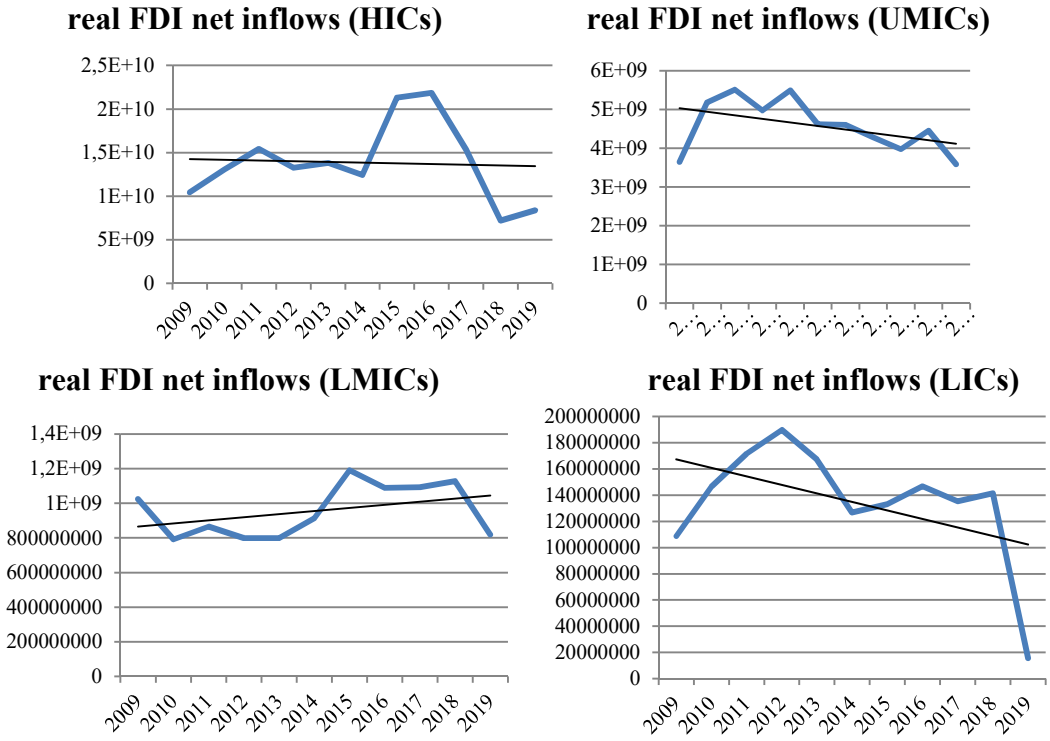
Figure 1. Trends in real FDI net inflows (2009-2019)



Source: World Development Indicators
Notes: Real FDI net inflows (the base year is 2010)

There are three important factors related to the relationship between institutions and FDI. First, North (1990) mentioned the importance of institutions in promoting investment and economic development. Second due to strong growth in FDI inflows over the past 25 years, countries have started to make institutional reforms to attract more FDI. Thirdly, it has been observed that foreign investors are more interested in institutional quality when they will determine the country to invest (Peres, Ameer& Xu, 2018:627-628). It is also stated that strong institutions attract FDI and weak institutions push FDI (Ali, Fiess & McDonald, 2010; Ajide, Raheem & Ibrahim 2016; Fukumi & Nishijima, 2010; Daude & Stein, 2007; Borin, Cristadoro & Mattevi, 2014).

In the literature that deals with the impacts of institutions on FDI inflows, studies conducted for country groups such as Developing Countries, Developed Countries, Transition Countries, OECD, African Countries, Sub Saharan Countries and a single country such as Turkey and Vietnam have been found. However as far as is known, there is no study conducted by categorizing countries according to their income levels. Therefore, in this study, the importance of institutional quality in attracting FDI inflows was analyzed by considering UMICs, LMICs, HICs and LICs in line with the classification made by the World Bank. Moreover 11 years panel dataset covering the period from 2009 to 2019 was created for country groups categorized by income levels. In this study, the methodology of Peres, Ameer & Xu (2018) was followed. Accordingly, this study has contributed to the literature by the following questions.

1. Is the impact of institutional quality (Gov, Control of Corruption, Rule of Law) on FDI inflows equally important for UMICs, LMICs, HICs and LICs? In other words do the impact of institutional quality on FDI differ for UMICs, LMICs, HICs and LICs?

2. What is the significance of institutional quality relative to other determinants of the FDI inflows such as trade, market size, economic growth, lagged FDI inflows for HICs, UMICs, LMICs and LICs?

Reserach and publication ethics were followed in this study and were designed as followed. In second section, the general framework of the literature review is emphasized. In third section, dataset and research methodology are explained. In fourth section, it is focused in the analysis results and in fifth section the results obtained are discussed.

2.LITERATURE REVIEW

Asiedu (2002) stated that FDI flows are needed to stimulate growth and support domestic savings and that the FDI flow will provide the necessary capital for investment as well as encourage growth and development by bringing employment, management skills and technology.

Institutional quality captures law and individual rights as well as high quality government regulation and services. International Country Risk Guide (ICRG) indices are expressed institutional quality variables such as rule of law, control of corruption, quality of bureaucracy, regulatory quality, doing business, political stability and absence of violence/terrorism, voice and accıuntability, government effectiveness. Another indicator of institutional quality is governance indicators that include government efficiency, the rule of law, regulatory burden, voice and accountability, corruption and political instability and violence (Islam & Montenegro, 2002:7).

In previous studies stated that the strength or weakness of institutional quality affects the economic functioning. North (1990) mentioned about the importance of institutions in the economic structure. Low institutional quality causes low investments, low income, low productivity and low of output growth. It is stated that strong institutions increase profitability and economic activity by decreasing production and transaction costs (North, 1990), while not strong institutions increase uncertainty and production costs (Cuervo Cazurra, 2006:2). Hayat (2017) stated that FDI inflows will result stronger economic growth in countries with better institutional structures for 104 selected countries. In the literature, it has been emphasized that institutional quality is an element that determines FDI flows. Lothian (2006) stated that policies towards the appearance of the institutional structure will result in higher FDI flows. Moreover it has been reported that strong institutions attract FDI inflows while weak institutions push FDI inflows (Ali, Fiess & MacDonald, 2010; Ajide, Raheem & Ibrahim, 2016; Fukumi & Nishijima, 2010; Daude & Stein, 2007; Borin, Cristadoro & Mattevi, 2014). Previous several studies have addressed to institutional variables such as rule of law and corruption. It has been argued that corruption as an institution is one of the main determinants of FDI. Esew & Yaroson (2014) stated that corruption is major determinant of FDI inflows in Nigeria. Ramde (2018) found a long term relationship between corruption and FDI inflows in Burkina Faso and stated that need to develop appropriate policies such as improving anti-corruption strategies in Burkina Faso. Nguyen & Cao (2015) stated that control of corruption to be an essential factor of attacting FDI to Vietnam. Moreover Vietnam's country partners replace local investments with FDI investments when institutional quality increases. Busse & Hefeker (2007) found that institutional variables such as corruption control and law and order are very important when multinational companies decide which country to invest in. Namely corruption and law and order are highly significant determinants of foreign investment inflows for 83 developing countries. Busse & Hefeker (2007) stated that better institutions are expected to attract foreign direct investment because of a lower risk premium. Ibrahim, Elhiraika & Hamdok (2011) stated that control of corruption and rule of law are essential factors of attacting FDI to African Countries. Karim, Zaidi, İsmail & Karim (2012) found that corrupiton plays an important role in Malaysia and stated that implementation of appropriate FDI policies will benefit the economic growth of the small open economy such as Malaysia.

Eren & Jimenez (2015) stated that the low corruption gap between host and home countries causes higher FDI flows between countries therefore it was stated that countries can obtain higher returns from their resources and capabilities in environments similar to themselves. Peres, Ameer & Xu (2018) determined that the institutional quality indicator, which it obtained as average of the rule of law and control of corruption creates positive impacts in developed countries, while it causes insignificant impacts in developing countries due to the weakness of institutional quality. Kurul & Yalta (2017) found that control of corruption has an important impact on FDI flows in developing countries. They stated that reducing of corruption lead to an increase in FDI inflows and encourage multinatioanl cooperation to bring capital into developing country. Therefore it was also stated that developing countries need policies for institutional arrangements to attract more FDI flows. Mallik & Chowdhury (2017) found that corruption decrease FDI inflows significantly while law and order have a positive impact on FDI inflows for 156 countries. Chen, Jiang & Wang (2019) found that the rule of law has positive impacts on the degree of facilitates FDI inflows for Belt and Road Countries. They stated that policymakers should focus on improving the influence of mediating mechanism, such as policies and regulations.

Studies in the literature have focused on determinants of FDI flows such as trade openness and market size. It has been argued that market size is a significant and positive determinant of FDI flows. Kamal, Wahid & Kamal (2018) measured market size by population and found that the impact on FDI inflows is positive and significant for 16 Emerging Market Economies. Ibrahim, Elhiraika & Hamdok (2011) found that market size is a determinant of FDI inflows for African Countries. They stated that the policy related to expand market through regional integration should implemented in African Continent. As well as the large host country's market size is the main driver of FDI market seeking. Morover FDI inflows in Africa are concentrated in the relatively countries with a larger market size. This implies that productions of affiliate transnational corporations in Africa mainly target local sale rather than opting for an export platform. Cheng & Kwan (2000) used per capita regional income to capture the regional market potential. They found that large regional market is a determinant of FDI inflows for 29 Chinese regions. Namely they found that the size of a region's market has a positive impact on FDI for 29 Chinese regions. Mallik & Chowdhury (2017) found that openness in a trade regime positively affected FDI inflows for 156 countries. Namely openness in a trade regime lead to a higher level of FDI. Trade (GDP%) shows that countries have an outward trade policy. Esew & Yaroson (2014) found that trade openness is significant determinant of FDI inflows in Nigeria. They stated that restrictive trade policies impedes FDI as well as liberal trade policies encourage FDI. Asiedu (2002) found that openness to trade promote FDI to Sub-Saharan Africa and non-Sub Saharan Africa but the marginal benefit of increased trade openness is lower for Sub-Saharan African Countries. They stated that the policies have been succesful in other regions may not be equally succesful in Africa. Sub-Saharan Africa has received less FDI than other regions. Asiedu (2002) discussed that trade restrictions (and therefore less openness) can have a positive impact on FDI when investments are market-seeking. This is due to the "tariff jumping" hypothesis, which argues that foreign firms that seek to serve local markets may decide to set up subsidiaries in the host country if it is difficult to import their products to the country. In contrast, multinational firms engaged in export-oriented investments may prefer to locate in a more open economy since increased imperfections that accompany trade protection generally imply higher transaction costs associated with exporting. Kar & Tatlısöz (2008) found that trade openness rate has a positive impact on FDI for Turkey. In the literature some studies has examined lagged FDI inflows as determinant of current FDI inflows. Peres, Ameer & Xu (2018) and Ibrahim, Elhiraika & Hamdok (2011) used the lagged value of the dependent variable to take into account the time needed for FDI inflows. Peres, Amer & Xu (2018) found that FDI lagged has a positive and significant impact on FDI inflows for developing and developed countries.

Ibrahim, Elhiraika & Hamdok (2011) found that FDI lagged has a positive and significant impact on FDI inflows for Africa Continent. In the literature some studies has examined economic growth as determinant of FDI inflows. Peres, Ameer & Xu (2018) found that GDP per capita growth has a positive and significant impact on FDI inflows for developing and develeoped countries. Singh & Jun (1995) found that growth rate of GDP has a positive and significant impact on FDI flows for developing countries. Sasi & Hristos (2015) found that economic growth is an important determinant of FDI using meta regression analysis from 140 emprical studies. Chowdhury & Mavrotas (2006) found that FDI caused to GDP growth for Chile, Malaysia and Thailand.
The purpose of this study analyzes whether the impact institutional determinants such as rule of law, corruption and other determinants such as trade, market size, economic growth, lagged FDI inflows on FDI inflows differ for UMICs, LMICs, HICs and LICs. Also this study reveals what is the significance of institutional deteminants relative to other determinants of the FDI inflows for UMICs, LMICs, HICs and LICs.

3.MATERIAL AND METHOD

3.1.Material

In this study, the impact of institutional quality on FDI inflows was estimated for the period from 2009 to 2019 using a panel dataset of 158 countries which classified by income level. The number and time interval selection of countries are made depending on the availability of dataset. In previous studies on the determinants of FDI inflows, developing countries, developed countries, transition economies, South Asian countries, OECD, African countries, Sub-Saharan Countries and individual countries were discussed. In this study, countries are classified as 51 HICs, 44 UMICs, 41 LMICs and 23 LICs in accordance with the definition of income classification of the World Bank. This classification is based on the GDP per capita measurement calculated by the World Bank using the Atlas Method (Prydz & Wardhwa, 2019). Country groups used in this study are presented in Appendix 1(a), Appendix 1(b), Appendix 1(c) and Appendix 1(d). All macroeconomic variables and governance variables (institutional quality) are obtained from World Development Indicators (The World Bank, 2013) and World Governance Indicators respectively (Kaufmann, Kraay & Mastruzzi, 2007). In the analysis conducted in this study, two governance indicators representing institutional quality are used: Control of corruption and rule of law. Control of corruption (CC) reflects perceptions of both minor and major forms of corruption and the extent to which public power is being used for private gain, including the capture of the state by the elite and private interest groups. The rule of law (RL) (in particular the quality of contract and enforcement, property rights, the possibility of crime and violence with courts and the police) measures the extent to which agents trust and pursue the rule of law. The mentioned governance variables take values between -2.5 (weak) and 2.5 (strong). Mauro (1995) stated that positive correlation between variables is a good reason, but high correlation between variables will cause multicollinearity and decrease the measurability of each governance variable. Daude & Stein (2007) stated that handling group variables as a total component would be a standard solution. Therefore, the average of each governance indicator has been calculated (Gov).

$$Gov=(CC + RL / 2) \quad (1)$$

In the literature, market size is generally measured using GDP, GDP per capita and population variables (Kamal, Wahid & Kamal, 2018; Cheng & Kwan, 2000; Ibrahim Elhiraika Hamdok, 2011). Peres, Amer & Xu (2018) used the population as a proxy for market size. In our model, population is used as a proxy of market size (MarketSize). Peres, Ameer & Xu (2018) and Ibrahim, Elhiraika & Hamdok (2011) used the lagged value of the dependent variable to take into account the time needed for FDI inflows. The lagged value of the dependent variable (LagFDI) has been added to our model to take into account the time factor. FDI refers to foreign investments for which multinational corporations own 10% or more of the (local) enterprise.

While the mentioned threshold is somewhat arbitrary, other problem might arise from this type of definition of multinationals' activities, which is that the FDI dataset cover only part of the resources invested by multinational corporation, because a share of the investment may be financed through debt or equity raised in the local market. Therefore FDI underestimates the extent of activities by multinational corporations abroad. If this potential bias is almost uniform across countries and over time the results do not change regarding significance and sign levels of the estimated coefficients (Busse & Hefeker, 2007).

The GDP deflator is used to calculate the real FDI in this study. The GDP deflator is used to measure inflation. The deflator is calculated as the ratio of nominal GDP to real GDP multiplied by 100 according to the base year (McTaggart, Findlay & Parkin, 1996; Dornbusch, Fischer & Kearney, 1995). It should be noted that the base year is not a year that is not subject to a major economic change (Ward,2007). Following the empirical strategy of Peres, Ameer & Xu (2018) and based on the year 2010, the GDP deflator was obtained. Then, real FDI inflows were obtained by using Foreign Direct Investment, net inflows (BoP, current US $) data from World Development Indicators and dividing the GDP into a deflator. Economic growth (GDPpcg) has also been added as a variable to the model. GDP per capita growth (annual%) is used for economic growth.

The fragmentation in international economic policy making and particularly in trade and investment policy reflects a shift from multilateral cooperation towards regional and bilateral solutions and increased protectionism. There is a general shift towards systemic competition between economic powers towards more regulation and intervention in national economic policy making in many countries (UN, 2020:120). Protectionism in trade as a whole harms the world economic welfare by shrinking international trade, reducing production, restricting investment and lowering stock prices (Tam, 2019:1). In this context, the impact of trade openness on FDI inflows has been discussed in previous studies (Mallik & Chowdhury, 2017; Esew & Yaroson, 2014; Asiedu, 2002; Kar & Tatlısöz, 2008). Buchanan, Le & Richi (2011) used the Trade (% GDP) variable Trade (GDP%) shows that countries have an outward trade policy. Trade (% GDP) variable has been added to our model as the determinant of increasing protectionism.

3.2.Method

Table 1(a) 1(b) 1(c) 1(d) summarizes the descriptive statistics of dependent variable, independent variables and control variables for HICs, UMICs, LMICs, and LICs respectively. Real net FDI inflows refers to the ratio of net FDI inflows (B.o.P. current U.S. $) to the GDP deflator based on 2010. On the other hand Gov is a governance component that is calculated by taking the average of CC and RL variables used in the analysis and using as a proxy of institutional quality. GDP per capita (annual%) indicates standard of living and economic growth. Trade (GDP%) shows that countries have an outward trade policy. Pop expresses the size of the market, while LagFDI is used to measure the impact of delayed value of the FDI inflows on current FDI inflows.

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Table 1(a) Descriptive Statistics –HICs

	FDI	Gov	GDPpcg	Trade	MarketSize	LagFDI
Mean	21.6937	1.0669	0.8855	115.4658	15.4067	15.4067
Minimum	21.2401	-0.3494	-15.1512	24.4909	10.7913	21.2833
Maximum	22.5418	2.1856	23.9855	408.362	18.6680	22.5418
Standart Deviation	0.1285	0.6706	3.5022	68.7864	1.8542	0.1296
No of Observation	498	550	548	538	550	498
No of Countries	50	50	50	50	50	50

Source: Author Calculated

Table 1(b) Descriptive Statistics -UMICs

	FDI	Gov	GDPpcg	Trade	MarketSize	LagFDI
Mean	18.5590	-0.3776	1.6488	82.1809	15.6801	18.5510
Minimum	13.3708	-1.6608	-13.5192	22.1059	10.9375	13.3708
Maximum	20.8027	0.8507	12.7742	170.7656	19.4162	20.7649
Standart Deviation	0.6196	0.5262	3.6574	31.9169	2.0985	0.6157
No of Observation	464	484	479	479	484	438
No of Countries	44	44	44	44	44	44

Source: Author Calculated

Table 1(c) Descriptive Statistics -LMICs

	FDI	Gov	GDPpcg	Trade	MarketSize	LagFDI
Mean	18.1626	-0.5954	2.6448	79.6924	16.4159	18.1582
Minimum	10.4088	-1.6102	-14.3793	0.1674	14.2102	10.4088
Maximum	20.1874	1.1038	18.0659	210.4002	18.5347	20.1159
Standart Deviation	0.5668	0.5107	3.3709	24.2217	0.9942	0.5636
No of Observation	427	451	448	432	451	410
No of Countries	41	41	41	41	41	41

Source: Author Calculated

Table 1(d) Descriptive Statistics-LICs

	FDI	Gov	GDPpcg	Trade	MarketSize	LagFDI
Mean	16.1730	-0.9151	1.9360	62.5195	16.4159	16.1723
Minimum	11.5129	-1.7405	-36.5568	19.1008	14.2102	0.6055
Maximum	17.9160	0.4096	18.5153	136.9687	18.5347	17.9160
Standart Deviation	0.6043	0.4448	4.5644	24.2217	0.9942	0.6055
No of Observation	233	253	253	248	253	230
No of Countries	23	23	23	23	23	23

Source: Author Calculated

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Tables 2 (a), 2 (b), 2 (c), 2 (d) report the results of correlation matrix and variance inflation factors (VIFs) for the sample groups respectively. If VIF exceeds 10, it is interpreted as a proof of multicollinearity (Asteriou & Hall, 2011). Since all values are below 10, it has been confirmed that there is not multicollinearity problem and a serious correlation.

Table 2(a) Correlation Matrix -HICs

	FDI	**Gov**	**GDPpcg**	**Trade**	**MarketSize**	**LagFDI**	**VIFs**
FDI	1						
Gov	0.3348	1					1.14
GDPpcg	0.0776	-0.0085	1				1.09
Trade	0.0529	0.0973	0.2364	1			1.31
MarketSize	0.3312	0.0850	0.0594	-0.3490	1		1.37
LagFDI	0.6959	0.3428	0.0292	0.0801	0.3272	1	1.31

Source: Author Calculated

Table 2(b) Correlation Matrix -UMICs

	FDI	**Gov**	**GDPpcg**	**Trade**	**MarketSize**	**LagFDI**	**VIFs**
FDI	1						
Gov	0.0208	1					1.13
GDPpcg	0.0765	0.0997	1				1.03
Trade	-0.3965	0.1902	0.0061	1			1.49
MarketSize	0.6040	-0.2382	0.0827	-0.5642	1		2.21
LagFDI	0.8579	-0.0008	0.0415	-0.4119	0.6326	1	1.76

Source: Author Calculated

Table 2(c) Correlation Matrix -LMICs

	FDI	**Gov**	**GDPpcg**	**Trade**	**MarketSize**	**LagFDI**	**VIFs**
FDI	1						
Gov	0.0886	1					1.36
GDPpcg	0.2461	-0.0263	1				1.06
Trade	-0.0200	0.2252	-0.0176	1			1.36
MarketSize	0.3535	-0.4061	0.1934	-0.4714	1		2.36
LagFDI	0.8113	0.0658	0.2005	-0.0693	0.5071	1	1.62

Source: Author Calculated

Table 2(d) Correlation Matrix and -LICs

	FDI	**Gov**	**GDPpcg**	**Trade**	**MarketSize**	**LagFDI**	**VIFs**
FDI	1						
Gov	0.1001	1					1.04
GDPpcg	0.1695	0.1315	1				1.07
Trade	0.0917	-0.0632	0.0905	1			1.14
MarketSize	**0.4920**	**0.0267**	**0.1672**	**-0.2165**	**1**		**1.42**
LagFDI	**0.5851**	**0.1010**	**0.1451**	**0.1088**	**0.4559**	**1**	**1.36**

Source: Author calculated

The determinants of FDI are defined in the model.

$$FDI = \beta + \propto_1 Gov + \propto_2 GDPpcg + \propto_3 Trade + \propto_4 MarketSize + \propto_5 LagFDI + e \quad (2)$$

Buchanan and English (2007) stated that investors who want to benefit from market returns should indicate their investments according to the legal basics/codes of the countries they invest in. David & Brierley (1985) stated that legal basics/codes can be classified as British law, French law, Scandinavian law and German law and the primary legal system can be divided into civil and common law. The same classification has been applied by Shleifer (La Porta, Lopez de-Silanes, Shleifer & Vishny, 1999). In this study, legal basics/codes are classified as English law (Englaw), French law (Frelaw), Scandinavian law (Scanlaw), German law (Gerlaw) and Socialist law (Soclaw). Socialist law has been characterized as disadvantageous as it includes all communist countries. In other words, the role of the legal system can be disrupted by other factors (Globerman & Shapiro, 2003:6).

Following the empirical methodology of Peres, Ameer and Xu (2018), instrumental variable methodology IV(a) was applied in the model. Using "The Quality of Government" dataset, governance as an institution has been measured (La Porta, Lopez de-Silanes, Shleifer & Vishny, 1999). However for the reason mentioned above, Soclaw category is not considered. For IV (b) the lagged value of the independent variables and the Common law from the dataset of the Ottowa University Law School are considered. Pure Common law has its origins in English law. Civil law is derived from Roman law. Civil law applies to countries subject to French law, German law and Scandinavian law. French civil law provides the least protection while civil law provides investors with weaker legal rights and poor quality of law enforcement. The degree of protection of the German and Scandinavian civil law is average while Common law provide the highest quality of law enforcement (La Porta, Lopez-de Silanes, Shleifer & Vishny, 1998:1116). In this study, Englaw, Frelaw, Gerlaw and Scanlaw legal basics/codes are used as instruments for IV (a) due to multicollinearity among the legal basics/codes.

4. RESULTS

4.1.High Income Countries (HICs)

Ordinary Least Squares (OLS) regression results were reported in Column (1) (2) (3) in Table 3 (a). In HICs, Gov, MarketSize, LagFDI and individual CC and RL variables were found to have a positive and significant impact on FDI, while GDPpcg and Trade variables were found to have a positive and insignificant impact. The OLS estimation results have indicated that the improvement in governance which is an institution, the increase in market size and from delayed value of the FDI inflows encouraged FDI inflows.

According to the endogeneity literature, the OLS Model has a potential deviation (Buchanan, Le & Rishi, 2011; Daude & Stein, 2007). Countries' institutions that stimulate good governance are not external but internal. Because, as an institution, governance is determined internally depending on the type of law, legal origins and level of economic development (Buchanan, Le & Rishi, 2011). Peres, Ameer & Xu (2018), Buchanan, Le & Rishi (2011) and Daude & Stein (2007) used the Instrumental Variable Method to solve this problem in their analysis.

In column (4) (5) (6) were reported results IV (a) using legal basics/codes (Englaw, Frelaw, Gerlaw, Scanlaw). Gov, CC and RL have a positive and insignificant impact on FDI inflows. The correlation between Gov and instrumental variables (Englaw, Frelaw, Gerlaw, Scanlaw, Commonlaw) is given in Appendix 2 (a). In addition, the Durbin-Wu Hausman Endogeneity Test accepted the hypothesis that the OLS estimate was consistent and showed that the Gov variable is exogenous (p value = 0.13095). According to IV(a) results, It has been observed that MarketSize and LagFDI variables have a significant and positive impact on FDI inflows, that is, these variables attract FDI inflows.

Djankov & Murrell (2002) found that countries following the British Common law protect foreign investors, better secure stakeholders' property rights, increase the confidence of foreign investors and market regulations, and consequently increase FDI inflows. On the other hand, civil law has been associated with more complex and lengthy processes. Civil law stimulates injustice and corruption. Using the lagged values of the independent variables and the Common law as the instrumental variable, the estimation results IV (b) were reported in column (7) (8) (9). The Durbin-Wu-Hausman Endogeneity Test rejected the hypothesis that the OLS estimate was inconsistent (p value = 0.07904) and the Gov variable was found to be endogeneity. Gov, CC and RL variables were found to have a significant and positive impact for HICs. This result is robust due to be the strong rule of law and stable control of corruption in HICs. According to IV(b) results, It has been observed that GDPpcg, MarketSize, LagFDI variables have a significant and positive impact on FDI inflows, that is, these variables attract FDI inflows for HICs. In HICs, institutions (Gov) and individual institutions (CC and RL) have been found to be strong enough to work with other legal orijins (Common law) rather than legal codes/basics (Englaw, Frelaw, Gerlaw, Scanlaw).

Table 3(a) FDI and Gov: Panel Regressions for HIC

Independent Variables	OLS			IV(a)			IV(b)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Constant	7.9870***	8.0200***	7.8688***	7.5538***	7.6232***	7.4390***	9.4850***	9.2901***	9.5920***
	(4.91)	(4.91)	(4.85)	(8.96)	(9.08)	(8.80)	(7.89)	(8.30)	(7.19)
Gov	0.0222***			0.0103			0.0634***		
	(4.01)			(0.99)			(2.52)		
C.C.		0.0195***			0.0103			0.0491***	
		(4.05)			(1.19)			(2.60)	
R.L.			0.0231***			0.0087			0.0811**
			(3.84)			(0.68)			(2.25)
GDPpcg	0.0022	0.0022	0.0020	0.0020	0.0021	0.0020	0.0025	0.0027*	0.0023
	(0.81)	(0.83)	(0.77)	(1.33)	(1.37)	(1.29)	(1.57)	(1.66)	(1.39)
Trade	0.00005	0.00005	0.00004	0.00006	0.00006	0.00005	0.00002	0.00004	-0.00002
	(0.85)	(0.98)	(0.73)	(0.85)	(0.90)	(0.83)	(0.24)	(0.59)	(-0.20)
MarketSize	0.0093***	0.0099***	0.0087***	0.0094***	0.0096***	0.0091***	0.0092***	0.0106***	0.0070**
	(4.17)	(4.34)	(3.91)	(3.42)	(3.51)	(3.29)	(3.26)	(3.74)	(2.27)
LagFDI	0.6235***	0.6217***	0.6294***	0.6440***	0.6406***	0.6496***	0.5527***	0.5613***	0.5486***
	(8.19)	(8.14)	(8.30)	(16.20)	(16.16)	(16.33)	(9.73)	(10.59)	(8.76)
No of Countries	50	50	50	50	50	50	50	50	50
No of Observations (strongly balanced)	479	479	479	479	479	479	479	479	479
R^2	0.5109	0.5113	0.5094	0.5077	0.5087	0.5057	0.4732	0.4854	0.4504
F-statistic	39.37	39.52	39.02						
Wald χ^2				487.45	488.87	484.95	460.92	472.13	440.78
				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Note: The dependent variable (FDI net inflows (B.o.P. current U.S. $)) is divided into GDP deflator based on 2010. White heteroskedastisity correction applied to OLS regression. Legal codes (basics) for IV (a), common law and the delayed value of the independent variables for IV (b) were used as instrumental variables. The logarithm of MarketSize, LagFDI and FDI variables are taken. . t-statistics are given in brackets. ***, **, * denotes significance at the level of 1%, 5% and 10% respectively.
Source: Authors calculated.

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Table 3(b) FDI and Gov: Panel Regressions for UMIC

Independent Variables	OLS			IV(a)			IV(b)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Constant	2.7542*	2.6601*	0.8516*	3.1581***	2.9175***	3.4487***	3.3883***	3.0289***	3.6310***
	(1.81)	(1.74)	(1.89)	(4.76)	(4.74)	(4.60)	(4.47)	(4.69)	(3.92)
Gov	0.0569*			0.1726**			0.2386*		
	(1.83)			(1.89)			(1.78)		
C.C.		0.0452			0.1564*			-0.2046*	
		(1.61)			(1.87)			(1.86)	
R.L.			0.0634**			0.1913**			0.2304
			(2.04)			(1.90)			(1.51)
GDPpcg	0.0055	0.0057	0.0055	0.0034	0.0035	0.0033	0.0022	0.0026	0.0026
	(0.91)	(0.94)	(0.90)	(0.71)	(0.74)	(0.69)	(0.43)	(0.52)	(0.51)
Trade	-0.0004	-0.0004	-0.0005	-0.0006	-0.0005	-0.0007	-0.0007	-0.0005	-0.0008
	(-0.98)	(-0.90)	(-1.06)	(-1.10)	(-0.94)	(-1.26)	(-1.20)	(-1.00)	(-1.29)
MarketSize	0.0309	0.296	0.0318	0.0412***	0.0389***	0.0440***	0.0471***	0.0430***	0.0477***
	(1.42)	(1.36)	(1.46)	(3.10)	(3.07)	(3.09)	(2.93)	(3.04)	(2.65)
LagFDI	0.8280***	0.8338***	0.8222***	0.8008***	0.6612***	0.7836***	0.7853***	0.8069***	0.7719***
	(8.46)	(8.44)	(8.44)	(19.71)	(20.76)	(17.03)	(16.61)	(20.30)	(13.36)
No of Countries	44	44	44	44	44	44	44	44	44
No of Observations (strongly balanced)	419	419	419	419	419	419	419	419	419
R^2	0.7458	0.7452	0.7462	0.7372	0.7372	0.7361	0.7247	0.7264	0.7290
F-statistic	236.75	235.53	236.71						
Wald χ^2				1189.51	1189.51	1184.53	1135.21	1142.27	1152.30
				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Note: Dependent variable (FDI net inflows (BoP current US $)) is divided into GDP deflator based on 2010. White heteroskedastisity correction applied to OLS regression. Legal codes (basics) for IV (a), Common law and the delayed value of the independent variables for IV (b) were used as instrumental variables. The logarithm of MarketSize, LagFDI and FDI variables are taken. t-statistics are given in parentheses. ***, **, * denotes significance at 1%, 5%, 10%level respectively.
Source: Authors calculated.

Table 3(c) FDI and Gov: Panel Regressions for LMIC

Independent Variables	OLS			IV(a)			IV(b)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Constant	-2.4852	-2.4731	-2.5019	-2.3714**	-2.3767**	-2.3681**	-1.7879	-1.8451*	-1.9945
	(-0.52)	(-0.52)	(-0.51)	(-2.17)	(-2.27)	(-2.08)	(-1.37)	(-1.67)	(-1.36)
Gov	-0.0008			0.0180			0.1148		
	(-0.01)			(0.14)			(0.68)		
C.C.		0.0012			0.0196			0.1209	
		(0.02)			(0.15)			(0.84)	
R.L.			-0.0032			0.0164			0.0713
			(-0.05)			(0.14)			(0.39)
GDPpcg	0.0176**	0.0176**	0.0176**	0.0176***	0.0175***	0.0176***	0.0173***	0.0169***	0.0177***
	(2.00)	(2.00)	(2.01)	(3.14)	(3.10)	(3.15)	(3.05)	(2.94)	(3.15)
Trade	-0.00005	-0.00005	-0.00005	-0.00004	-0.00003	-0.00005	7.40e-06	0.00007	-0.00005
	(-0.07)	(-0.06)	(-0.07)	(-0.08)	(-0.06)	(-0.10)	(0.01)	(0.13)	(-0.10)
MarketSize	-0.0274	-0.0270	-0.0276	-0.0244	-0.0233	-0.0253	-0.0091	-0.0032	-0.0188
	(-0.55)	(-0.53)	(-0.58)	(-1.06)	(-0.82)	(-1.38)	(-0.31)	(-0.10)	(-0.10)
LagFDI	1.1579***	1.1569***	1.1589***	1.1495***	1.4488***	1.1501***	1.1065***	1.1043***	1.1255***
	(3.74)	(3.79)	(3.73)	(15.59)	(15.31)	(15.89)	(12.30)	(13.74)	(11.87)
No of Countries	41	41	41	41	41	41	41	41	41
No of Observations (strongly balanced)	377	377	377	377	377	377	377	377	377
R^2	0.6714	0.6714	0.6714	0.6712	0.6712	0.6712	0.6641	0.6625	0.6684
F-statistic	211.79	203.61	222.23						
Wald χ^2				769.99	769.95	769.96	754.09	750.71	763.49
				(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)

Note: Dependent variable (FDI net inflows (BoP current US $)) is divided into GDP deflator based on 2010. White heteroskedastisity correction applied to OLS regression. Legal codes (foundations) for IV (a), Common law and the delayed value of the independent variables for IV (b) were used as instrumental variables. The logarithm of MarketSize, LagFDI and FDI variables are taken. . t-statistics are given in parentheses. ***, **, * denotes significance at 1%, 5%, 10% level respectively.
Source: Authors calculated.

Table 3(d) FDI and Gov: Panel Regressions for LIC

Independent Variables	OLS			IV(a)			IV(b)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Constant	5.9292***	5.8788***	5.9610***	7.0593***	5.9493***	7.0111***	6.1767***	6.4512***	6.0729***
	(2.87)	(2.85)	(2.87)	(5.59)	(5.59)	(6.25)	(5.62)	(4.97)	(5.79)
Gov	0.0723			0.7148*			0.2133		
	(1.25)			(1.76)			(0.60)		
C.C.		0.0594			0.1139			0.5025	
		(0.99)			(0.26)			(0.76)	
R.L.			0.0715			0.5435**			0.1220
			(1.41)			(2.24)			(0.50)
GDPpcg	0.0051	0.0052	0.0051	-0.0031	0.0045	-0.0008	0.0035	-0.0002	0.0046
	(1.24)	(1.29)	(1.24)	(-0.32)	(0.49)	(-0.10)	(0.41)	(-0.02)	(0.60)
Trade	0.0029*	0.0028*	0.0029*	0.0041**	0.0029**	0.0043**	0.0032**(2.	0.0032**	0.0121***
	(1.70)	(1.66)	(1.72)	(2.28)	(1.94)	(2.54)	01)	(1.95)	(2.56)
MarketSize	0.2006***	0.2011***	0.1994***	0.2229***	0.2038***	0.2084***	0.2076***	0.2266***	0.2022***
	(3.08)	(3.10)	(3.07)	(4.64)	(4.49)	(4.78)	(4.90)	(4.04)	(5.02)
LagFDI	0.4231**	0.4252**	0.4220**	0.3631***	0.4209***	0.3708***	0.4079***	0.3876***	0.4148***
	(2.22)	(2.22)	(2.21)	(4.45)	(5.91)	(5.07)	(5.70)	(4.47)	(6.09)
No of Countries	23	23	23	23	23	23	23	23	23
No of Observations (strongly balanced)	207	207	207	207	207	207	206	206	206
R^2	0.4229	0.4223	0.4231	0.2193	0.4207	0.3043	0.4132	0.3130	0.4217
F-statistic	55.05	52.19	57.62						
Wald χ^2				114.55	150.26	130.10	147.93	126.62	149.99
				(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)

Note: Dependent variable (FDI net inflows (BoP current US $)) is divided into GDP deflator based on 2010. White heteroskedastisity correction applied to OLS regression. Legal codes (basics) for IV (a), delayed value of independent variables for IV (b) were used as instrumental variables. The logarithm of MarketSize, LagFDI and FDI variables are taken. t-statistics are given in parentheses. ***, **, * denotes significance at 1%, 5%, 10% level respectively.
Source: Authors calculated.

4.2. Upper Middle Income Countries (UMICs)

Ordinary Least Squares (OLS) regression results were reported in column (1) (2) (3) in Table 3 (b). It has been observed that LagFDI variable has a significant and positive impact on FDI inflows but GDPpcg, MarketSize variables have a positive and insignificant impact and Trade variable has a negative and insignificant impact. It was seen that Gov and RL variables had a positive and significant impact, while CC variable had a positive and insignificant impact. According to the OLS results, it has been observed that delayed value of the FDI inflows stimulated FDI inflows.

In column (4) (5) (6) reported results IV (a) using the Englaw and Frelaw legal basics/codes, as Gerlaw and Scanlaw legal basics/codes do not exist in UMICs. Gov, CC and RL have a significant and positive impact on FDI inflows. The correlation between Gov and instrumental variables (Englaw, Frelaw, Common law) is presented in Appendix 2 (b) In addition, the Durbin-Wu Hausman Test for endogeneity accepted the hypothesis that the OLS estimate is consistent and indicated that the Gov variable is exogenous (p value = 0.17036). It has been observed that MarketSize and LagFDI variables have a significant and positive impact on FDI inflows, that is, these variables attract FDI inflows. It has been observed that the GDPpcg variable has a positive and insignificant impact, while the Trade variable has a negative and insignificant impact.

In column (7) (8) (9) Common law and lagged values of independent variables were used as instrumental variables and the estimation results were reported as IV (b). For the Gov variable, the Durbin-Wu-Hausman Endogeneity Test accepted the hypothesis that the OLS estimate was consistent (p value = 0.14553) and the Gov variable was found to be exogenous. the Gov variable was found to be positive and significant, and the CC variable negative and significant, while the RL variable had a positive and insignificant impact for UMICs. It has been observed that MarketSize and LagFDI variables have a significant and positive impact on FDI inflows, that is, these variables attract FDI inflows for UMICs. It has been observed that the GDPpcg variable has a positive and insignificant impact on FDI inflows while the Trade variable has a negative and insignificant impact.

In UMICs, Institutions (Gov) and individual institutions (CC and RL) have been found to be strong enough to work with other legal origins (Common law) and legal basics/codes (Englaw, Frelaw).

4.3. Lower Middle Income Countries (LMICs)

Ordinary Least Squares (OLS) regression results are reported in column (1) (2) (3) in Table 3 (c). In LMICs, GDPpcg and LagFDI variables have significant and positive impact on FDI inflows, Gov and RL variables have negative and insignificant impact, CC variable has a positive and insignificant impact. According to the results, it has been observed that economic growth and delayed value of the FDI inflowsstimulated FDI inflows.

In column (4) (5) (6) reports results IV (a) using legal basics/codes (Englaw, Frelaw) as Gerlaw and Scanlaw bases / codes do not exist in LMICs. Gov, CC and RL have a positive and insignificant impact on FDI inflows. The correlation between Gov and instrumental variables (Englaw, Frelaw, Commonlaw) were given in Appendix 2 (c). Also Durbin-Wu Hausman Endogeneity Test indicated that the Gov variable is exogenous (p value = 0.87275) by accepting the hypothesis. So OLS estimation result was consistent. According to IV(a) estimation results, it has been observed that GDPpcg and LagFDI variables have a significant and positive impact on FDI inflows, that is, these variables attract FDI inflows.

In column (7) (8) (9), the estimation results IV (b) of the Common Law as the instrumental variable and the lagged values of the independent variables are reported. For the Gov variable, the Durbin-Wu-Hausman Endogeneity Test accepted the hypothesis that the OLS estimate was consistent (p value = 0.47754) and the Gov variable was found to be exogenous. According to IV(b) estimation results, Gov, CC and RL variables were found to have a positive and insignificant impact on FDI inflows. It has been observed that GDPpcg and LagFDI variables have a significant and positive impact on FDI inflows, that is, GDPpcg and LagFDI attract FDI inflows for LMICs. Trade and MarketSize variables were found that have an insignificant impact. In LMICs, it has been found that institutions (Gov) and individual institutions (CC and RL) are not strong enough to work with other legal origins (Common law) and legal basics/codes (Englaw, Frelaw).

4.4. Low Income Countries (LICs)

Ordinary Least Squares (OLS) regression results are reported in column (1) (2) (3) in Table 3 (d). It has been observed that Trade, MarketSize, and LagFDI variables have a significant
and positive impact on FDI inflows in LICs. Trade (GDP%) shows that countries have an outward trade policy. According to the OLS estimation results, it was seen that the increase in trade openness stimulated the FDI inflows. Moreover the increase in market size and delayed value of the FDI inflows stimulated the FDI inflows.

In column (4) (5) (6) were reported results for IV (a) using legal basics/codes (Englaw, Frelaw). Gerlaw and Scanlaw were not available in LICs. While Gov and RL are positive and significant, CC has a positive and insignificant impact on FDI inflows. Correlation between Gov and instrumental variables (Englaw and Frelaw) were given in Appendix 2 (d). In addition, the Durbin-Wu Hausman Test for endogeneity rejected the hypothesis that the OLS estimate is inconsistent and indicated that the Gov variable is internal (p value = 0.05921). It is seen that Trade, MarketSize, LagFDI variables have a significant and positive impact on FDI inflows, that is, Trade, MarketSize, LagFDI variables stimulate FDI inflows.

Djankov & Murrell (2002) found that countries following the British Common Law protect foreign investors, better secure stakeholders' ownership rights, increase the confidence of foreign investors and market regulations, and consequently increase FDI inflows. On the other hand, Civil Law is associated with more complex and lengthy processes. Civil Law stimulates injustice and corruption. However, since there is no country based on British Common Law in LICs, Common law was not used as an instrumental variable.

For this reason, the estimation results of the lagged values of the independent variables as instrumental variables in the column (7) (8) (9) were reported IV (b). For the Gov variable, the Durbin-Wu-Hausman Endogeneity Test accepted the hypothesis that the OLS estimate was consistent (p value = 0.68230) and the Gov variable was found to be exogenous. It was seen that Gov, RL and CC variables had a positive and insignificant impact on FDI inflows. It is seen that Trade, MarketSize, LagFDI variables have a significant and positive impact on FDI inflows, that is, Trade, MarketSize and LagFDI variables stimulate FDI inflows.

5.DISCUSSION AND CONCLUSION

Low institutional quality causes low investments, low per capita income, low productivity and low of overall output growth. It is stated that strong institutions increase profitability and economic activity by decreasing transaction and production costs (North, 1990), while weak institutions increase uncertainty and production costs (Cuervo Cazurra, 2006:2). The present study aim to examine whether the impact institutional quality such as Gov, rule of law, corruption and other determinants such as trade, market size, economic growth, lagged FDI inflows on FDI inflows differ for UMICs, LMICs, HICs and LICs for the period from 2009 to 2019 using Instrimental Variable Method. Also this study reveals what is the significance of institutional quality relative to other determinants of the FDI inflows for HICs, UMICs, LMICs and LICs.

In HICs, our analysis indicated that Gov, CC and RL variables attracted FDI inflows. Strong institutions attract FDI inflows while weak institutions push FDI inflows (Ali, Fiess & MacDonald, 2010; Ajide, Raheem & Ibrahim, 2016; Fukumi & Nishijima, 2010; Daude & Stein, 2007; Borin, Cristadoro & Mattevi, 2014). In HICs, generally countries have strong institutions. The corruption and rule of law are important determinants of FDI inflows for developed countries (Peres, Ameer & Xu,2018). It should also be noted that in HICs, strong control of corruption and a stable rule of law are not homogeneous in the sample. Romania, Panama, Kuwait and Saudi Arabia, despite being HICs, do not have a strong institutional quality. The analysis also provided evidence that institutions works better with legal origin (Common law) rather than legal basics/codes (Englaw, Frelaw, Gerlaw, Scanlaw) in HICs. Our analysis indicated that MarketSize, LagFDI, GDPpcg variables attracted FDI inflows in HICs. Larger market size affects positively on FDI inflows for 29 Chinese regions (Cheng & Kwan,2000). The level of delayed value of the FDI inflows is the determinant of FDI inflows for developed countries (Peres, Ameer & Xu,2018). Peres, Ameer & Xu (2018) found that GDP per capita growth has a positive and significant impact on FDI inflows for develeoped countries. Sasi & Hristos (2015) found that economic growth is an important determinant of FDI using meta regression analysis from 140 emprical studies. The fourth key finding of the current study was that it is seen that institutions are more determinant on FDI inflows than market size since HICs have strong institutions.

In UMICs, our analysis indicated that Gov, CC and RL variables attracted FDI inflows. The corruption and rule of law are important determinants of FDI inflows for developing countries (Busse & Hefeker, 2007). The corruption is important determinant of FDI inflows for Malaysia which is UMICs (Karim, Zaidi & Karim, 2012). The rule of law is important determinant of FDI inflows for Belt and Road Countries (Chen, Jiang & Wang, 2019). The analysis also provided evidence that institutions works better with legal basics/codes (Englaw, Frelaw) rather than legal origin (Common law) in UMICs. The third key finding of the current study was that MarketSize and LagFDI variables attracted FDI inflows in UMICs. Larger market size affects positively on FDI inflows for Emerging Market Economies (Kamal, Wahid & Kamal, 2018). The level of delayed value of the FDI inflows is the determinant of FDI inflows for developed countries (Peres, Ameer & Xu,2018). The fourth key finding of the current study was that the level of determination of institutions are higher than market size in UMICs.

In LMICs, our analysis indicated that LagFDI and GDPpcg variables attracted FDI inflows. The level of delayed value of the FDI inflows is the determinant of FDI inflows for African Countries and Developing Countries (Ibrahim, Elhiraika & Hamdok, 2011; Peres, Ameer & Xu,2018). Peres, Ameer & Xu (2018) found that GDP per capita growth has a positive and significant impact on FDI inflows for developing countries. Singh & Jun (1995) found that growth rate of GDP has a positive and significant impact on FDI flows for developing countries. Sasi & Hristos (2015) found that economic growth is an important determinant of FDI using meta regression analysis from 140 emprical studies. Chowdhury & Mavrotas (2006) found that FDI caused to GDP growth for Chile, Malaysia and Thailand. The analysis also provided evidence that Gov, CC and RL, Trade, MarketSize variables did not attracted FDI inflows. In the literature was found that CC is a determinant on FDI inflows for Nigeria and Vietnam (Esew &Yaroson, 2014; Nguyen & Cao, 2015). But generally this country group have weak institutional structure. Therefore this result is consistent with expectations. Trade opennness affects positively on FDI inflows for Sub Saharan Countries but it is stated that the marginal benefit is lower than non-Sub Saharan Countries (Asiedu, 2002). Larger market size affects positively on FDI inflows for African Countries (Ibrahim, Elhiraika & Hamdok, 2011). But it should note that our analysis include all the Low Middle Income Countries. So our sample are not individual country or individual continent.

In LICs, our analysis indicated that Gov and RL variables attracted FDI inflows. The rule of law is important determinants of FDI inflows for African Countries and Burkina Faso (Ibrahim, Elhiraika & Hamdok, 2011; Ramde, 2018). But it should note that our analysis include all the Low Income Countries. So our sample are not individual country or individual continent. The analysis also provided evidence that institutions works better with legal basics/codes (Englaw, Frelaw) rather than lagged independed variables in LICs. Since there is not common law in LICs. There we used only lagged independed variables as instrumental variables for LICs. Our analysis indicated that Trade, MarketSize and LagFDI variables attracted FDI inflows in LICs. Trade opennness affects positively on FDI inflows for Sub Saharan Countries but it is stated that the marginal benefit is lower than non-Sub Saharan Countries (Asiedu, 2002). It was discussed that trade restrictions (and therefore less openness) can have a positive impact on FDI when investments are market-seeking. This is due to the "tariff jumping" hypothesis, which argues that foreign firms that seek to serve local markets may decide to set up subsidiaries in the host country if it is difficult to import their products to the country. In contrast, multinational firms engaged in export-oriented investments may prefer to locate in a more open economy since increased imperfections that accompany trade protection generally imply higher transaction costs associated with exporting (Asiedu, 2002). As discussed previously, FDI for LICs sample is less likely to be market-seeking and therefore it has been found a positive relationship between trade openness and FDI. Larger market size affects positively on FDI inflows for African Countries (Ibrahim, Elhiraika & Hamdok). The level of delayed value of the FDI inflows is the determinant of FDI inflows for African Countries (Ibrahim, Elhiraika & Hamdok). The third key finding of the current study was that the determination of institutions on FDI inflows are more higher than trade openness and market size in LICs.

Our analysis are robust since same results was found using different methods (OLS, IV(a) and IV(b)) for all samples. This findings supports the idea that the impact institutional quality and other determinants such as trade, market size, economic growth, lagged FDI inflows on FDI inflows differ for UMICs, LMICs, HICs and LICs for the period from 2009 to 2019. This study confirms that the impact of institutional quality and other determinants such as trade, market size, economic growth, lagged FDI inflows on FDI inflows differ for UMICs, LMICs, HICs and LICs. It contributes to the current knowledge by asseting that MarketSize did not affect investors' market choice for FDI inflows in LMICs but affected on FDI inflows in other country groups (HICs, LICs, UMICs). Also institutional quality did not effect in LMICs but affected on FDI inflows in other country groups (HICs, LICs, UMICs). In literature support estimation results our analysis.

It was found that the developed countries and the developing countries differ in related to determinants of FDI inflows (Peres, Amer & Xu,2018).

The findings in this study should be interpreted considering several limitations. First, the common law is known to protect foreign investors, better secure stakeholders' property rights, increase the confidence of foreign investors and market regulations, and consequently increase FDI inflows. But the common law did not used in LICs since it did not include but was used HICs, UMICs, LMICs since it included. Second, Frelaw provides the least protection while civil law provides weaker legal rights and poor quality of law enforcement. The degree of protection of the Gerlaw and Scanlaw is average while common law provide the highest quality of law enforcement (La Porta, Lopez-de Silanes, Shleifer & Vishny, 1998:1116). This legal codes/basics differ in our samples (HICs, UMICs, LMICs, LICs). All legal codes (Englaw, Frelaw, Scanlaw, Gerlaw) included in HICs but only Frelaw and Englaw included in UMICs, LMICs and LICs. Third, FDI dataset underestimates the extent of activities by multinational corporations abroad. If this potential bias is almost uniform across countries and over time the results do not change regarding significance and sign levels of the estimated coefficients (Busse & Hefeker, 2007). We therefore recommend that institutional structure should be restructured in LMICs as well as should be regulated in HICs and UMICs. Also policies should be developed to eradicate corruption in LICs.

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Appendix

Table A.1 List of Selected -HICs

No.	Country	No.	Country
1	Aruba	29	Italy
2	United ArabEmirates	30	Japan
3	Antigua and Barbuda	31	St. Kittsand Nevis
4	Australia	32	Korea, Rep.
5	Austria	33	Kuwait
6	Belgium	34	Lithuania
7	Bahrain	35	Luxembourg
8	Bahamas	36	Latvia
9	Barbados	37	Mauritius
10	Brunei Darussalam	38	Netherlands
11	Canada	39	Norway
12	Switzerland	40	New Zealand
13	Chile	41	Oman
14	Cyprus	42	Panama
15	CzechRepublic	43	Malta
16	Germany	44	Poland
17	Denmark	45	Portugal
18	Spain	46	Qatar
19	Estonia	47	Romania
20	Finland	48	SaudiArabia
21	France	49	Singapore
22	United Kingdom	50	Slovak Republic
23	Greece		
24	Croatia		
25	Hungary		
26	Ireland		
27	Iceland		
28	Israel		

Source: World Bank

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Table A.2 List of Selected UMICs

No.	Country	No.	Country
1	Albania	30	Moldova
2	Argentina	31	Maldives
3	Armenia	32	Mexico
4	Azerbaijan	33	Marshall Islands
5	Bulgaria	34	North Macedonia
6	BosniaandHerzegovina	35	Malaysia
7	Belarus	36	Namibia
8	Belize	37	Peru
9	Brazil	38	Paraguay
10	Botswana	39	Russian Federation
11	Colombia	40	Senegal
12	Costa Rica	41	Thailand
13	Dominica	42	Turkmenistan
14	DominicanRepublic	43	Tonga
15	Ecuador	44	Turkey
16	Gabon	45	South Africa
17	Georgia		
18	EquatorialGuinea		
19	Grenada		
20	Guatemala		
21	Guyana		
22	Indonesia		
23	Iran, IslamicRep.		
24	Iraq		
25	Jamaica		
26	Jordan		
27	Kazakhstan		
28	Lebanon		

Source: World Bank

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Table A.3 List of Selected LMICs

No.	Country	No.	Country
1	Angola	31	Pakistan
2	Benin	32	Philippines
3	Bangladesh	33	West Bank and Gaza
4	Bolivia	34	Solomon Islands
5	Bhutan	35	Tunusia
6	Côted'Ivoire	36	Tanzania
7	Cameroon	37	Ukraine
8	Congo, Rep.	38	Uzbekistan
9	Comoros	39	Vietnam
10	Cabo Verde	40	Zambia
11	Algeria	41	Zimbabwe
12	Egypt, ArabRep.		
13	Micronesia, Fed. Sts.		
14	Ghana		
15	Honduras		
16	India		
17	Kenya		
18	KyrgyzRepublic		
19	Cambodia		
20	Kiribati		
21	Lao PDR		
22	Sri Lanka		
23	Lesotho		
24	Morocco		
25	Myanmar		
26	Mongolia		
27	Mauritania		
28	Nigeria		
29	Nicaragua		
30	Nepal		

Source: World Bank

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Table A.4 List of Selected LICs

No.	Country	No.	Country
1	Afghanistan	14	Mozambique
2	Burundi	15	Malawi
3	Burkina Faso	16	Niger
4	Central AfricanRepublic	17	Rwanda
5	Congo, Dem. Rep.	18	Sudan
6	Ethiopia	19	Sierra Leone
7	Guinea	20	Chad
8	Gambia, The	21	Togo
9	Guinea-Bissau	22	Tajikistan
10	Haiti	23	Uganda
11	Liberia		
12	Madagascar		
13	Mali		

Source: World Bank

Table B.1 Correlations between governance and instrument variables – HICs

	CCRL2	english	french	german	scandi~n	common~w
CCRL2	1.0000					
english	0.1772	1.0000				
french	-0.2232	-0.5849	1.0000			
german	0.2188	-0.1925	-0.2002	1.0000		
scandinavian	0.3869	-0.1895	-0.1970	-0.0649	1.0000	
commonlaw	0.1976	0.5120	-0.2554	-0.1195	-0.1176	1.0000

Table B.2 Correlations between governance and instrument variables – UMICs

	CCRL2	english	french	common~w
CCRL2	1.0000			
english	0.4511	1.0000		
french	-0.2461	-0.5580	1.0000	
commonlaw	0.2802	0.5816	-0.3245	1.0000

Table B.3 Correlations between governance and instrument variables – LMICs

	CCRL2	english	french	common~w
CCRL2	1.0000			
english	0.3098	1.0000		
french	-0.2017	-0.7805	1.0000	
commonlaw	0.2404	0.1986	-0.1550	1.0000

Table B.4 Correlations between governance and instrument variables – LICs

	CCRL2	english	french
CCRL2	1.0000		
english	0.1932	1.0000	
french	-0.1181	-0.8982	1.0000