FORMAL AND INFORMAL INSTITUTIONS, AND FDI FLOWS: A REVIEW OF THE EMPIRICAL LITERATURE AND PROPOSITIONS FOR FURTHER RESEARCH

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ABSTRACT: The aim of this paper is to firstly, summarize the empirical literature dealing with the relationship between formal and informal institutions on one side and foreign direct investment (FDI) on the other, and secondly, to propose a possible path for further progress in the field. The main proposition of the paper is that when formulating hypotheses, the empirical research on the institutions-FDI nexus should rely (to a greater extent) on the theories from institutional economics, more specifically on the theory of institutional stickiness (Boettke et al., 2008) and the hierarchy of institutions (Williamson, 2000), and the theory of coevolution of culture (informal institutions) and formal institutions (Bisin and Verdier, 2017). Within the framework of these theories, the paper provides four suggestions as regards the manner in which further progress in the empirical research on the institutions-FDI nexus can be achieved.

Key words: FDI, culture, institutions, corruption, political and civil rights

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1 INTRODUCTION

Both the theoretical and empirical analyses on the FDI flows have long been in the forefront of economics research. This lively interest is well justified by the enormous positive impact the incoming FDI exerts on the economic development of the host country, as documented in particular by Iamsiraroj (2016), who proves the existence of a virtuous cycle suggesting that FDI contributes to economic growth which in turn attracts more FDI.² In this spirit, attracting more FDI has become a crucial goal in the economic policy of many developing countries, meaning that the question of what factors lead to more FDI inflows has gained not only economic policy interest but significance as well.

2 Note that a couple of empirical studies have provided mixed evidence on the growth effect of FDI; see Azman-Saini et al. (2010) for a brief review of the negative or zero effect.

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Answers given to the above question are largely based on empirical investigations, mostly of a cross-country regression type, which report the importance of various "traditional" factors such as market size, growth prospects, macroeconomic stability, macroeconomic policies, tax regime, labor cost, level of the infrastructure, agglomeration economies, trade policy, exchange rate policy, etc.³ However, the literature is not only extensive but controversial as well, which is evidenced in Chakrabarti's (2001) extreme bound analysis. According to the latter, only the "market size" variable survives a sensitivity analysis, while all the other variables, found to be determinants of FDI in previous studies, are proven to be sensitive to small changes in the conditioning information set.

With the aim of finding more solid factors attracting FDI, institutional explanations have recently been enjoying a period of growth. This line of research is primarily advocated, firstly, by the literature proving the positive impact of various "good" institutions on economic development (e.g. Acemoglu et al., 2001), and secondly, by the literature on the development-enhancing impact of culture⁴ (e.g. Tabellini, 2010). From the perspective of this literature, FDI is one channel through which formal and informal institutions can promote development. What is more, different scholars provide evidence for the beneficial effect of different institutions.

The aim of this paper is to summarize the empirical literature dealing with the relationship between formal and informal institutions, and FDI, and to propose a possible path for further progress in the field. The main proposition is that when formulating hypotheses, the empirical research on the institutions-FDI nexus should rely, to a greater extent, on the theories from institutional economics, namely the theory of institutional stickiness (Boettke et al., 2008) and the hierarchy of institutions (Williamson, 2000), as well as the theory of coevolution of culture and institutions (Bisin and Verdier, 2017). Within the framework of these theories, the paper provides four suggestions as regards how to advance in empirically investigating the institutions-FDI nexus.

In my review, my focus is restricted to only those papers in which the dependent variable in the empirical analysis is a measure of FDI (inflow or stock), while at the same time admitting that both formal and informal institutions have an impact on other "characteristics" of multinational firms in a foreign country.⁵

³ It is beyond the scope of this paper to summarize the vast literature on the "traditional" determinants of the FDI movements; a review can be found in Blonigen (2005).

⁴ When it comes to informal institutions included in empirical investigations, scholars use, almost exclusively, culture with an equivalent meaning. While admitting that the Northian conceptualization of informal institutions (North, 1991) cannot be fully equated with that of culture, which is part of informal institutions, the two concepts are used as synonyms in the paper, as they are in the literature in question too.

⁵ Amongst these "characteristics", the choice of entry modes between wholly-owned companies or joint ventures (shared ownership) in the host country is probably the most frequently researched (e.g. Kogut and Singh, 1988).

The rest of the paper is organized as follows. In Section 2, the literature analyzing the link between formal institutions and FDI is summarized. Section 3 deals with the empirical literature on how informal institutions (culture) affect the FDI flows. A critique of the literature together with my personal propositions on how to make further progress in the research are provided in Section 4, while Section 5 concludes the paper.

2 THE FORMAL INSTITUTIONS-FDI NEXUS

There are several reasons to think that high-quality institutions, e.g. low corruption, secure property rights, low political risk, low-level of bureaucracy etc., attract more FDI. The literature, except for some very rare cases, documents this by showing a significant positive impact of various "good" formal institutions on FDI.⁶ The papers evidencing a significant impact of formal institutions seem to have been converging to show the importance of in particular the following institutions: (1) corruption, 2) governance and regulatory institutions, 3) political institutions (civil and political rights) and political risk. In what follows, I summarize the literature as centered on the above institutions. In each subsection, the studies are distinguished based on whether they address a *general* or a *specific* question about the impact of the particular formal institution. The general question refers to *whether* the individual institution has an impact on FDI, however, the specific question of the paper is about *how* this same institution exercises its effect.

2.1. Corruption

Among formal institutions, corruption has frequently been proven to be an impediment to the inward FDI. Bearing in mind that the literature on corruption has provided us with the knowledge that corruption *does* affect investments in general (e.g. Lambsdorff, 2003), it is not a surprise that almost all investigations in the field look into a specific question about its impact on FDI, which contributes greatly to our understanding of this effect.

One obvious specific question that consequently arises is how corruption affects the composition of capital inflows, i.e. FDI versus borrowing from a foreign bank. Wei (2000) is an important paper addressing this issue. Relying on an econometric specification based on a simple optimization problem faced by multinational firms, his main finding is that corruption exercises an impact both on the volume and composition of capital inflows in the host country. In other words, on the one hand, corruption reduces the inward FDI, and on the other, it distorts the composition of capital inflows towards foreign bank loans. Focusing on a specific group of countries, namely transition economies, Smarzynska and Wei (2000), by using the EBRD firm-level data for the period 1989-1995, demonstrate a slightly different impact, namely corruption has a negative impact on the inward FDI,

⁶ Amongst the rare cases not supporting the importance of formal institutions in attracting FDI, it is worth mentioning Wheeler and Mody (1992) who look at the US outward FDI location decisions in the 1980s. What the two scholars identify as affecting factors are the "traditional" variables and agglomeration benefits.

however, it shifts the ownership structure towards joint ventures, and the latter is exactly the opposite of Wei's (2000) finding.

Aizenman and Spiegel (2006) investigate the effect of corruption across various income categories. They use the index of corruption in a broader context to express institutional inefficiency on a sample of 97 countries, 28 of which are designated as low-income and 48 of which are designated as mid-income. Irrespective of the income category, the institutional variable (corruption) is always significant in the regressions, except for when investment cost is included.

Of course, various types of FDI may be influenced by corruption in different ways. In this spirit, Brouthers et al. (2008) distinguish three types, namely the market-seeking, labor-seeking and raw materials-seeking FDIs, and provide novel insights into corruption's role in the FDI flows. The results indicate that the negative effect of corruption is mitigated by the high attractiveness of the market when it comes to the market-seeking FDI, while in the case of the labor-seeking and raw materials-seeking FDIs, greater attractiveness on the contrary does not compensate for higher corruption.

Egger and Winner (2006) go further and provide a more nuanced picture on the corruption-FDI relationship by showing that the effects of corruption on FDI are different across countries of different sizes and levels of development, and over the course of time. More importantly, Egger and Winner (2006) argue that while the overall effect of corruption is negative, it at the same time matters for the intra-OECD FDI and does not matter for the extra-OECD FDI.

Focusing on the Japanese investments, Voyer and Beamish (2004) differentiate between groups of host countries, namely emerging and industrialized ones, and find differing evidence for the FDI-corruption link. In practice, for the sample of all the 59 countries the relationship is positive and significant, as it is for the emerging countries, however, the relationship does not prove to be significant for the industrialized countries. Although Voyer and Beamish (2004) rely only on the simple OLS regressions, a method which can be contested in many respects, the results are nevertheless worth mentioning because they indeed signal the heterogeneity of findings.

Habib and Zurawicki's (2002) study is novel in the sense that it includes a variable of corruption distance (calculated based on Kogut and Singh (1988) with Hofstede's (1980, 2001) scores) besides the host country's corruption level. By analyzing the bilateral FDI flows from 7 developed countries to 89 countries in OLS and probit regressions, both variables are found to exercise a significant negative effect on FDI.

By using a non-parametric analysis as well, Barassi and Zhou (2012) provide more nuanced results on the corruption-FDI nexus. More specifically, besides reaffirming the common

view that the effect of corruption is negative on the likelihood of FDI taking place, the two scholars stress and prove the view that the relationship between corruption and FDI is not homogenous for different quantiles of the FDI stock distribution. In particular, in the top percentile the effect of corruption is not negative after controlling for other factors.

By separating corruption into two types, Cuervo-Cazurra (2008) looks deeper into the question of how corruption affects FDI. His idea is that on the one hand, different types of corruption exert different effects, and on the other, these effects can differ depending on the characteristics of the economic system of the host country. In this spirit, Cuervo-Cazurra (2008) distinguishes between pervasive and arbitrary corruption, and compares the effects of these kinds of corruption in general with those in transition countries. Using a gravity framework⁷ for 1999, he finds that while both types of corruption have a negative impact on FDI in general, pervasive corruption has a larger negative impact in transition countries, while arbitrary corruption on the contrary has a smaller negative impact there than in other countries. The reason behind these findings is related to a more nuanced view on corruption, namely corruption is perceived as "sand in the wheels of commerce" as opposed to "grease in the wheels of commerce", implying that in quasi-market economies corruption can facilitate transactions (grease). This explains why transition economies "enjoy" relatively high FDI inflows while having a relatively high level of corruption at the same time.

Another paper to argue for the possible positive association between corruption and FDI is Egger and Winner (2005). As the authors argue, "in the presence of regulations and other administrative controls, corruption can act as a "helping hand" to foster FDI" (in ibid p. 933) since paying bribes may speed up bureaucratic processes and provide access to publicly financed projects. As a result, the "helping hand" influence of corruption may occur in the longer run as opposed to its short-run "grabbing hand" influence. Besides these theoretical considerations, Egger and Winner (2005) also think that the negative link found by previous studies is due to the cross-section type of the regression analysis and the negligence of the endogeneity of corruption.

Not satisfied with the somehow inconsistent results of previous studies, Bailey (2018) investigates very important specific questions in his meta-analytic regression analysis. As a result, he is able to reconfirm the negative link between corruption and FDI, but more importantly, his results suggest that the deterrent impact of corruption is much stronger in developing countries than in the developed ones, as well as in Asian countries rather than in Europe or North America.

⁷ The gravity model framework was designed originally for an analysis of international bilateral trade, but has been extended later to that of FDI flows. The model is built upon the idea that bilateral FDI (trade) depends positively on the size of the two economies, and negatively on the distance between them. Typical additional variables included in a gravity specification are income per capita, openness of the host country, and dummies indicating whether the two countries have a common border, a common language, or a past colonial link.

In a unique paper (Pajunen, 2008), providing a fuzzy-set analysis, the author adds more nuances to our understanding of how corruption affects FDI. He determines which factors are a sufficient cause for a country to be classified as FDI-attractive or FDI-unattractive. Among less developed countries, the lack of corruption alone is found to be a sufficient cause for a country to be FDI-attractive, while this factor on the contrary is not as important for developed countries.

As can be concluded from the above review, while the majority of scholars find a negative relationship between corruption and FDI, the opposite link cannot be ruled out either. Of course, many factors can contribute to the lack of unanimity on the negative association, such as the use of different measures of corruption, or of different econometric models and different samples of countries, which underlines the need to find new routes in the research field, in order to be able to produce more solid results.

2.2. Governance and regulatory institutions

2.2.1. The "whether institutions matter" question

As mentioned in the introduction, the findings of the literature about the "traditional" variables to explain FDI have proven to be inconclusive, which has been a motivation for researchers to seek after other explanatory variables. Among them, various regulatory and governance institutions seem to be good candidates. Consequently not surprisingly, an important number of studies address the general question of whether these institutions have a significant impact on FDI flows.

Globerman and Shapiro (2002) are concerned with analyzing both the inward and outward FDIs on a large sample of countries for the second half of the 1990s. Their econometric model is rather *ad hoc*, in which the dependent variable is the FDI flow (inward or outward), while among the independent variables one can find indexes for human development and environmental sustainability besides an institutional index (first principal component of the WGI indices) and some control variables. The results indicate that both the inward and outward FDI flows are affected by the same factors, amongst them governance institutions which have a significant positive impact on both types of FDI.

In another paper, the two scholars (Globerman & Shapiro, 2003) look at whether governance institutions (measured by the WGI indices) are among the determinants of the United States (US) outward FDI. Their empirical analysis occurs in two steps. First, they estimate the probability that a country is a US FDI recipient, and find that this depends on whether the country meets a minimum threshold for institutions. In the second step, Globerman and Shapiro (2003) focus only on the recipient countries and examine the factors affecting the amount of FDI. According to their results, governance institutions prove to be among the strong determinants of FDI.

More recently, the impact of governance institutions on FDI has been analyzed within the framework of the gravity model, which allows for controlling for both countries' institutions. Daude and Stein (2007) is an important paper that takes advantage of the gravity model when it comes to robustness checks. This paper analyzes the impact of formal institutions on the FDI location decisions by using the WGI indices. Their baseline specification follows Carr et al. (2001)'s work, which is an empirical model built upon a theoretical model of location of multinational enterprises. Their cross-country setting for 2002 controls for the size of the host and source countries, the difference in their size, as well as relative factor endowments, trade cost and investment cost. The authors find that not all institutions are equally important for FDI, namely regulatory quality, government effectiveness, and political stability matter the most, which is reaffirmed by the IV estimations. Daude and Stein (2007) provide several robustness checks. First, they use a transformation of the dependent variable to deal with the problems of the zero FDI⁸, secondly, they apply different models such as the gravity model, and thirdly, they in addition use different estimation techniques, including pooled OLS, random effect, and Poisson regression, and finally, they substitute the WGI data with different institutional measures. At the end of the day, the results have proven to be robust.

Bénassy-Quéré et al. (2007) is an ambitious paper in trying to provide further evidence as regards how formal institutions affect the FDI movements. By relying on the gravity model, the authors intend to take into account both the host and the source countries' institutions, and take advantage of the possibility of using the bilateral FDI stocks. In addition, they intend to tackle multi-collinearity and endogeneity problems. Besides the usual gravity variables, Bénassy-Quéré et al. (2007) include a measure for institutional quality for both countries and at the same time, a measure of institutional distance between the two countries, calculated from the Institutional Profiles database which contains data about public governance, market freedom, security of contracts and regulation. To deal with the potential endogeneity of institutions, they apply IV estimations. The gravity model reconfirms the findings of previous studies: all gravity variables are significant and the fitness of the model is high. The institutional variable is positive and significant in this model. The authors also run cross-country regressions, which is done in three steps to tackle the collinearity of GDP per capita and FDI. In this setting, Bénassy-Quéré et al. (2007) are able to show that institutions play an independent role in promoting FDI and that institutional distance reduces FDI.

Although the indices of economic freedom are among the most frequently used institutional measures in the institutional economics empirical literature, they are very much missing in the studies analyzing the FDI-formal institutions link. However, in a recent paper, although focusing on the FDI-growth nexus, Iamsiraroj (2016) uses this index to check whether good institutions attract more FDI. On a sample of 124 countries for the period 1971-2010, by using the simultaneous system of the equations approach

⁸ The dependent variable is the logarithm of the FDI bilateral stock, which is problematic if FDI is zero. See Daude and Stein (2007) on how to tackle this problem.

he finds that economic freedom has a significant positive effect on the FDI flows, besides openness and human capital.

Examining the institutional determinants of FDI in Central and Eastern European transition countries has been a quite popular endeavor. For instance, Kinoshita and Campos (2003) look at 25 transition countries between 1990 and 1998. The paper distinguishes three categories of the FDI affecting factors: country-specific advantages (e.g. low-cost labor, skilled labor force, proximity to the Western European markets), formal institutions (rule of law and the quality of bureaucracy and governance), macroeconomic policies (e.g. inflation, budget deficit, trade liberalization), and agglomeration economies. Using fixed effects and GMM models, Kinoshita and Campos (2003) regress the per capita FDI stock on the above three broad categories of variables. The main finding is that the most important determinants of the FDI location are the formal institutions and agglomeration economies. The conclusion of Bevan et al. (2004) is very similar for this group of countries. However, to express governance and regulatory institutions, Bevan et al. (2004) use an index developed by the European Bank for Reconstruction and Development, namely the aggregate transition index, and its sub-indices.

When it comes to Asia and Latin America, Gani's (2007) panel estimates show that governance indicators are positively linked to FDI. Bengoa and Sanchez-Robles (2003) focus only on Latin America by using both fixed and random effect models. This paper documents the positive impact of institutions proxied by an index of economic freedom on the share of FDI within GDP. The Middle East and North Africa (MENA) countries form another group towards which FDI flows are worth investigating. As an example, Daniele and Marani (2007) examine the role of institutional quality (measured by WGI indices) on FDI, unfortunately using only the cross-country OLS technique. Their regression results indicate that institutions play an important role in the relative performances of countries in attracting FDI, and call attention to the need for institutional reforms in order to improve the attractiveness of MENA countries. On a sample of 15 Asian countries for the period 1996-2007, Mengistu and Adhikary's (2011) results confirm the positive significant impact of all variables of WGI, except for regulatory quality, voice and accountability.

2.2.2. Specific questions about the impact of governance institutions

Having more evidence on the impact of governance and regulatory institutions on FDI, scholars are becoming concerned with more specific questions.

Among the few papers dealing with institutional distance, Cezar and Escobar (2015) look at the link between institutional distance and both the volume of FDI and the likelihood that a firm will invest in a foreign country. The empirical model is based on the idea that firms in the host country face adaptation costs which depend on the institutions of the host country. The institutional distance variable is calculated from a composite index of 13 indicators from Doing Business, mainly expressing the regulatory framework of a country. The results from a gravity model indicate that a greater institutional distance reduces both the volume of FDI and the likelihood of the investment. In addition, Cezar and Escobar (2015) find that the results are similar for OECD and non-OECD countries, but different for inward and outward FDI.

The impact of institutional distance, together with that of the levels of institutions is also investigated in Kuncic and Jaklic (2014). One novelty of the analysis lies in the use of a new institutional dataset provided by Kuncic (2014), which distinguishes three types of institutions, namely legal, political and economic. Another novelty of the mentioned study is the inclusion of informal institutions–although their meaning is reduced to liberal or non-liberal public opinion–together with formal institutions in the regression analyses based on a gravity framework. For a sample of 34 OECD countries for the period 1990-2010 Kuncic and Jaklic (2014) evidence that except for economic institutions, institutions matter for FDI. On the one hand, legal institutions in the origin country exercise a positive, while on the contrary political institutions exercise a negative, impact on foreign investments. On the other hand, distances in these two institutions have a significant negative effect. When it comes to informal institutions–included together with formal institutions in the regressions–the two scholars find it is only non-liberal public opinion that matters.

Buchanan et al.'s (2006) paper is unique within the literature in the sense that besides the impact of the governance institutions on FDI, the authors also look at how institutions affect the volatility of FDI. Based on a panel of data for 164 countries from 1996 to 2006, they not only reconfirm the findings of other papers, namely the positive and significant impact of institutions (measured by the first principal component of the WGI indices) on the FDI levels, but also show a significant negative link between institutions and the FDI volatility.

It is very rare, if not unique, in the literature to look at whether either the impact of institutions is conditional on any other factor, or the impact of another factor is conditional on institutions. Okada (2013) is concerned with such an investigation, and looks at the interaction between the institutional quality and financial openness in a system GMM setting. His main finding is that while these two factors are not significant determinants of FDI when entering the regression individually, their interaction term is significant with a negative sign. This means that the partial effect of financial openness on FDI increases with the level of institutional quality, and the threshold level for institutions between negative and positive partial affects is a 30th percentile in the sample. On the other hand, the partial effect of institutions on FDI depends on financial openness, namely countries with higher financial openness benefit more from institutions.

In a recent paper, as opposed to the linear association of institutions and FDI prevalent in the literature, Kurul (2017) assumes a nonlinear relationship between these two. To control for this nonlinearity, he applies a dynamic panel threshold model, which allows him to determine whether a certain level of institutional quality-measured by the principal component of the WGI indices-should be reached for a country to attract more FDI. His results on a sample of 126 developing countries over the period 2002-2012 provide evidence that the threshold exists. Furthermore, it is also demonstrated that when institutional quality is better than this threshold value, the FDI inflow measured by the net FDI inflow as a percentage of GDP is higher. Unfortunately, no information is given about the extent to which institutions have to be "good" to attract more FDI.

Besides reaffirming the view that institutions are robust determinants of FDI, Ali et al. (2010) provide additional insights as regards which institutions matter the most and which sectors are sensitive to institutional quality in attracting FDI. Their results from a random-effects panel analysis for 69 developing countries for the period between 1981 and 2005 evidence that institutional quality (as measured by the investment profile and law and order of the International Country Risk Guide (ICRG) dataset) does not matter equally for all sectors, namely it exerts a robust impact in manufacturing and services sectors, but not in the primary sector. What is more, the property rights security proves to be the most important determinant of FDI because once controlled for, other institutions lose their significance.

Sen and Sinha (2017) also ask a very specific question about how institutions affect FDI by taking into consideration sectorial differences in the relationship specificity of the investment. Their paper looks at the US outward FDI to 50 countries for the period 1984-2010, and applies the difference GMM estimator technique. The main finding is that the US multinationals are likely to invest more in the sectors in which the investment is relation-specific if the host country's property rights are well protected, otherwise they invest in the sectors with a low-level of relation-specificity.

A novel aspect of the analysis of the impact of institutions on FDI is explored by a very interesting paper by Aleksynska and Havrylchyk (2013). Their paper is motivated by the appearance of new global investors from emerging economies (South) such as China. In their regression analyses based on the gravity model, the two scholars look at whether investors from the South invest differently from their Northern counterparts, and whether the FDIs from the South and from the North are complements or substitutes. The results provide us with more nuanced insights into how institutional distance matters to investors. First, a greater institutional distance between the origin and the host countries deters investors from the North. Second, for investors from the South a greater institutional distance may have a heterogeneous effect, namely if a Southern country invests in a country with better institutions, larger distance stimulates FDI, however, if a Southern country invests in a country with worse institutions, i.e. the destination country is from the South as well, a greater institutional distance deters. At that point Aleksynska and Havrylchyk (2013) dig deeper and find that this deterring effect of worse institutions is counterbalanced by the greater attractiveness of investing in a Southern country (with worse institutions) arising from the abundance of natural resources. The authors also evidence that the FDI from the South tends to be complementary to the FDI from the North, so there is no competition

between them. All in all, this paper is the first to show that the FDI flows from developed and emerging countries are driven by different institutional factors.

As in the case of corruption, Bailey (2018) provides valuable new insights into the impact of institutional quality on FDI. While the positive association is confirmed, he documents the differences in the strength of this impact, on the one hand, between the developed and developing countries, with a stronger impact in the developed countries, and on the other hand, between the Asian and other countries, with a stronger impact in Asia.

In the same way, the analysis of Panjunen (2008), which also looks at the effects across different regions and developed versus developing countries, help us clarify why earlier studies produced heterogeneous results. His fuzzy-set analysis shows that the impact of regulatory institutions matters in all groups of countries, i.e. South American, Southeast Asian, Central and Eastern European, but they have to be combined with various other factors for a country to be seen as FDI-attractive. For instance, in the CEE countries regulatory institutions alone are not sufficient, as they only work together with democratic institutions and low corruption. However, in Southeast Asia they have to be combined with low taxation as well to make a country attractive to foreign investors.

2.3. Political institutions

A number of papers deal with the question of whether foreign investors have a preference for countries with democratic political institutions. The findings of various studies converge to the view that democratic institutions are favorable for FDI, despite the fact that the studies use different measures of democracy or have different samples and econometric specifications.

By using both cross-section and panel settings for 114 countries, Jensen (2003) evidences that the democratic institutions in the 1980s affected FDI in the 1990s, which is perfectly in line with his theoretical reasons about why democratic governments are seen as more credible in the eyes of foreign investors⁹. Harms and Urpsrung's (2002) findings also support this result. They use the Freedom House's index of democratic and civil rights in both the cross-country and panel settings for 62 emerging and developing countries for the period between 1989 and 1997, and show that these rights have a significant positive effect on FDI. Busse (2004) is another study echoing the fact that FDI is attracted by countries where democratic and civil rights are protected. In fact, in the period 1972-2001, countries with improving democratic and civil rights attracted more FDI than would have been predicted on the basis of other country characteristics. Fukumi and Nishijima (2010) examine a panel of 19 countries in Latin America and the Caribbean by applying a simultaneous equation approach. They find that better political institutions measured

⁹ Jensen (2003) highlights two reasons. First, the presence of veto players contributes to the stability of the political decision-making system. The second is the "audience cost", meaning that democratic leaders may suffer from a loss of electoral support if they renege on their promises to foreign investors.

by the political rights index of the Freedom House attract more FDI, but at the same time, the FDI contributes to improving political rights as well. Tintin (2013) looks at the CEE transition countries and finds that political and civil rights, together with economic freedom and state fragility, affect FDI from various countries (EU-15, Japan, China, US) in a positive and significant way. However, he also reveals some differences in the institutional determinants of the FDI across the investor countries.

It is quite rare to look at the FDI flows into different sectors of the economy, although one can intuitively think that the FDI influencing factors may vary across different sectors. Kolstad and Willanger (2008) provide such an analysis for the service sector of 57 countries for the period 1989–2000. The results of the fixed effect estimation evidence that democracy, as measured by the ICRG index of democratic accountability, has a positive significant impact on FDI. Nevertheless, when it comes to the robustness of these results, it turns out that the above effect is not very robust to changes in the sample of countries and to different estimation techniques. When looking at particular service sectors, Kolstad and Willanger (2008) find conflicting evidence, more specifically, in the finance and transport sectors the role of democracy seems to be missing.

Besides the political and civil rights, political risk is another variable with regard to which the "whether" question is asked. Although a number of studies include a political risk measure in the regression analysis as a control variable¹⁰, only a few studies deal explicitly with its effect. Busse and Hefeker (2007) focus on the role of political risk by using the ICRG data on the various aspects of political risk in the regression analysis on a sample of 83 developing countries covering the period from 1984 to 2003. By applying both cross-country and panel regressions, including fixed-effects and GMM estimators, they find that almost all components of the political risk measure are highly significant determinants of FDI. Some studies try to establish the link between FDI and political risk only for a particular group of countries. Asiedu (2002), for instance, focuses on sub-Saharan Africa and finds that neither the political risk nor the expropriation risk has a significant impact on FDI, implying that Africa is *different*.

Several papers go further by addressing specific questions about the impacts of political rights on FDI. For instance, Li and Resnick (2003) explore the channels through which political rights exert their impact on FDI, by providing many theoretical grounds for the link. Particularly, they highlight the role of one such channel in the empirical investigations, namely the protection of property rights. Their theory suggests that democratic political institutions may exert two conflicting impacts on FDI: a positive and a negative one. The

¹⁰ An early attempt in the field is Gastanaga et al. (1998) who together with institutional variables such as contract enforcement and corruption include the nationalization risk in the regressions and find that it affects FDI negatively. Dutta and Roy (2011) examine the role of political risk implicitly by looking at its role in the association between financial development and FDI. The major finding is that for each level of political risk the inverted U-shaped curve depicting the relationship between financial development and FDI shifts upwards; accordingly, the threshold level beyond which the impact of financial development becomes negative corresponds to even higher levels.

positive effect works via property rights protection, namely an increase in democratic rights in developing countries yields better property rights thus encouraging FDI flows. But after controlling for democracy via property rights protection, democratic institutions reduce the FDI inflows, which is, as they put it, a kind of "reversal of fortune".¹¹ This view is contested by Jakobsen and de Soysa (2006), who report that the negative and significant association between democracy and FDI vanishes if they add more countries to the sample of Li and Resnick (2003). In addition, when using the logged value of the FDI inflows, the negative effect of democracy becomes positive and significant.

The conjecture that democratic institutions may discourage FDI, a thesis partly evidenced by Li and Resnick (2003), is further corroborated by Adam and Filippaios (2007). The two scholars look at the US FDI flows in 105 developing countries for the period 1989-1997 by assuming that democracy is not one-dimensional and that different dimensions may affect FDI in a different way. In this spirit, Adam and Filippaios (2007) examine the impact of civil and political rights separately. As for political rights, they reaffirm the results of the above studies, but when it comes to civil rights, their results are novel. They establish that there exists a threshold level for civil rights below which repression of civil liberties is associated with more FDI, meaning that the relationship between civil rights and FDI is non-linear.

Asiedu and Lien (2011) is an important paper which digs deeper in the analysis of how democracy (political institutions) affects FDI. The novelty of this study lies in asking the question of whether natural resources in the host country alter the effect of democracy documented by the above-mentioned studies. Asiedu and Lien (2011) reassess the link between democracy and FDI by taking into account the interaction between democracy and natural resources, and the possible reverse causality between FDI and democracy. Using the difference and system GMM estimators, the authors provide evidence for their suspicion, namely the effect of democracy on FDI depends on the importance of natural resources in the host country's exports, more precisely, democracy encourages FDI in those countries where the share of natural resources within exports is low and reduces FDI in the countries where exports are dominated by natural resources.

Complementing the results of the above studies, highlighting the role of political and civil rights as the determinants of FDI, Wisniewski and Pathan (2014) investigate more subtle differences in political institutions. In particular, they analyze whether foreign investors have a preference for leftist executives, presidential systems and for countries where the executive's party controls all houses of the parliament, and where the ruling party is in power for a longer period. The results add some new knowledge regarding the

¹¹ Oneal's (1994) analysis on the question of whether multinationals benefit materially from autocratic regimes is somewhat similar to the negative impact of democracy on FDI found by Li and Resnick (2003), because he found that US multinationals achieved higher rates of return in autocracies during the period 1950-1985, and that FDI is not significantly related to this regime type.

attractiveness of a country, namely continuous competition in the political arena together with democratic traditions makes a country more attractive for FDI.

Bailey's (2018) recent meta-analysis on the results of 97 previous studies nuances the conflicting results documented by other scholars such as Li and Resnick (2003). When distinguishing between developed and developing countries, Bailey (2018) finds that democratic institutions "behave" differently, i.e. they exercise a positive significant impact on the FDI in the developing countries, while their impact is negative, but not significant, in the developed countries. This finding clearly provides support for the claim that researchers have to ask very specific questions instead of general ones.

3. HOW INFORMAL INSTITUTIONS AFFECT FDI

When it comes to the informal institutions-FDI link, the vast majority of papers center on culture (see footnote 3), which is taken into account in two ways, that is in terms of the "level" of culture and cultural distance.¹²

Several papers asking the "whether" question have not brought too much insight. For instance, Davidson (1980), relying on a very simple methodology of country-pair entry frequencies, argues that cultural similarity encourages direct investments, which is a somewhat everyday observation. By focusing on institutions, Habib and Zurawicki (2002) also include the cultural distance variable in the regression, however, the authors do not consider it important and leave it outside further investigations. Another simple analysis was done by Jones and Teegen (2001) who restricted their attention only to FDI in the field of research and development (R&D) from the perspective of US firms. The paper documents a limited role of culture in the R&D activities. Mac-Dermott and Mornah (2015) provide only a qualitative analysis of the GLOBE cultural data (House et al. 2004) on FDI by pairing high and/or low levels of various cultural dimensions between the host and source country that attract FDI. Grosse and Trevino (1996) explore the factors affecting the US inward FDI by country of origin, but they do not document the significant impact of cultural distance except for one specification. No significant association between cultural proximity and FDI is found by Voyer and Beamish (2004) for Japan. When analyzing trends in the US FDI location, Sethi et al. (2003) find that cultural distance as measured by Hofstede's scores exerts a significant negative impact on the FDI flows.

Nevertheless, a couple of studies provide us with more consolidated results by asking more specific questions. Bhardwaj et al. (2007) examine the impact of two cultural variables, that is the uncertainty avoidance (Hofstede 2001) and the trust from the World Values Survey (WVS), as well as their interaction effect on FDI. The results confirm their hypotheses, namely a higher level of uncertainty avoidance is associated with a lower inward FDI, and

¹² The most frequently used composite measure of cultural distance is introduced by Kogut and Singh (1988) based on Hofstede's (1980, 2001) cultural dimensions.

a higher level of trust is associated with a greater inward FDI. Furthermore, the authors report that the effect of trust is reduced as the country's uncertainty avoidance increases. Although the econometric methodology includes only cross-country OLS regressions and no robustness checks are provided, the merit of this paper lies in calling our attention to the complexity of the effects various cultural dimensions may have on FDI.

Unlike those scholars who have used a composite cultural distance measure, Tang (2012) assumes that the four dimensions of Hofstede (2001) might affect FDI activities differently. Accordingly, she investigates the effects of the dimensions separately. Her empirical strategy is based on a gravity model in which she includes the cultural distance variables for all four of Hofstede's dimensions, defined as the net difference between the source and host countries' scores. Besides including the usual gravity variables, Tang also controls for whether the host and source country have an agreement on the taxation of income and capital, the political environment of the host country, whether in the two countries the same language is spoken and whether they belong to the same trade agreement. According to the results, the Hofstede dimensions clearly exert difference in individualism¹³ and an inverted U-shaped relationship with the net difference in power distance¹⁴. When it comes to the net difference in uncertainty avoidance and masculinity, the impact is negative.¹⁵ Based on the results, Tang's final conclusion is that the "cultural difference does not always imply cultural conflicts" (in ibid p. 249).

To my knowledge, Siegel et al. (2012) provide the most scrupulous analysis on how cultural distance affects FDI. A distinctive feature of this paper is its strict reliance on theory when it comes to the conceptualization of culture itself, and its link with firm-level characteristics of the multinational firms' decisions about the FDI location. The conceptualization of culture comes from Schwartz's (1999) theory developed in cross-cultural psychology. As the authors argue, this theory offers a number of advantages vis-à-vis the other conceptualizations and measurements of culture, more particularly the theory of Hofstede (1980, 2001). As regards the mechanism via which cultural distance has an impact on FDI, Siegel et al. (2012) emphasize (uniquely) firm-level factors, most importantly the possible difficulty in interacting with stakeholders in the host country. Of Schwartz's three cultural dimensions, namely egalitarianism-hierarchy, embeddedness-autonomy and harmony-mastery, they associate only one dimension (egalitarianism-

¹³ This implies that greater differences in absolute values have a positive impact on FDI, which shows a harmonious "marriage of difference" (p. 237). According to Tang (2012), this is caused, on the one hand, by the fact that when the FDI from a collectivist country goes to an individualistic country, the leadership style of the collectivist country can help accommodate the parent company in the local culture. And when the opposite direction of the FDI flow occurs, the host country's collectivist culture is favorable to mitigating the more individualistic (entrepreneurial) leadership style of the source country.

¹⁴ The reason behind this is related to the fact that the FDI flows from a low power distance country to a high power distance country can cause problems for the employees in the host country since they are accustomed to directives.

¹⁵ That is, FDI increases when it flows from a low to a high uncertainty avoidance (or masculine) country.

hierarchy) and one of its polars (egalitarianism) with the above firm-level factor. In this spirit, their main hypothesis is that the greater the distance in terms of egalitarianism between the source and the host country, the greater the adjustments the multinational firm has to make to engage effectively with its stakeholders.

The regression results based on gravity equations provide evidence for the significant negative link between cultural distance and FDI. The instrumental variable estimations, by using societal fractionalization, dominant religion, countries' 19th-century war history, and communist rule as instruments, reaffirm the main finding. Besides the significance of cultural distance, it has proven to be economically meaningful, namely a one-standard-deviation increase in egalitarianism leads to an 11.76% decrease in the log FDI. It is worth mentioning that cultural distance enters the regression in two forms, i.e. sheer (the square of the difference between the host and source country egalitarianism) and directional (with a positive or negative sign). Although Siegel et al.'s (2012) focus is on egalitarianism, as a robustness check the scholars also include embeddedness and harmony in the regressions and find they have a significant impact on FDI, together with egalitarianism. The results indicate that FDI moves from the low-embeddedness towards the high-embeddedness countries.

In a recent paper, on a panel of 29 source and 65 host countries for the period 1995-2009, Lucke and Eicher (2016) analyze the impact of a broad set of institutional and cultural determinants of FDI, but separately from one another. Besides including (institutional and) cultural distance between the source and host countries in the regressions, they also include the host country (institutions and) culture. Lucke and Eicher (2016) pay special attention to whether foreign investors invest differently in the developed versus developing and transition economies. Using the ethnic, linguistic and religious fractionalization of Alesina et al. (2003) to express cultural diversity, they find that investors prefer to invest in the developed countries with less or similar cultural diversity than their own, and are deterred by larger cultural distance. When it comes to developing countries as source countries, foreign investors tend to invest more in the less diverse countries than their own, and are attracted by large cultural distance.

Amongst the few papers including both culture and formal institutions at the same time in the analysis, Holmes et al. (2013), relying on the insight that culture shapes formal institutions, investigate the influence of culture on formal institutions, and then the effects of formal institutions on the FDI inflows. In-group collectivism and future orientation stand for the proxies for culture and data are taken from the GLOBE dataset (House et al. 2004), while to express the formal institutions they use four factors determined on the basis of a principal components analysis of 20 institutional variables from different institutional datasets. The results indicate that formal institutions affect both culture and FDI, however, there is no evidence that culture influences FDI. Seyoum (2011) goes further into the issue of how culture and formal institutions affect the inward FDI by exploring both the direct and indirect impacts of culture on FDI, with the indirect impact mediated via formal institutions.¹⁶ To measure trust and reputation, i.e. culture, Seyoum (2011) takes six indicators¹⁷ from the World Economic Forum Global Competitiveness Report, and to measure institutions he uses the rule of law measure from World Governance Indicators. His cross-country regression results indicate on the one hand that trust and reputation have a significant and greater effect on FDI than formal institutions, and on the other, that informal institutions affect FDI in an indirect way as well, which is mediated by formal institutions. Although the very unusual proxy used for informal institutions (culture) and the lack of the robustness of the results may cast some doubts on the results, the merit of this paper lies in the fact that it looks at the impact of culture together with formal institutions.

Slangen and Beugelsdijk (2010) are unique in the literature in asking a very specific question and at the same time examining the impact of both the institutional and cultural hazards multinational companies face. The two scholars intend to look at the composition of FDI, more specifically, they ask the question of which hazard affects which type of FDI to a greater extent. The main result is that both hazards related to formal institutions such as high-level of bureaucracy and corruption, weak property rights protection or high political risk, and cultural distance exert a greater impact on the vertical FDI than on the horizontal FDI. Furthermore, the impact of institutions is greater for both types of FDI than that of the cultural distance.

To my knowledge, the only investigation addressing the issue of the interplay of institutions and cultural distance is Du et al. (2012). The paper analyzes how cultural distance from 6 countries affects their FDI in various Chinese mainland regions with different institutional quality. As the authors argue, cultural proximity may play an important role in mitigating the negative impact of poor institutions on FDI. Although the institutional variables do not come from well-established institutional databases but are instead calculated on the basis of private firms' answers in Chinese surveys, the results reveal a novelty within the relevant literature. More specifically, Du et al. (2012) are able to show that FDI coming from a country that is more culturally different from China exhibits higher sensitivity towards regional economic institutions in the FDI location choice.

Mondolo (2019) provides a meta-analysis of 20 empirical papers investigating the informal institutions-FDI link. She focuses on three types of informal institutions, namely

¹⁶ Although he uses the term informal institutions and argues that culture and informal institutions are not the same, his understanding of informal institutions in terms of trust and reputation, in our opinion, makes him part of the culture-FDI literature since trust is clearly seen as (part of) culture in the literature (e.g. Tabellini, 2010).

¹⁷ These are as follows: ethical behavior of firms, importance of corporate social responsibility, strength of accounting and auditing standards, strength of corporate boards, firm dependence on professional management, and willingness to delegate authority within a firm.

corruption¹⁸, trust and social network. Mondolo's (2019) findings from a meta probit model suggest that informal institutions do affect FDI, and their impact is especially relevant for developing countries. The author has also shown that the significance of informal institutions does not depend on whether studies use panel or cross-section data.

4 HOW TO PROGRESS FURTHER IN THE EMPIRICAL RESEARCH

As can be concluded from the summary in the previous chapter of the paper, the literature on the FDI-formal institutions nexus has provided us with much empirical evidence. The major finding of the studies is that "good" institutions such as low level of corruption, low level of expropriation risk, good governance etc. attract more FDI on their own. In addition, a number of specific questions which dig deeper into how these institutions matter for FDI have also been investigated.

And while the role of formal institutions in directing FDI has been analyzed to a considerable degree, it is however somewhat astonishing that an analysis of the role of culture or cultural distance in attracting the FDI flows is still in its early infancy. On the one hand, as can be seen from the above review, empirical examinations on the relationship between culture or cultural distance and the FDI flows are very limited in number, and on the other, several important aspects of how culture matters in attracting FDI have not yet been examined.

No doubt there is still a huge potential in (both formal and informal) institutions providing us with more knowledge about the attractiveness of different countries for FDI. In what follows I state what I think the main critique vis-à-vis the literature summarized above might be, which allows me to come up with four propositions as regards how to advance in empirically investigating the institutions-FDI nexus. In this spirit, I do not intend to criticize the literature from all possible angles, nor go into detail as regards all of its shortcomings. Instead, my aim is to identify the root problem the improvement of which can help us find fruitful ways forward in future research.¹⁹

My argument is that the root problem–from which many controversies apparent in the literature stem–is the weak link between the economic theory and empirical investigation. The research is driven by empiricism, and once a particular variable is found to exercise

¹⁸ Note that Mondolo's (2019) procedure to consider corruption an informal institution goes against the view of the institutional economics literature in which corruption is primarily seen as a formal institution because it is "caused" by weak governmental institutions. For more details, see the papers reviewed in Section 2.

¹⁹ Of course, a number of general critiques can be stated, starting from the one that instead of the cross-country regressions which still dominate the investigations, panel techniques should have been used to a greater extent. In addition, the bilateral structure of the FDI flows would quite naturally require an empirical framework able to make use of this structure, i.e. the gravity framework. And when applying the gravity framework, an additional problem is that researchers consider a large set of variables, including those that are not justified by the gravity theory of international trade (FDI), thus making the empirical model inconsistent.

a significant impact on FDI, the results are explained *ex post*, which is like putting the cart before the horse. Instead, in my opinion research should be designed based on the principle of "theory first, empiricism after".

More particularly, empirical researchers should rely (to a greater extent) on institutional economics theories which can provide them with more solid (theoretical) grounds to formulate hypotheses about how both formal and informal institutions matter for FDI. In this respect, the theory of institutional stickiness (Boettke et al. 2008) and that of the hierarchy of institutions (Williamson 2000) are of particular importance, as both suggest that formal institutions are embedded in culture, or are in other words constrained by culture.²⁰ These two theories are closely connected to the theory of the coevolution of culture (informal institutions) and formal institutions (Bisin and Verdier 2017), which originates from the Hayekian theory and is generally accepted among economists. This theory sees formal institutions and culture as coevolving in an evolutionary process, mutually reinforcing one other. On the other hand, when designing empirical research we should rely to a greater extent on the ideas from the non-neoclassical approaches to culture, especially. In this respect, historical approaches to culture, such as are the insights of McCloskey (2015) or Mokyr (2017), are of key importance too. These theories are in line with the theory of the coevolution of culture and institutions. Accordingly, adopting this historical-evolutionary view of culture requires us, of course together with the institutional stickiness theory, to include both culture and institutions and their interaction term in the regressions, suggesting the following for the empirical strategy which should be adopted.

1. An analysis of the simultaneous role of formal institutions and culture

If we look at the literature, we observe that the impacts of culture and formal institutions are treated separately in explaining FDI movements, with the exception of very rare cases such as Du et al. 2012 or Kuncic and Jaklic 2014. However, when relying on the above theories, the question we should be asking is "How do formal institutions together with culture (in which they are embedded) attract more FDI?", instead of "How do formal institutions affect FDI?" and "How does culture affect FDI?". Besides the reliance on the existing theory, which is a merit in itself, the proposed procedure offers two additional advantages.

On the one hand, in the regressions the proposed procedure helps minimize the omitted variable bias which, unfortunately, characterizes many studies that include only a small number of explanatory variables, basically only those which the researchers' interest is focused on.²¹ On the other hand, this procedure makes it possible to ask new specific

²⁰ As it is beyond the scope of this paper to go into details as regards these theories, see Boettke et al. (2008) and Williamson (2000) for details.

²¹ When applying the extreme bound analysis on previous studies, Chakrabarti (2001) also argues that leaving outside the variables that have been proven by other investigations to have a significant effect on FDI can cause serious biases.

questions about the effects of formal institutions and culture, which can enrich our understanding of what countries attract more FDI. One important question of this type can be whether there exists a complementary or substitution effect between formal institutions and culture in attracting FDI. Thus, within the framework of the institutional stickiness theory, *a priori* we can assume that culture can compensate for poor formal institutions, a question that has been partly raised in the literature (for instance in Du et al. 2012) but nevertheless not investigated in depth.

2. An analysis of the possible interaction of formal institutions and culture

Institutional economics has taught us a lot about the relationship between the formal institutions and culture insights which have converged into two lines of arguments. The first, suggested by the theory of institutional stickiness, argues that formal institutions are shaped and partly determined by culture. Accordingly, one might expect that the impact of culture on FDI is conditional on formal institutions. At the same time, we cannot rule out an effect in the opposite direction either, because, as argued by Williamson (2000), feedbacks from formal institutions towards culture are possible as well, meaning that the impact of formal institutions on FDI may be conditional on culture. The second line, in harmony with the first one, puts forth the view that institutions and culture evolve jointly in an endogenous process (e.g. Bisin & Verdier, 2017).

In the light of the coevolution of culture and formal institutions, when it comes to the question of how culture affects economic outcomes (income level or FDI), the right question to put forward is how culture in conjunction with formal institutions affects economic outcomes, a question which requires us to assess the interplay of culture and formal institutions in shaping economic outcomes. In Bisin and Verdier's (2017) formal model of this coevolution, culture and formal institutions are jointly and endogenously determined, and jointly affect economic outcomes. In this process of coevolution, both culture and institutions can reinforce the impact of the other by ending up either weakening or strengthening the equilibrium outcome. The two scholars emphasize that the joint evolution of culture and institutions is likely to be non-linear, which suggests that under some "conditions" culture and formal institutions may act as substitutes, and under different "conditions" as complements.

To check for the presence of the above effects, an interaction term of formal institutions and culture should be accounted for in the empirical investigations, which can also lead to further questions being raised about the details of the interplay of formal institutions and culture (e.g. threshold levels, marginal effects).

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3. Instrumenting formal institutions and culture

The view suggested by the theory of the hierarchy of institutions (Williamson, 2000), namely that institutions (including even culture) can change, although slowly, and adapt to one other, calls for concerns about the possible endogeneity of institutions in economic development which is, at least partly, induced by the FDI flows. Accordingly, the suspicion arises that institutions are endogenous in the institutions-FDI nexus as well. In this light, the instrumental variable approach should be standard in future research rather than being exceptional, which has been the case up to present time. In turn, the instrumental variable estimation strategy poses challenges in finding valid and relevant instruments, and what is more, in coping with instrumenting more than one variable.

4. Distinguishing between the "distance" and the "level" effects

Previous studies differ in terms of whether they control for institutional distance or level. As can be seen from the summary under point 3, when it comes to formal institutions included in the regressions, researchers account almost exclusively for the level of formal institutions (see section 2). As regards culture, the practice is just the opposite, that is, we can hardly find regression investigations that include the level of culture as they most frequently include cultural distance only (see section 3).

This practice, however, is not fully justified by the mentioned theories (Boettke et al., 2008; Williamson, 2000) suggesting that both distance and level can matter for both formal institutions and culture. Why is this so? The answer is that the level of formal institutions indicates the degree of "quality" they should have to satisfy foreign investors, referring to the idea that "good" formal institutions reduce uncertainty, restrain opportunistic behavior and lower transaction costs (North, 1991). Nevertheless, the distance in formal institutions expressing institutional dissimilarity also matters because of its embeddedness. In other words, since formal institutions find their roots in culture, investors with their own institutional arrangements would not find it easy to work in a foreign institutional environment that was not in harmony with their culture. As far as culture is concerned, besides cultural distance, the culture of the host country also matters in attracting FDI. The latter is simply because some cultures are more favorable for investments (entrepreneurship).

As stems from the previous paragraph, since both the distance and the level of both culture and formal institutions can contribute to the attractiveness of a country simultaneously, we have to account for both in the regression analyses. However, including both the distance and the level terms in regressions lead to serious problems. On the one hand, if the origin country dummies, otherwise needed in general, are included together with the level term of the destination country, the distance term becomes determined, and accordingly, the inclusion of the distance together with the level proves meaningless. And what is more, even if it were included, it would be very difficult to see what the coefficient of the distance variable means. On the other hand, including both terms would also lead to multi-collinearity.

The fact that the literature has not adequately distinguished between the distance and level effects is clearly shown by van Hoorn and Maseland (2014) in relation to culture, and by van Hoorn and Maseland (2016) in relation to institutions. When it comes to cultural distance, these authors argue that the cultural distance measures used in the literature cannot be meaningfully compared across countries because they correlate uniquely with the destination country culture for each origin country. In relation with institutions, they emphasize the risk of a strong correlation between the institutional distance and the institutional level. Based on their empirical results, they consequently propose using multiple reference points when calculating distance. All in all, the above suggests that researchers have to find a novel econometric method to control for both the distance and the level terms in future empirical investigations.²²

5 CONCLUSIONS

In this paper I have summarized the empirical results on how both formal and informal institutions can contribute to the attractiveness of a country for FDI. When it comes to formal institutions, it has turned out that the literature has focused mainly on the role of three institutions, namely (1) corruption, (2) governance and regulatory institutions, and (3) political institutions. This branch of the literature has provided much evidence about the positive impact of the high quality of the above institutions, and in addition, has given much detail about *how* they do that. As for the informal institutions (culture), the results of the literature have not proven to be as convincing as in the case of formal institutions, leaving several important aspects of how culture matters in attracting FDI not yet examined.

I have argued that institutional explanations can contribute to further enriching our knowledge about the FDI flows if empirical investigations rely, to a greater extent, on institutional economics theories in their empirical design. In particular, the view that formal institutions are embedded in culture, and are stuck to it (Boettke et al., 2008; Williamson, 2000), together with the theory of the coevolution of formal institutions and culture (Bisin and Verdier, 2017) have led me to make four propositions regarding how to progress further in empirical research on the institutions-FDI nexus, although of course, I do not claim that the suggestions outlined in this paper represent the only way to progress further in the field.

²² Kapás and Czeglédi (2020) propose a possible fruitful way of distinguishing the distance and level effects, and provide an econometric method to separate the level and the distance effects of culture, thus ensuring at the same time that the cultural distance does not depend on the origin country's culture. Since they include only the level term with the origin country dummies, but not the distance term, the multi-collinearity problem does not appear in their regression.

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