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**Institutional Configurations  
in International Investment Research**

Christopher Weber/Pascal Mayer

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*Christopher Weber/Pascal Mayer*

**Abstract**

In the area of International Business (IB), a substantial body of research has accumulated analyzing the effect of various host country characteristics on foreign direct investments (FDI). Special attention has been given to institutions. However, the conventional approach of addressing institutions in IB research has recently been criticized for not paying sufficient attention to the interrelationships among institutions. We address those calls and conceptualize institutions as “holistic systems composed of interrelated components” (Kim & Aguilera 2016, p. 149) and employ the fuzzy set Qualitative Comparative Analysis (fsQCA) to investigate the interrelated effect of formal and informal institutions on FDI inflows. In our empirical methodology, we use data on FDI and formal and informal institutions from 57 countries. The results support the configurational approach and corroborate a systemic view on the effect of institutions on FDI. Our study contributes to a more nuanced understanding of the workings of institutions on FDI and demonstrate the value in adopting a configurational perspective in institutional research.

JEL Codes: D02, F21, F23

Keywords: Foreign Direct Investment, Institution, International Business, Location Choice, Qualitative Comparative Analysis

# **Institutionelle Konfigurationen in der internationalen Investitionsforschung**

## **Zusammenfassung**

Viele Studien haben sich im Bereich *International Business* (IB) mit den Auswirkungen verschiedener Ländercharakteristika auf ausländische Direktinvestitionen (ADI) befasst. Insbesondere der Analyse von Institutionen wurde in diesem Zusammenhang besondere Aufmerksamkeit gewidmet. Der herkömmliche Ansatz, Institutionen in der IB-Forschung zu berücksichtigen, ist jedoch in letzter Zeit zunehmend kritisiert worden, da er den Wechselbeziehungen zwischen einzelnen institutionellen Elementen nicht genügend Aufmerksamkeit schenkt. Wir greifen diese Kritik auf und konzeptualisieren Institutionen als „ganzheitliches System zusammenhängender Elemente“ (Kim & Aguilera 2016, S. 149; eigene Übersetzung) und verwenden die Fuzzy Set Qualitative Comparative Analysis (fsQCA), um die zusammenhängende Wirkung von formellen und informellen Institutionen auf ADI-Zuflüsse zu untersuchen. In unserer empirischen Methodik verwenden wir Daten über ADI und formelle und informelle Institutionen aus 57 Ländern. Unsere Ergebnisse unterstützen den Konfigurationsansatz und bestätigen eine systemische Sichtweise auf die Auswirkungen von Institutionen auf ADI. Unsere Studie trägt zu einem differenzierteren Verständnis der Wirkungsweise von Institutionen auf ADI bei und verdeutlicht den Wert der konfigurativen Perspektive in der institutionellen Forschung.

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Universität Münster  
Institut für Organisationsökonomik  
Scharnhorststraße 100  
D-48151 Münster

Tel: +49-251/83-24303 (Sekretariat)  
E-Mail: [io@uni-muenster.de](mailto:io@uni-muenster.de)  
Internet: [www.wiwi.uni-muenster.de/io](http://www.wiwi.uni-muenster.de/io)

# **Institutional Configurations in International Investment Research**

## **1. Introduction**

Foreign direct investments (FDI) play a crucial role in today's world economy. In 2022 the total value of global FDI flows amounted to 1.3 trillion US dollars (\$), according to the United Nations Conference for Trade and Development (UNCTAD 2023b). Even though total FDI in 2022 was lower than in 2021 due to several crises, such as the war in Ukraine, FDI represents a substantial part of world GDP. For example, in 2022, with a global GDP of \$ 101 trillion, global FDI flows accounted for more than 1.2 % of that GDP. (World Bank 2023b). The share of FDI stocks, which is the accumulated value of investors equity in foreign countries, i.e. the accumulated value of FDI flows, exceeded 40 %, according to OECD data (OECD 2023). Moreover, FDI is seen as crucial to achieving the sustainable development goals (SDGs) (UNCTAD 2023b) and as a key lever for economic development, due to diminishing returns of capital and convergence to a steady state (de Mello 1997, Iamsiraroj 2016, Solow 1957) or endogenous growth due to positive spillover and externality effects (Romer 1986).

Because of this importance to the global economy, a substantial body of research has accumulated, looking at various aspects related to international investments. Today, FDI represent one of the most frequently studied phenomena in International Business (IB) research (Paul & Feliciano-Cestero 2021). Starting in the 1980s, Dunning (1980, 1998) identified three distinct dimensions in the form of the OLI framework which encapsulates firms' rationale to assess whether to pursue foreign direct investment. This framework posits that conducting FDI is beneficial for firms when ownership advantages, location-specific advantages, and internalization advantages harmoniously work together (Dunning 1980, 1998). Building on the insights of this framework, plenty of researchers looked specifically at the location dimension and analyzed which location factors are conducive for attracting investments and which factors are repelling international investment activity. There has long been a scholarly consensus that "pure economic factors" are decisive factors for firms' foreign direct investment decisions (Nielsen et al. 2017, p. 65). Pure economic factors usually have an unambiguous and intuitive effect on investments. To those pure economic factors belong, for example, a country's market size (i.e. GDP), the quality of the country's infrastructure, or the wage level (Nielsen et al. 2017). In the last three decades, however, academic attention shifted towards institutions, after North's (1990) seminal paper on institutions, which he defines as "rules of the game" (p. 3) and "the humanly devised constraints that shape human interaction" (p. 3). Since then, a multiplicity of

studies has examined the plethora of various institutions and their impact on FDI, often adopting North's dichotomous classification of institutions into formal institutions, which are explicit and written down, and informal institutions, which can be characterized as conventions and behavioural customs (North 1990). For example, with respect to formal institutions research has shown that the rule of law such as property rights protection is positively associated with FDI flows (Li & Resnick 2003). With respect to informal institutions research demonstrated that the level of trust (Choe & Lee 2016) or online social networks activities (Paniagua et al. 2017) are conducive to FDI.

While examining the multiplicity of institutional constructs has provided numerous insights and furthered the understanding of factors relevant to FDI, the conventional approach to addressing institutions in International Business research has also been criticized. Inconsistent and contradictory findings led some scholars to argue that the way institutional theory is applied in research can be characterized as "thin" (Jackson & Deeg 2008, p. 541) and "narrow" (Kostova et al. 2008, p. 994). An essential aspect of the critique is the implicit notion that countries can be ranked according to their institutional qualities, which is an overly simplistic view, scholars argue (Kim & Aguilera 2016). In addition, most of the empirical research lacks methodological heterogeneity such that most use secondary data from the same countries and data sources (Nielsen et al. 2017). This prompted calls for the adoption of a multidimensional approach to institutions (Donnelly & Manolova 2020), which specifically recognizes that multinational enterprises (MNEs) in their investment decisions are confronted with an "arrangement of reinforcing institutional configurations" (Bailey 2018, p. 146). From this perspective, institutional frameworks are better understood as "holistic systems composed of interrelated components that govern and organize the social actions, rather than as constructs that can be categorized along a single continuum" (Kim & Aguilera 2016, p. 149). In addition, previous research on institutions has virtually overemphasized the role of formal institutions and neglected the fact that formal and informal institutions are inherently interrelated in a holistic institutional system, which together influence economic outcomes, such as attracting FDI (Bisin & Verdier 2017, Dunning & Lundan 2008a).

In this study, we specifically address those calls and conceptualize institutions as interrelated elements of a holistic system. We adopt a configurational perspective, explore the influence of institutional configurations on FDI attractiveness and revisit many of the tenets commonly accepted in research on institutions and FDI. The research question which guides us, is: How do institutions as configurations of interrelated formal and informal elements affect the FDI

attractiveness of countries? We study the interrelated effect of formal and informal institutions on FDI with a sample of 57 host countries by applying the set-theoretical fuzzy set Qualitative Comparative Analysis (fsQCA). This method has special properties, which allow the analysis of interrelated elements in a holistic system. As such, the method marks a departure from linear data analysis approaches, which are designed to isolate effects of individual elements while holding all other variables constant (Furnari et al. 2021).

We address our research question by drawing on the approach and methodology of Pajunen (2008), who first used fuzzy-set QCA in International Business and FDI research to analyse the effect of institutional configurations on FDI inflows. However, our study departs from Pajunen's (2008) approach in several aspects. First and importantly, we use data on both formal and informal institutions, whereas Pajunen restricted his analysis on formal institutions. This is an important distinction because the interplay of those very distinct types of institutions together may very well lead to different outcomes than the interplay of formal institutions only – a core tenet of conceptualizing institutions as “holistic systems”. Second, we use an updated timeframe with data from 2012 to 2016 and include a larger set of countries in our analysis. Third, we depart from Pajunen's (2008) data sources on several dimensions. We use different data sources with respect to country tax rates, exclude data from the world competitiveness yearbook completely and include cultural data from the Global Leadership and Organizational Behaviour Effectiveness study (GLOBE) to proxy informal institutions.

Our study contributes to a more nuanced understanding of the way how institutional systems attract FDI. We demonstrate that FDI attractiveness on the country level is to be evaluated in consideration of the overall institutional context with institutions being part of a holistic system. By doing so, we open up avenues for further research with the QCA methodology in international business research.

The remainder of this paper is organized as follows. In the next chapter we provide an overview of institutional theory with a special emphasis on FDI research. In Chapter 3 we elucidate our empirical methodology. In Chapter 4 we present our results. Finally, in Chapter 5, we discuss the results, embed them in previous research and conclude with avenues for further research.

## 2. Theory

### 2.1. Institutional Theory, Formal and Informal Institutions

As widely observed in the literature (e.g. Donnelly & Manolova 2020, Dunning & Lundan 2008a, Jackson & Deeg 2008), there is no uniform approach to institutional theory. Different institutional perspectives have been put forward in the various social sciences, whereas, among numerous other approaches (e.g. Aoki 2001, Immergut 1998, Peng 2002, Powell & DiMaggio 1991), the most cited are Scott's (1995) approach rooted in institutional sociology and North's (1990) conceptualization of institutional economics (Donnelly & Manolova 2020, Jackson & Deeg 2008). Recognizing the adoption of North's framework by Dunning and Lundan (2008a), who explicitly recommend the use of a consistent approach to institutional theory in FDI research, this study adopts North's conceptualization of institutions.

From the perspective of North's institutional economics, institutions are "humanly devised constraints" (North 1990, p. 3), whose primary function is to reduce uncertainties arising from the postulated complexity of the environment as well as the limited perception of individuals by constituting a stable structure for human interactions that constrains the choice set of the actors. North distinguishes between two distinct types of institutions, *formal institutions* and *informal institutions*. *Formal institutions* comprise rules, structures and constraints that are essentially explicit. In their function to affect political and economic exchange, formal institutions can be categorized into political and judicial rules, economic rules, and contracts (North 1990). Political and judicial rules define the hierarchical structure of politics, the legislative structure as well as the characteristics of agenda control (North 1990). Economic rules define property rights, comprising the set of rights that permits the use and realization of profits from property, as well as its alienation. The role of contracts is to set out the specific conditions for a particular arrangement in the context of an exchange (North 1990). While formal rules usually serve the function of promoting exchange, in some instances they are explicitly designed to increase the cost of exchange (North 1990). *Informal institutions*, in contrast, are non-explicit and encompass "codes of conduct, norms of behavior, and conventions" (North 1990, p. 36). Like formal institutions, their function lies in coordinating repetitive human interactions. They are socially imposed behavior or internally imposed standards of conduct (North 1990). North specifically argues that informal institutions are reflected as part of a society's culture. North emphasizes that formal and informal institutions influence each other. For example, formal rules may complement and enhance the effectiveness of informal constraints and vice versa. Importantly, North makes no claim about general efficiency of an institutional system. Thus, it may vary

well be that institutional systems can be inefficient in the sense that they are not best in achieving various outcomes.

## **2.2. Institutional Systems at the Country-level and Foreign Direct Investment**

In International Business research, Dunning's (1980) eclectic paradigm is the most widely adopted theoretical perspective on the mechanisms that explain FDI activities of MNEs (Paul & Feliciano-Cestero 2021). The eclectic paradigm, also referred to as the OLI-framework, posits that advantages of ownership, location and internalization together determine firms FDI decisions. Whereas the ownership dimension refers to the specific assets of the firm, and the internalization relates to a firm's decision whether to conduct a value-adding activity within or outside the firm, the location dimension explicitly focuses on locational characteristics relevant for the investment decision. Research has identified various factors on the location-level which are relevant for a firm's FDI decision. Important locational elements for a firm's decision to conduct an investment are for example "pure economic factors" (Nielsen et al. 2017, p. 65). Examples of such factors are a country's market size, its quality of infrastructure, or its wage level. Usually, a larger market size (i.e. a larger GDP) and a better infrastructure are associated with more investments while a higher wage level is supposed to have an adverse effect on investments (Nielsen et al. 2017).

In the last decades, however, research has paid special attention to the role of institutions for FDI, specifically adopting the perspective of institutional economics and the demarcation between formal and informal institutions (North 1990). For example, with respect to formal institutions, research has looked at the role of property rights, rule of law and regulation. Arregle et al. (2013), for instance, looked at the location decisions of Japanese firms and analyzed how the formal institutions of regulatory control and political democracy influence those decisions. Clougherty and Grajek (2008) investigated the role of the adoption of a standardized certification for FDI. They found that the diffusion of ISO-norms can unfold a pull effect for FDI in developing countries. Likewise, research showed that the stringency of regulation with respect to the environment affects inflowing investment (Madsen 2009). This effect is moderated by the distance in environmental regulation between a firm's home country and the respective host country (Madsen 2009). With respect to informal institutions, research has demonstrated that historical and cultural distance, i.e. how similar or dissimilar countries are in terms of their history or culture, influences the direction of outflowing investment (Drogendijk & Martín Martín 2015). Another example of the role of informal institutions is Buckley et al. (2012) who



showed that networks and linkages between countries influence the direction of acquisitions in the case of Indian firms.

In the following paragraphs, we review the literature on some specific types of formal and informal institutions and their effect on FDI. By showing that the relationship between those institutions and FDI is not always unambiguous, we aim to illustrate that those types of institutions unfold their effect on FDI together with other institutions in a holistic system. With respect to formal institutions, we look at *political stability*, *rule of law*, *democracy* and *tax rates*. Regarding informal institutions, we focus on *corruption* and various *cultural dimensions*.

### **2.2.1. Formal Institutions**

#### ***Political Stability***

The political stability of a country is widely recognized as a significant determinant for international investment in the IB literature (Henisz & Delios 2001, Weitzel & Berns 2006) and is considered one of the fundamental characteristics of a nation (Pajunen 2008). The concept of political stability is mostly consistently defined in the literature as the “likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism” (Kraay et al. 2010, p. 223), which in turn can lead to formal rules being amended to the detriment of interests held by enterprises, in the context of this study in particular those of foreign MNE (García-Canal & Guillén 2008). While the concept of political stability is thus intuitively connoted positively, it should be noted that it is considered independently of a country’s form of rule (Pajunen 2008). Therefore, it depends on the combination with other institutional attributes as well as on the context of consideration whether it may be perceived as a positive or negative characteristic of a nation to MNEs (Pajunen 2008). Nevertheless, theoretical arguments primarily emphasize positive properties of a nation’s political stability. From this perspective MNEs prefer a stable and credible institutional environment as it reduces the overall investment risk and creates economic stability, in particular by promoting legitimacy and less capricious behavior of the government, efficient resource allocation as well as change and innovation (Trevino et al. 2008, Veliyath & Sambharya 2011). Conversely, prevailing political instability and thus an increased likelihood of changes or reinterpretations of formal rules are considered to create an unpredictable environment (Büthe & Milner 2008, García-Canal & Guillén 2008) and consequently uncertainty (Guler & Guillén 2010), which potentially interrupts economic processes by increasing internalization costs (Jensen 2003), for instance, and eventually leads to adverse effects on enterprise profitability

(García-Canal & Guillén 2008, Treviño & Mixon 2004). While several empirical studies confirm these theoretical statements on the relationship between political stability and FDI (e.g. Busse & Hefeker 2007, Henisz & Delios 2001, Loree & Guisinger 1995, Sethi et al. 2003) others find no influence of political stability on FDI (e.g. Globerman & Shapiro 2003, Kobrin 1976) or even reverse effects (e.g. García-Canal & Guillén 2008). Those mixed results suggest that political stability needs to be analyzed in relation to other factors and in a context-specific way in order to explore its impact on FDI (Pajunen 2008).

### ***Rule of Law***

The rule of law of a nation is defined as “the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence” (Kraay et al. 2010, p. 223) and is considered in the literature as an important country level determinant for corporate activities in general and therefore also for FDI activities (Bailey 2018, Choi et al. 2016, Li & Resnick 2003, Pajunen 2008). The degree of property rights protection, defined as “the rights individuals appropriate over their own labor and the goods and services they possess” (North 1990, p. 33), as well as the degree of contract enforcement are of particular importance, as these entail direct corporate implications (e.g. Li & Resnick 2003, Pajunen 2008). From a theoretical point of view, a weak rule of law associated with low confidence in the legal system represents a major constraint for businesses (Stoian & Filippaios 2008) as it results in increased transaction costs (Arregle et al. 2013, Dunning 1980, Khoury & Peng 2011). Conversely, a strong rule of law contributes to reduction of uncertainty through providing protection and allowing to compete abroad (Arregle et al. 2013, Bailey 2018, Globerman & Shapiro 2003, Huang & Sternquist 2007, Li & Resnick 2003), thus facilitating market transactions which in turn may increase profitability (Arregle et al. 2013, Bailey 2018, Gastanaga et al. 1998). Furthermore, theoretical arguments suggest that a strong rule of law may have a positive impact on the economic growth of a nation (Knack & Keefer 1995, Levine et al. 2000). In the context of FDI, some studies looked empirically at the relevance of rule of law for FDI. Concerning property rights protection, Li and Resnick (2003) observe that they are positively associated with FDI inflows in developing countries and Nunnenkamp and Spatz (2004) find that strong intellectual property rights protection leads to both higher quality and quantity of FDI. Findings of Rammal and Zurbruegg (2006) suggest that the enforcement of the host country’s trade and investment regulations generally plays a significant role for MNE. Regarding contract enforcement, Uddin et al. (2019) conclude that higher levels of contract enforcement lead to better

developed financial intermediaries and Gastanaga et al. (1998) find that high levels of contract enforcement have a positive impact on FDI. Those studies support the theoretical arguments concerning the relevance of rule of law for FDI. However, rule of law should be considered contextual, as interdependencies to other institutional attributes may be present (Li & Resnick 2003).

### ***Democracy***

Constituted by the presence of political rights and civil liberties (Bailey 2018), democracy provides one of the fundamental frameworks for human and group activities, which implies its relevance in the context of FDI inflows (Pajunen 2008). There are different theoretical arguments on the relation between democracy and FDI inflows. On the one hand, scholars propose a positive relationship between democracy and FDI inflows, arguing that democratic systems are fundamentally more stable (Jensen 2003) and transparent (Arregle et al. 2016), less inconsiderate towards foreign investors (Li & Resnick 2003), more favorable for the development of high-quality human capital (Arregle et al. 2016, Blanton & Blanton 2007) and enable MNEs to assert their interests through measures such as elections and lobbying (Uddin et al. 2019). From this perspective, undemocratic environments are associated with uncertainty and high transaction costs and thus seen as inhibiting inward FDI (Arregle et al. 2013, Uddin et al. 2019). On the other hand, some scholars hold a contrary position, considering democracies as less attractive. Accordingly, democratic systems offer fewer opportunities to generate returns (Li & Resnick 2003) for instance due to the presence of numerous veto players, which constitute an obstacle to the emergence of beneficial policy changes (Henisz 2000). Democratic governments may also be more likely to protect the interests of domestic enterprises than those of foreign MNEs (Dunning & Lundan 2008b, Li & Resnick 2003). Consistent with this line of reasoning, less democratic, i.e. more autocratic environments are seen to provide decisive advantages for MNEs as governments are less accountable to their electorates (Asiedu & Lien 2011), which, for instance, may result in opportunities to exploit low labor costs, reducing risk through collective bargaining, and concluding advantageous deals with the government (Arregle et al. 2013). Furthermore, some scholars consider autocracies being more attractive to foreign investors due to their assumed greater tendency towards stable economic conditions, resulting from comparatively less change in government personnel than is the case in democracies (Asiedu & Lien 2011). A vast amount of empirical studies reflects the spectrum of theoretical arguments on both sides of the topic. Many contributions (e.g. Ahlquist 2006, Harms & Ursprung 2002, Jensen 2003 and 2006, Kolstad & Villanger 2008) conclude that democratic systems or the

associated political freedom and civil liberties are conducive to FDI inflows. Meanwhile, several studies support the other side of the argument, finding that less democratic or autocratic conditions lead to more inward FDI (e.g. Arregle et al. 2013, Gani & Al-Abri 2013, Holmes et al. 2013, Li & Resnick 2003, Mathur & Singh 2013). Notably, some studies provide ambiguous results. For instance, Li and Resnick (2003) find a positive effect of democracy on FDI but attribute it primarily to democracy strengthening property rights. Kolstad and Villanger (2008) find a positive effect of democracy on FDI in developing countries only, leading them to the conclusion that the absence of democracy beyond a certain level of development does not matter for MNE investment behavior. Busse (2004) observes variations in the relationship between FDI and democracy across time periods and Asiedu and Lien (2011) find the relationship between democracy and FDI to be contingent on further external factors. In summary, neither theoretical arguments nor empirical findings suggest a clear direction of impact of democracy on FDI.

### ***Tax Rates***

As all forms of taxation influence organizational decision-making (Trevino et al. 2008), tax rates play a major role as an institutional factor affecting investment decisions of MNE (Lim 2005, Pajunen 2008, Xie et al. 2017). The importance of the subject is evident in distinct ways: On the one hand, host countries try to attract FDI through tax incentives that show the investment-friendliness of the country and offer compensation for the positive economic effects that they generate for the country (Lim 2005, Sethi et al. 2002). On the other hand, MNE often try to influence the taxation policies of the host country independently through lobbying measures (Pajunen 2008). There is widespread agreement in the literature that high tax rates act as a disincentive to FDI, based on the associated generation of increased costs of doing business for MNE (Rolfe et al. 1993). Conversely, low tax rates are seen as a positive condition compensating MNE for the positive effects they may create for the host countries (Lim 2005). As Bailey (2018) summarizes, numerous studies provide empirical evidence for this argument (e.g. Gastanaga et al. 1998, Loree & Guisinger 1995). However, there are also empirical studies which found no significant influence (e.g. Chakrabarti 2001, Wheeler & Mody 1992) or even a positive relationship between high taxation and FDI inflows if these are associated with tax reforms (Swenson 1994). Therefore, while most of the literature points to a negative relationship between tax rates and FDI inflows, the evidence is not fully conclusive (Bailey 2018, Pajunen 2008).

## ***2.2.2 Informal Institutions***

### ***Corruption***

An important informal institutional element is a nation's level of corruption (Godinez & Liu 2015, Wei 2000). General definitions of corruption in the literature are mostly consistent in characterizing it as behaviors of unethical or illegal exploitation of public power with the objective of gaining individual advantages (e.g. Kraay et al. 2010, Shleifer & Vishny 1993, Tanzi 1998), comprising activities like bribery, nepotism, cronyism, graft, patronage, and embezzlement (Bailey 2018, Pajunen 2008). Following Wei and Shleifer (2000), we conceptualize the level of corruption as “the extent to which firms or individuals need to pay bribes to government officials to obtain permits, licenses, loans, or other government services needed to conduct business in a country” (Wei & Shleifer 2000, p. 304). Corruption arises in particular from a combination of factors, such as low salaries in the public sector, strong and discretionary government power and non-transparent processes and laws (Dunning & Lundan 2008b, Tanzi 1998). While incremental changes in the level of corruption can be achieved, it is unlikely to be removed completely (Tanzi 1998) and therefore a factor that needs to be taken into consideration by MNEs (Wu 2006). Theoretical considerations on the relationship between corruption and FDI focus predominantly on the perception of corruption as a “grabbing hand” (Egger & Winner 2005, p. 933) that causes inefficiencies and additional costs (Bailey 2018, Egger & Winner 2005), thus suggesting corruption as an impediment to FDI. Accordingly, from the perspective of an MNE, corruption is perceived as an arbitrary form of taxation that creates uncertainty (Dunning & Lundan 2008b, Li & Resnick 2003, Shleifer & Vishny 1993) and potentially raises transaction costs (Stoian & Filippaios 2008). Corruption also does not allow for open and equal market access, and payments to officials distort and inflate the cost of goods, which is also a disincentive in the context of MNE investment considerations (Habib & Zurawicki 2002). From this perspective, corruption is considered to have corrosive effects at the national level, for example by decelerating the dissemination of information, which may lead to significant inefficiencies in the entire national system (Chen et al. 2010, Godinez & Liu 2015, Voyer & Beamish 2004). However, some theoretical considerations provide support for a positive relationship between corruption and FDI. According to this view, corruption is considered as a “helping hand” (Egger & Winner 2005, p. 933) by accelerating bureaucratic processes and granting access to publicly funded projects through bribery (Egger & Winner 2005, Kapas 2020) or to “grease the wheels” (Godinez & Liu 2015, p. 33), bridging deficiencies caused by malfunctioning authorities and ineffective bureaucracy and facilitating transactions (Godinez & Liu 2015, Kapas 2020, Leff 1964). In line with the “grabbing hand” rationale, most

empirical studies examining the relationship between corruption and FDI find a negative correlation across a variety of applied research models and econometric models (e.g. Bailey 2018, Cuervo-Cazurra et al. 2019, Gastanaga et al. 1998, Habib & Zurawicki 2002, Mauro 1995, Wei 2000, Wei & Shleifer 2000). However, Egger and Winner (2005), for instance, observe a positive correlation between corruption and FDI and thus empirical evidence for “helping hand” and “grease the wheels” rationales. Other empirical studies are inconclusive with respect to the relationship between corruption and FDI. For example, Ivar Kolstad and Espen Villanger (2004) find an insignificant relationship between corruption and FDI and Voyer and Beamish (2004) as well as Egger and Winner (2006) show that the importance of corruption in the context of FDI may depend on contingencies such as development level and size of the host country or the time period under observation. In summary, while overall the majority of theoretical arguments and empirical results point to a negative relationship between corruption and FDI, it cannot be ruled out that opposing or contingent relationships exist (Kapas 2020, Pajunen 2008).

### *Cultural Dimensions*

Since informal institutions, according to North (1990), are non-explicit and encompass “codes of conduct, norms of behavior, and conventions” (p. 36), the social culture of a country crucially represents the informal institutional system. Thus, most of the literature in IB treats culture as the key informal institution (e.g. Arregle et al. 2016, Holmes et al. 2013). Central to the study of culture in IB research is Hofstede (1980), who theoretically and empirically analyzed national culture on five central dimensions: performance orientation, power distance, uncertainty avoidance, collectivism and future orientation. After some substantial criticism of Hofstede’s methodology (e.g. Ailon 2008, Javidan et al. 2006), the Global Leadership and Organizational Behaviour Effectiveness (GLOBE) research project (Garrido et al. 2014) measured national culture with an updated methodology and data. We shortly revisit five selected dimensions and evidence on their effect on FDI.

#### *Performance Orientation*

The cultural dimension of performance orientation captures “the degree to which a collective encourages and rewards group members for performance improvement and excellence” (House et al. 2004, p. 30). It influences, how societies measure success in adapting to external challenges and how interpersonal relationships are organized. Societies with a high degree of performance orientation are characterized in particular by an emphasis on education and learning, results-oriented behavior, setting high performance targets, taking initiative, and communicat-

ing directly (House et al. 2004). At the organizational level, performance orientation indicates the extent to which firms value setting and achieving ambitious and challenging goals, as well as being competitive and winning through innovativeness and performance improvement (House et al. 2004). House et al. (2004) find that performance-orientated companies are highly correlated to economic health, show higher levels of economic prosperity and are more competitive in global markets. Despite the lack of research on the relationship between performance orientation and FDI, a high degree of a society's performance orientation seems to have a positive effect on MNE's investment decisions.

### *Power Distance*

The cultural dimension power distance captures “the degree to which members of a collective expect power to be distributed equally” (House et al. 2004 p. 30). In societies with a high degree of power distance, the higher rank of some individuals is accepted unquestioned and perceived as unattainable by individuals with lower power (House et al. 2004). In contrast, in societies with a lower power distance, every individual is considered equal and opportunities for advancement in social class and job are expected (House et al. 2004). Theoretical arguments suggest a conducive effect of power distance on FDI, ascribing power distance an essential role for corporate coordination and control (House et al. 2004), pointing out that managers in cultures with high power distance tend to centralize decision-making processes upon approval of subordinates (Noorderhaven & Harzing 2003, Shane 1992, Wong & Birnbaum-More 1994). Consequently, cultures with a low power distance have higher transaction costs for any given transaction (Shane 1992). Empirical evidence indeed suggest that higher levels of power distance are associated with higher level of inflowing FDI (Hahn & Bunyaratavej 2010). However, other scholars argued that low power distance may attract foreign investors by contributing to values of openness, creativity and efficiency (Saleh et al. 2017).

### *Uncertainty Avoidance*

The cultural dimension uncertainty avoidance captures “the extent to which a society, organization, or group relies on social norms, rules, and procedures to alleviate unpredictability of future events” (House et al. 2004, p. 30). In societies with high levels of uncertainty avoidance, for example, individuals tend to formalize interpersonal interactions, as well as to record agreements in contracts, establish rules and obey them, and only take moderate and predictable risks (House et al. 2004). In contrast, societies with low levels of uncertainty avoidance tend to rely on the word of confidants rather than contracts, trust informal norms rather than formal rules,

and are less risk averse (House et al. 2004). Regarding the relationship of uncertainty avoidance to FDI, scholars argue that the negative attitude towards the unknown and towards competition prevailing in high uncertainty avoidance societies increase the “liability of foreignness” (Zaheer 1995, p. 341) for MNEs. Furthermore, the importance attached to rigid structures and the preference for extensive written rules in high uncertainty avoidance cultures may incur additional costs, overall suggesting that higher uncertainty avoidance negatively affects FDI inflows (Bhardwaj et al. 2007). Research seems to corroborate these arguments (Bhardwaj et al. 2007, Hahn & Bunyaratavej 2010).

### *Collectivism*

Regarding the cultural dimension of collectivism GLOBE distinguishes between institutional collectivism, and in-group collectivism. For international investment decisions, institutional collectivism, measuring “the degree to which organizational and societal institutional practices encourage and reward collective distribution of resources and collective action” (House et al. 2004, p. 30) seems to be crucial. In a society characterized by a high degree of collectivism, individuals are members of cohesive groups to which they are strongly interdependent and whose interests are considered to be superior to individual interests (House et al. 2004). In contrast, in a society characterized by a low degree of collectivism, i.e. by a high degree of individualism, individuals tend to perceive themselves as independent of groups and place a higher value on individual rather than group interests (House et al. 2004). Research has sometimes linked collectivism to cooperative behavior because collectivism tends to facilitate cooperative relationships (Wagner 1995). Since the establishment of cooperative relationships is associated with advantages such as easier access to new technologies and markets (Hamel et al. 1989), collectivism of a society may have a positive impact on inward FDI. However, individualism, in contrast to collectivism, is also associated with characteristics creating an innovative corporate environment (Tekic & Tekic 2021), such that the effect of collectivism on FDI is rather unclear.

### *Future Orientation*

The cultural dimension future orientation captures “the extent to which individuals engage in future-oriented behaviors such as delaying gratification, planning, and investing in the future” (House et al. 2004, p. 30). In cultures with a high future orientation, individuals consider future scenarios, formulate objectives and strive to achieve goals and develop strategies that contribute to the achievement of their future aspirations (House et al. 2004, Keough et al. 1999). In



societies with low levels of future orientation individuals tend to be unwilling or incapable of planning ahead to achieve their goals and have difficulty recognizing adverse effects of their current behavior on those goals (House et al. 2004, Keough et al. 1999). Research suggests that high levels of future orientation are associated with reducing uncertainty, facilitating the building of trust and thus reducing opportunism and transaction costs (Chung et al. 2008, Ganesan 1994, Hagen & Choe 1998, Peng & Beamish 2014). Therefore, future orientation is likely to support trust building with local partners (Peng & Beamish 2014), serve as security for specific assets and may further enable the generation of relation-specific assets by signaling the desire to maintain relationships (Anderson & Weitz 1989, Ganesan 1994, Peng & Beamish 2014). Empirical evidence corroborates the notion of future orientation positively affecting subsidiary ownership within MNEs (Peng & Beamish 2014). Thus, established research suggests that a country's future orientation is positively related to MNE investment and may therefore also positively affect FDI inflows.

### **2.3. A Configurational Perspective on Institutions and FDI Attractiveness**

The inconsistent and sometimes conflicting results of research on institutions, as evident in our review of selected institutions in the previous section, prompted scholars to criticize institutional research as “narrow” (Kostova et al. 2008, p. 994) and “thin” (Jackson & Deeg 2008, p. 541), not considering the diversity of institutions. The criticism is fundamental: Institutions are typically examined in isolation, and the effect on other constructs, such as FDI, for example, is often studied by focusing on single institutions. To draw theoretical interpretations from such an approach, the researcher needs to assume that there is an underlying relationship between the respective institution and the construct under examination. This notion has recently been challenged. The effect of a particular institution may be rather different, depending on the specific characteristics and design of the other institutions with which the institution under examination is systematically interrelated with. Thus, scholars argue that a multidimensional approach to institutions (Donnelly & Manolova 2020) is more appropriate, as MNEs are confronted with an “arrangement of reinforcing institutional configurations” (Bailey 2018, p. 146). Therefore, institutional frameworks are better understood as “holistic systems composed of interrelated components that govern and organize the social actions, rather than as constructs that can be categorized along a single continuum” (Kim & Aguilera 2016, p. 149). From this perspective, the focus of research on mostly formal institutions, while neglecting the interrelatedness of institutions in a holistic system, which also includes informal institutions, is a shortcoming which we address. With respect to research on FDI, country-level institutions may

unfold substantially different effects, depending on the specific configuration of the whole institutional system (Bisin & Verdier 2017, Dunning & Lundan 2008a)

In this context, a configurational perspective can be viewed as an approach whose multi-dimensional and holistic character enables the analysis of complex phenomena, such as the simultaneous consideration of environment, structure and strategic activities as factors influencing performance (Cheng et al. 2022, Miles et al. 1978). The explicit denotation as a *perspective* implies that the configurational perspective is not to be regarded as an independent theory as it does not contest the underlying mechanisms assumed by other theories (Fiss et al. 2013). Rather, it can be referred to as a “meta-theoretical perspective” (Fiss et al. 2013, p. 8), in which the complexity inherent in existing theories is inductively elaborated (Misangyi et al. 2017). In this study, the configurational perspective is employed as a conceptual approach to understand the system of interrelationships (Short et al. 2008) between institutions and FDI attractiveness. Although the roots of configurational theorizing are spread across various disciplines (Furnari et al. 2021), the seminal work of Meyer et al. (1993) is of central importance to organizational and economic research (Fiss et al. 2013, Misangyi et al. 2017). We therefore follow Meyer et al. (1993) and Furnari et al. (2021) in their conceptualization of the configurational perspective. The configurational perspective comprises explicit assumptions reflecting inherent “characteristics of causal complexity” (Furnari et al. 2021, p. 6). Ragin (2008, p. 124) defines causal complexity as “a situation in which a given outcome may follow from several different combinations of causal conditions”. From this definition, three key assumptions for the configurational perspective can be derived (Furnari et al. 2021).

The first central assumption emerging from Ragin’s definition is that of *causal conjunction* (Furnari et al. 2021, Mackie 1973). The principle of causal conjunction implies that configurations are conceptualized as sets of causal variables which, jointly embedded in a system, generate a collective outcome (Meyer et al. 1993). Consequently, from a configurational perspective, individual attributes of a set can only exert an effect together with all other dimensions of the set (Tekic & Tekic 2021). In the context of institutions, North (1990) argues that the overall market is a “mixed bag of institutions” (p. 69), which interact with each other and jointly produce economic and social outcomes. Following North’s reasoning, Dunning and Lundan (2008a, p. 578) contend that “any set of institutions is always a combination of elements”. Other researchers emphasize that they may be seen as mutual complements, whose efficacy depends upon their joint presence (Morgan et al. 2011). Regarding the analysis of country attractiveness for FDI, Pajunen (2008) provides first empirical evidence that multiple causal conjunctions of

formal institutional elements influence countries' FDI attractiveness. Based on those arguments, we contend that host country institutional sets are combinations of integrative institutional elements, subject to the following proposition:

Proposition 1: A single institutional element cannot influence a countries' FDI attractiveness on its own, but only in combination with other institutional elements within an institutional configuration.

The second central assumption emerging from Ragin's definition is the *equifinality* of systems (Furnari et al. 2021, Meyer et al. 1993), which means "a system can reach the same final state, from different initial conditions and by a variety of different paths" (Katz & Kahn 1978, p. 30). Thus, different configurations of causal attributes may lead to the same outcome despite being exposed to various contingencies (Fiss 2007, Gresov & Drazin 1997). Equifinality builds on the principle of functional equivalence, denoting that one or more attributes may act as substitutes for others (Furnari et al. 2021, Gresov & Drazin 1997). The idea of equifinality is also relevant in the context of institutions. North adopts the assumption of "multiple equilibria" (North, 1990, p. 24) and argues for a context-specific efficiency of institutions, suggesting that institutions may be efficient in various ways (North, 1990). Similarly, based on the path-dependent development of institutions, Dunning and Lundan (2008a) contend that functionally equivalent institutions can be expected to emerge in different forms across countries. Pajunen (2008) specifically argues and empirically validates that a country's attractiveness for FDI may be caused by different combinations of formal institutional elements and that those different combinations can equally lead to the respective outcomes. Based on those arguments, we argue that host country institutional sets are subject to the principle of equifinality. Formally:

Proposition 2: Multiple configurations of institutional elements lead to countries' FDI attractiveness or FDI unattractiveness.

The third central assumption of the configurational perspective refers to the principle of *asymmetry* (Meyer et al. 1993). This principle implies that attributes "found to be causally related in one configuration may be unrelated or even inversely related in another" (Meyer et al. 1993, p. 1178). Although the principle of asymmetry may not be derived directly from Ragin's (2008) definition of causal complexity, as Furnari et al. (2021) point out, causally complex situations in which conjunction and equifinality prevail give rise to situations in which symmetry does not occur. It thus follows from Proposition 1 and Proposition 2:

Proposition 3: Institutional elements may show different, asymmetric effects on countries' FDI attractiveness within distinct configurations.

### 3. Methodology

In this section, we describe the empirical methodology with which we address our research question. We employ the fuzzy set Qualitative Comparative Analysis (fsQCA), which is a method inherently related to the configurational perspective on institutions, which we elucidated in the previous section. First, we explain our data sources and how we constructed the *causal conditions*<sup>1</sup>, which determine the attractiveness of a country for FDI. Then we explain the logic of fsQCA and how we calibrated and transformed the data, a necessary step for employing fsQCA. Finally, we explicate how we conducted the fsQCA in our specific context with the necessity and sufficiency analysis.<sup>2</sup>

#### 3.1. Data

Plenty of different institutional measures have been employed in institutional research. So far there is no academic consensus on how to best measure institutions at the country level (Donnelly & Manolova 2020). In this study, we use various data sources of institutional measures which have been used previously and are well established in the academic conversation on institutions.

Data on FDI and GDP we obtained from the World Development Indicators from the World Bank (World Bank 2023a). For countries for which this database did not contain data we resorted to the United Nations Conference on Trade and Development database (UNCTAD 2023a). For measuring various institutions, both formal and informal, we used several different databases. To measure political stability and rule of law of a country, we relied on the Worldwide Governance Indicators (WGI) (Kraay et al. 2010), which have been frequently used in FDI research (e.g. Cuervo-Cazurra & Genc 2008, Globerman & Shapiro 2003, Oh & Oetzel 2011). Freedom House provides us with the Freedom in the World Index (FWI), which has been used to measure political freedom and civil liberties of countries (e.g. Pajunen 2008). For a measure of a country's level of corruption we resort to the Corruption Perception Index (CPI)

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<sup>1</sup> We use the term “causal conditions” instead of “variables” to stay in line with the terminology of the configurational perspective.

<sup>2</sup> In the Sections 3.4. and 3.5. below, terminology specific to the fsQCA is used. Any ambiguities will be clarified there.

from Transparency International. This composite measure, which uses secondary survey data from various sources and captures experts' as well officials' perception of corruption, has been used in various studies to proxy corruption (e.g. Davis & Ruhe 2003, DiRienzo et al. 2007, Treisman 2000). The Tax Foundation's tax rate dataset (Enache 2022) provides us with data on country-level tax rates. This dataset aggregates corporate tax data from PricewaterhouseCoopers, KPMG, Ernst & Young, the University of Michigan's Ross School of Business as well as numerous government websites. Finally, we retrieved data on countries' cultural dimensions from the societal culture questionnaire data from the GLOBE study (House et al. 2004). Following previous research (Holmes et al. 2013), we use the practices-based score, which represents current societal practices instead of societal preferences. The final sample for which we were able to obtain the data includes 57 host countries, composed of both developed and developing countries.

### 3.2. Outcome and Causal Conditions

This study examines two outcomes: FDI attractiveness and its absence (i.e. FDI unattractiveness).<sup>3</sup> In order to determine both outcomes, we follow Pajunen (2008) and calculate the inward FDI performance index (UNCTAD 2008). The index represents the ratio of a country's share in global FDI inflows and its share in global GDP. Thus, we construct the outcome condition as follows:

$$FDIAT_i = \frac{\left(\frac{FDI_i}{FDI_{world}}\right)}{\left(\frac{GDP_i}{GDP_{world}}\right)}$$

As we analyze the effect of institutional configurations on FDI, we use several measures for the causal institutional conditions. With respect to formal institutions, we use the Political Stability (PS) and Rule of Law (RL) indicators from the World Governance Indicators. Both measures vary between 0 and 100, where 0 represents the lowest and 100 the highest score. Additionally, to measure the institution Democracy (DE), we average the political rights and civil liberty score from the Freedom in the World Index. This indicator varies between 1 (smallest degree of freedom) and 7 (greatest degree of freedom).<sup>4</sup> The measure Tax Rate (TR) reflects the

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<sup>3</sup> In accordance with configurational theory, FDI attractiveness and FDI unattractiveness are considered independently. The cut-off points at which a country is classified as attractive or unattractive for FDI are defined in Section 3.4. below.

<sup>4</sup> We inverted the original scale so that larger numerical values reflected stronger features in all scales.

countries' corporate tax rate. With respect to informal institutions, we use the Corruption Index (CO), which ranges between 0 (highest level of perceived corruption) and 100 (lowest level of perceived corruption). Furthermore, we used the five different indicators from the GLOBE study (House et al. 2004) to gauge a countries' culture as part of the informal institutional system. The measures Performance Orientation (PO), Power Distance (PD), Uncertainty Avoidance (UA), Institutional Collectivism (IC) and Future Orientation (FO) all vary between 1 and 7.<sup>5</sup> Finally, we averaged all scores over the years 2012 to 2016.

Since we want to analyze the effect of institutions as configurations to meet our research question "How do institutions as configurations of interrelated formal and informal elements affect the FDI attractiveness countries?", we split the total sample in two, depending on the countries' level of development. We do this because previous research suggests that the effect of institutions can differ substantially between countries of different levels of development (e.g. Bailey 2018, Donnelly & Manolova 2020). We used the United Nations World Economic Situations and Prospects 2016 report to distinguish between developed and developing countries (United Nations Department of Economic and Social Affairs 2016). Thus, we obtain a sample of developed countries, which we call *Sample 1*, and a sample of developing countries, to which we refer to as *Sample 2*. Descriptive statistics of Sample 1 and 2 are presented in Table 1 and 2, respectively.<sup>6</sup>

<i>Causal Condition</i>	<i>Min</i>	<i>Max</i>	<i>Mean</i>	<i>SD</i>	<i>N</i>
FDIAT	0.10	13.47	1.92	3.20	23
PS	40.02	98.67	76.33	14.76	23
RL	63.52	99.81	88.09	11.00	23
DE	6.00	7.00	6.90	0.27	23
CO	41.80	90.80	71.50	14.57	23
TR	12.50	39.04	25.64	6.42	23
PO	3.20	4.75	4.08	0.40	23
PD	3.59	5.56	4.97	0.50	23
UA	3.12	5.32	4.40	0.62	23
IC	3.25	5.22	4.24	0.50	23
FO	3.11	4.61	3.94	0.48	23

**Table 1: Causal Conditions and Descriptive Statistics of Sample 1 – Developed Countries**

<sup>5</sup> For the measures we retrieved from GLOBE, we treated the English-speaking part of Canada as representative for all Canada, and England as representative for the whole UK, due to a lack of data for Quebec and other parts of UK bar England. In addition, for Germany, South Africa and Switzerland we averaged the scores for different subpopulations according to official population statistics.

<sup>6</sup> Please note that no correlations are shown because the methodology applied is non-parametric and therefore its assumptions are not violated by multicollinearity.

<i>Causal Condition</i>	<i>Min</i>	<i>Max</i>	<i>Mean</i>	<i>SD</i>	<i>N</i>
FDIAT	0.12	13.28	1.51	2.40	34
PS	4.95	96.48	37.62	23.21	34
RL	0.57	94.38	45.00	24.20	34
DE	1.50	7.00	4.31	1.44	34
CO	18.40	85.20	40.99	14.54	34
TR	10.00	35.00	25.37	6.57	34
PO	3.32	4.90	4.09	0.41	34
PD	4.22	5.80	5.25	0.39	34
UA	2.88	5.31	3.96	0.49	34
IC	3.66	5.20	4.24	0.37	34
FO	2.88	5.07	3.75	0.44	34

**Table 2: Causal Conditions and Descriptive Statistics of Sample 2 – Developing Countries**

### 3.3. Method: fsQCA

The basic assumptions of configurational theory presented in Chapter 2 constitute a logic that cannot be reconciled with that of linear data analysis approaches (Dahms 2019, Fiss 2007, Furnari et al. 2021, Meyer et al. 1993). This refers to all three assumptions of configurational theory, conjunction, equifinality and asymmetry. Since linear empirical approaches are designed to isolate effects of individual variables on the outcome while holding all other variables constant, this would violate the assumption of conjunction that it is the interplay of conditions that together determine an outcome (Furnari et al. 2021). Furthermore, linear data analysis neglects how alternative pathways may lead to the outcome under investigation (Furnari et al. 2021). Finally, as linear methods inherently assume that discovered cause-effect relationships are to be interpreted bilaterally, they also violate the assumption of asymmetry (Furnari et al. 2021). Even though the use of interaction terms in linear data analysis may relieve some of those shortcomings, this approach entails similar conceptual problems and reaches its limit in terms of interpretable results quite fast (Fiss 2007, Furnari et al. 2021). In recognition of these challenges, Misangyi et al. (2017) specifically link configurational theory to the methodology of QCA, developed by Ragin (1987, 2000 and 2008) and refer to this new view as a “neo-configurational perspective” (Misangyi et al. 2017, p. 257).

The method of Qualitative Comparative Analysis (QCA) is rooted in set theory and essentially identifies various sets of elements that causally produce an outcome condition. There are two main variants of the QCA methodology (Schneider & Wagemann 2012), crisp set QCA and fuzzy set QCA. Crisp set QCA only allows cases to be assigned set membership values of either 0 (full non-membership) or 1 (full membership), thus making a differentiation between cases’ degree of set membership impossible. Instead, fuzzy set QCA (fsQCA) developed by Ragin

(2008) combines the QCA methodology with the fuzzy set theory of Zadeh (1965), allowing variables to be assigned a value on a continuous scale between 0 and 1, therefore eliminating limitations by allowing to precisely differentiate between degrees of set membership. We choose to analyze the relationship between various institutional systems and FDI with fsQCA as it has been shown to be superior in capturing complexity.

FsQCA is based on expressing the degree of membership of cases (countries in this study) within sets (a collection of cases sharing common conditions) by assigning set membership scores (Schneider & Wagemann 2012). By modelling causal relations in the form of subsets (a set whose elements are all contained in another set) and supersets (a set that contains all the elements of another set) relations, fsQCA then aims to identify conditions whose presence or absence is sufficient or necessary<sup>7</sup> for a case to constitute membership within the outcome set (Schneider & Wagemann 2012). The required calculations of QCA are based on the three Boolean operators, conjunction (Boolean *and*), disjunction (Boolean *or*) and negation (Boolean *not*) (Cronqvist 2019).<sup>8</sup>

### **3.4. Data Calibration and Transformation**

Before data can be analyzed with fsQCA, it must be calibrated and transformed into fuzzy sets, assigning cases a degree of set membership based on values between 0 and 1. For this purpose three qualitative anchor points must be defined, the threshold value indicating a case's full non-set membership, the threshold value indicating a case's full set membership, and the crossover point indicating the value of maximum ambiguity between a case's non-membership and membership within a set (Ragin 2008).

The specific anchor points in a certain context need to be determined on the basis of theoretical and substantive knowledge (Greckhamer et al. 2018). We present the anchor points for the causal conditions in our context in Table 3. A detailed description of how we derived the anchor points of each causal condition in our specific context is available in Appendix A.

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<sup>7</sup> The concepts of necessity and sufficiency will be elaborated in Section 3.5. below.

<sup>8</sup> More detailed information on the conceptual background of QCA can be obtained from Schneider and Wagemann (2012).



<i>Causal Condition</i>	<i>Threshold Full Fuzzy Membership</i>	<i>Crossover Point</i>	<i>Threshold Full Non-fuzzy Membership</i>
FDIAT	5.740	0.790	0.240
PS	76.710	53.440	9.220
RL	90.760	64.860	10.770
DE	5.500	4.000	2.500
CO	88.200	50.000	19.800
TR	34.200	25.000	16.200
PO	4.295	4.040	3.695
PD	5.265	4.735	4.310
UA	4.725	4.080	3.470
IC	4.565	3.925	3.390
FO	4.415	3.805	3.160

**Table 3: Determined Qualitative Anchors for Data Calibration**

Based on these anchors the causal conditions' initial values are transformed into fuzzy membership scores using the log odds of full membership (Ragin 2008, Chapter 5). This and all further analytical steps were carried out using the Fuzzy Set/Qualitative Comparative Analysis 4.0 software (Ragin & Davey 2022). We report the resulting fuzzy membership scores of causal conditions in Appendix B.

### 3.5. Analysis of Necessity and Sufficiency

FsQCA captures causality within the two distinct concepts of necessity and sufficiency by applying the set theoretical measures of consistency and coverage (Greckhamer et al. 2018). Consistency measures “how closely a perfect subset relation is approximated” (Ragin 2008, p. 44) and can be understood analogously to correlation within parametric analyses (Woodside 2013). Coverage “assesses the degree to which a cause or causal combination ‘accounts for’ instances of an outcome” (Ragin 2008, p. 44) and thus “gauges empirical relevance or importance” (Ragin 2008, p. 44) comparable with the R<sup>2</sup> measure in parametric analysis (Woodside 2013).

A condition is considered necessary if it can be identified as a superset of the outcome (Greckhamer et al. 2018). Thus, necessity implies a state in which the outcome is (almost) never achieved by a configuration in which necessary conditions are absent, yet configurations may exist that contain the necessary conditions and do not lead to the outcome (Morgan et al. 2011).

To identify necessary conditions, we follow Ragin (2000, p. 115) and use “linguistic qualifiers”. In our context, we draw on previous investigations of country characteristics (e.g. Katz et al. 2005, Pajunen 2008, Pennings 2003) and consider a condition as *usually necessary* if a consistency threshold of 0.65 is reached and *almost always necessary* if a consistency threshold of

0.80 is reached. Furthermore, for cases exceeding the consistency threshold, it is essential to ensure a high level of coverage. In the context of necessity analysis, coverage can be understood as the measurement of relevance indicating how much larger the set under investigation is compared to the outcome set (Schneider & Wagemann 2012). In other words, a high coverage avoids a condition's necessity being merely caused by its empirical distribution rather than "by virtue of its substantive or causal relevance" (Schneider & Wagemann 2012, p. 234). As coverage values in necessity analysis generally tend to be high (Schneider & Wagemann 2012), we set the threshold for them at 0.70.

A configuration is considered sufficient if it represents a consistent subset of the outcome (Greckhamer et al. 2018). Sufficiency thus implies a state in which the outcome is always present when a certain sufficient configuration is present, but there may be cases in which the outcome exists without this sufficient configuration being present (Morgan et al. 2011).

In the context of the sufficiency analysis we follow Fiss (2011) and introduce the terms *core condition* and *peripheral condition*. Core conditions are the essential factors strongly linked to the desired outcome while peripheral conditions are additional elements that complement the core. This distinction also allows us to identify *neutral permutations*, which are groups of configurations sharing the same core conditions. Various combinations of peripheral conditions around these shared core conditions may be identified to be equally effective in causing the outcome (Fiss 2011, Greckhamer 2016). In order to identify all sufficient configurations while classifying inherent conditions as core or peripheral, we combine different types of solutions (i.e. combinations of configurations leading to the outcome) obtained during analysis (Pappas & Woodside 2021, Sections 6.4. and 6.5.).

## **4. Results**

### **4.1. Results of Necessity Analysis**

Table 4 shows the results of the necessity analysis of Sample 1. For the outcome high FDIAT, several conditions show consistency values exceeding the set thresholds. However, none of these conditions also exceed the coverage threshold of 0.7, which rules out their relevance. Thus, neither usually nor almost always necessary conditions can be identified for high FDIAT within Sample 1. While for low FDIAT several conditions exceed only one of either the consistency or coverage thresholds, the presence of TR, with a consistency value of 0.71 and a

coverage value of 0.81, exceeds both thresholds and therefore can be classified as a usually necessary condition for low FDIAT within Sample 1.

<i>Condition</i>	<i>High FDIAT</i>		<i>Low FDIAT</i>	
	<i>Consistency</i>	<i>Coverage</i>	<i>Consistency</i>	<i>Coverage</i>
PS	0.99	0.46	0.91	0.62
RL	0.96	0.44	0.93	0.62
DE	1.00	0.41	1.00	0.59
CO	0.94	0.49	0.88	0.66
TR	0.52	0.41	<b>0.71</b>	<b>0.81</b>
PO	0.71	0.50	0.64	0.65
PD	0.80	0.45	0.84	0.68
UA	0.76	0.47	0.74	0.66
IC	0.81	0.49	0.77	0.68
FO	0.74	0.51	0.66	0.66
~PS	0.19	0.59	0.21	0.96
~RL	0.18	0.65	0.17	0.86
~DE	0.00	1.00	0.00	1.00
~CO	0.34	0.67	0.31	0.88
~TR	0.76	0.64	0.49	0.59
~PO	0.50	0.49	0.50	0.71
~PD	0.43	0.66	0.32	0.70
~UA	0.45	0.55	0.41	0.72
~IC	0.47	0.58	0.42	0.76
~FO	0.51	0.51	0.51	0.74

Note: Consistency and coverage values of conditions exceeding both defined thresholds are marked in bold. "~" indicates negation.

**Table 4: Results of the Necessity Analysis of Sample 1 – Developed Countries**

Table 5 shows the results of the necessity analysis of Sample 2. For high FDIAT several conditions exceed either the consistency or coverage threshold, however no condition exceeds both thresholds at the same time. Thus, in Sample 2 no condition can be identified as usually or almost always necessary for the outcome high FDIAT. For the outcome low FDIAT, present TR as well as absent PS, RL, CO, UA and FO exceed both the set consistency threshold and the set coverage threshold. While present TR as well as absent UA and FO with respective consistency values of 0.71, 0.76 and 0.70 can therefore be classified as usually necessary conditions, absent PS, RL and LCO with consistency values of 0.85, 0.86 and 0.89 can be classified as almost always necessary conditions for low FDIAT within Sample 2.

<i>Condition</i>	<i>High FDIAT</i>		<i>Low FDIAT</i>	
	<i>Consistency</i>	<i>Coverage</i>	<i>Consistency</i>	<i>Coverage</i>
PS	0.56	0.73	0.38	0.67
RL	0.58	0.75	0.41	0.73
DE	0.74	0.54	0.62	0.62
CO	0.58	0.79	0.39	0.73
TR	0.68	0.54	<b>0.71</b>	<b>0.77</b>
PO	0.70	0.53	0.63	0.66
PD	0.89	0.45	0.91	0.63
UA	0.62	0.65	0.48	0.70
IC	0.89	0.53	0.84	0.68
FO	0.63	0.60	0.60	0.79
~PS	0.74	0.47	<b>0.85</b>	<b>0.73</b>
~RL	0.79	0.49	<b>0.86</b>	<b>0.74</b>
~DE	0.48	0.48	0.54	0.74
~CO	0.80	0.49	<b>0.89</b>	<b>0.75</b>
~TR	0.70	0.64	0.57	0.71
~PO	0.55	0.52	0.55	0.72
~PD	0.26	0.69	0.20	0.72
~UA	0.71	0.50	<b>0.76</b>	<b>0.73</b>
~IC	0.46	0.68	0.42	0.84
~FO	0.78	0.59	<b>0.70</b>	<b>0.72</b>

Note: Consistency and coverage values of conditions exceeding both defined thresholds are marked in bold. "~" indicates negation.

**Table 5: Results of the Necessity Analysis of Sample 2 – Developing Countries**

#### 4.2. Results of Sufficiency Analysis

Table 6 and 7 show the results of the sufficiency analyses for high and low FDIAT for Sample 1 and 2, respectively. The individual columns represent identified sufficient configurations, respectively leading to high or low FDIAT. Below the identified configurations the parameters of fit of the analysis are reported. In addition to the basic consistency of the identified configurations other specific forms of consistency and coverage are displayed. Raw coverage captures how much of an outcome is captured by a specific configuration regardless of being simultaneously covered by other configurations (Schneider & Wagemann 2012). Unique coverage captures how much of the outcome is covered exclusively by the specific configuration (Schneider & Wagemann 2012). Furthermore, overall solution consistency and the overall solution coverage represent the respective measures for the set containing all configurations that lead to the respective outcome (Schneider & Wagemann 2012). In our presentation of results we follow previous research (Greckhamer 2016) and order the configurations by unique coverage. We also consecutively number distinct paths (i.e. all configurations sharing the same core conditions) with different neutral permutations being distinguished by appended letters in lower case.

The results of the sufficiency analysis for Sample 1 shows that three configurations within two distinct paths lead to membership of countries with high FDIAT. Configuration 1 combines absent TR (meaning low tax rates) with present PO and PD as core conditions. Configurations 2a and 2b represent two neutral permutations around the absence of TR and absent IC as core conditions. Within the solution for membership in the set of countries with low FDIAT, seven configurations within two distinct paths could be identified. Configurations 1a and 1b represent neutral permutations around absent PO and present IC as core conditions. Configurations 2a-e represent five neutral permutations where TR is present as a core condition.

<i>Configuration</i>	<i>High FDIAT</i>			<i>Low FDIAT</i>						
	1	2a	2b	1a	1b	2a	2b	2c	2d	2e
PS	●	●	●	●	●	●	●	●		⊗
RL	●	●	●	●	●	●	●	●	●	⊗
DE	●	●	●	●	●	●	●	●	●	●
CO	●	●	●	●	●	●	●	●	●	⊗
TR	⊗	⊗	⊗	⊗	⊗	●	●	●	●	●
PO	●	⊗	●	⊗	⊗	●	●	●	⊗	⊗
PD	●	●	⊗	●	●	●	●	●	●	●
UA	●	⊗	●	●	⊗	●	●		⊗	⊗
IC	●	⊗	⊗	●	●	●		●	⊗	⊗
FO	●	⊗	⊗	●	⊗		●	●	⊗	⊗
Consistency	0.84	0.84	0.99	0.87	0.89	0.95	0.94	0.95	0.88	0.98
Raw Coverage	0.35	0.16	0.13	0.17	0.14	0.38	0.34	0.33	0.15	0.10
Unique Coverage	0.27	0.11	0.06	0.08	0.07	0.06	0.04	0.04	0.03	0.02
Overall Solution Consistency		0.84					0.91			
Overall Solution Coverage		0.52					0.71			

Note: The notation follows Fiss (2011): Black circles = causal presence, cross-filled circles = causal absence; large circles = core condition, small circles = peripheral condition; blank spaces = indifferent condition.

**Table 6: Sufficient Configurations for High and Low FDIAT for Sample 1 – Developed Countries**

The results of the sufficiency analysis for Sample 2 in Table 7 show that four configurations within two distinct paths lead to membership of countries with high FDIAT. Configurations 1a and 1b represent neutral permutations in which the conditions PS and UA are present as core conditions. Configurations 2a and 2b represent two neutral permutations in which the condition PS is absent but CO is present. For the outcome condition of low FDIAT, we were able to identify eleven configurations within seven distinct paths. Configurations 1a and 1b represent two neutral permutations in which the core conditions PS and RL are absent but TR is present. In configurations 2a and 2b the absent condition is CO (meaning high corruption) whereas the conditions PO and UA are present. Configuration 3 shares all core conditions with configurations 2a and 2b except for present UA, which is marked as indifferent in this configuration. Configuration 4 includes as core conditions absent PS, and the presence of UA. Configurations 5a and 5b represent two neutral permutations around the absence of PS, the absence of CO and the presence of PO as core conditions. Configurations 6a and 6b constitute neutral permutations around present PS and RL, as well as absent TR, and UA as core conditions. Finally, configuration 7 reverses the core conditions of configurations 6a and 6b.

### **4.3. Robustness Test**

In order to determine the robustness of the results obtained, the assessment needs to follow the logic of set theoretical analysis rather than relying on the usual robustness tests used in regression analyses (Schneider & Wagemann 2012). Thus, the robustness of the results is assessed by determining their sensitivity to the defined crossover points. We follow Fiss (2011) and repeat the entire fsQCA analysis by changing the crossover points of conditions for which alternative crossover points appear plausible. Specifically, we set the crossover points of the causal conditions FDIAT, PS, RL, CO and TR, which were previously set at the 50th percentile of the data distribution, at the 45th percentile of the data distribution. The results obtained based on these modified crossover points can be found in Appendix B. With an average deviation of 0.02 for consistency as well as coverage values, the modified necessity analysis shows only minor changes for both samples and the majority of results are reproduced. In the following discussion, we put the focus on the results that showed to be robust.

Configuration	<i>High FDIAT</i>				<i>Low FDIAT</i>											
	1a	1b	2a	2b	1a	1b	2a	2b	3	4	5a	5b	6a	6b	7	
PS	●	●	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	●	●	⊗
RL	●	⊗	⊗	●	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	●	●	⊗	
DE	⊗	●	●	●		⊗	●	⊗	●	⊗	⊗	●	●	⊗	⊗	
CO	●	⊗	●	●	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	●	●	⊗	
TR	⊗	●	⊗	●	●	●	●	●	●	⊗	⊗	⊗	⊗	⊗	●	
PO	●	●	⊗	●	⊗	⊗	●	●	●	⊗	●	●	●	⊗	⊗	
PD	●	●	●	⊗	●	●		●	●	●	●	●	●	⊗	●	
UA	●	●	⊗	⊗	⊗	⊗	●	●		●	⊗	⊗	⊗	⊗	●	
IC	●	●	●	●	⊗		●	●	●	●	●	⊗	●	●	●	
FO	●	⊗	⊗	●	⊗	⊗	●	⊗	●	⊗	●	⊗	●	⊗	●	
Consistency	0.98	0.96	0.95	1.00	0.90	0.97	0.97	0.99	0.96	1.00	0.99	0.99	0.90	1.00	1.00	
Raw Coverage	0.21	0.15	0.18	0.10	0.27	0.19	0.24	0.17	0.27	0.11	0.15	0.14	0.11	0.06	0.10	
Unique Coverage	0.13	0.05	0.09	0.03	0.07	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	
Overall Solution Consistency		0.97								0.93						
Overall Solution Coverage		0.41								0.69						

Note: The notation follows Fiss (2011): Black circles = causal presence, cross-filled circles = causal absence; large circles = core condition, small circles = peripheral condition; blank spaces = indifferent condition.

**Table 7: Sufficient Configurations for High and Low FDIAT for Sample 2 – Developing Countries**

## 5. Discussion

We describe how we interpret the key results with respect to necessary (Section 5.1.) as well as sufficient (Section 5.2.) conditions. Following that we will focus on the theoretical contribution (Section 5.3.) and practical implications (Section 5.4.) of our study and outline limitations (Section 5.5.).

## 5.1. Interpretation of Necessary Conditions

As outlined, necessary conditions cannot cause the respective outcome of high or low FDI attractiveness on their own but have been identified as conditions that usually or almost always represent a part of the respective pathway to the outcome. Thus, they can be interpreted as institutional features almost always or usually contributing to high or low FDI attractiveness of countries.

Our results show that both in developed and developing countries high corporate tax rates systematically lead investors to consider them unattractive for FDI. Tax rates therefore seem to play a crucial role in the considerations of investors. This aligns with established theory as corporate tax rates can easily be compared between potential target locations for investors and exert a direct impact on the cost of doing business. Additionally, weak political stability, weak rule of law and high levels of corruption have been identified as factors that almost always contribute to investors' perception of a developing location as unattractive for investment. A potential reason for this could be that there are few or no compensating factors for these weak institutions, while in developed environments factors such as market size and potential, access to key technologies, skilled labor or capital might serve as compensators when weak formal institutions prevail.

Furthermore, low degrees of uncertainty avoidance and low levels of future orientation appear to contribute to the assessment of a developing location as unattractive for FDI activities by investors. Low uncertainty avoidance could be deterring, as it may be perceived as an indicator of unpredictable and unstable conditions for example by inhibiting access to finance or making market trends more unpredictable. Absent future orientation could be perceived as particularly negative in developing regions, as it might signal disincentives such as limited potential for long-term growth and development, a lack of emphasis on addressing long-term market challenges or a potential lack of investment towards education of future labor force as well as towards the expansion of infrastructure.

Notably, and in accordance with the assumption of asymmetry, for neither of the two samples any of the conditions identified as necessary for low FDI attractiveness could be identified as usually or almost always necessary for the opposite outcome, i.e. high FDI attractiveness, when negated. Thus, all identified factors seem to contribute towards the exclusion of a location in the context of MNE's investment considerations, yet their absence does not necessarily contribute towards a location being considered more attractive for investment than an alternative location.



## 5.2. Interpretation of Sufficient Conditions

With respect to sufficient conditions our results show that in developed and developing countries quite different configurations lead to a country being attractive or unattractive for FDI. In developed countries, the combination of low tax rates, combined with a culture characterized by a high performance orientation and a high power distance, seems particularly conducive for high FDI attractiveness. Thus, the combination of low costs due to low tax rates with expected low internal transaction costs due to high power distance, embedded in a culture that promotes a competitive business environment driven by innovation and performance improvement, seems to constitute an attractive institutional environment for investors.

The identified peripheral conditions indicate that this combination is particularly appealing to investors when accompanied by strong formal institutions, as well as high levels of uncertainty avoidance, collectivism, and a future-oriented society. While collectivism and future orientation in this configuration correspond to the theoretical considerations, uncertainty avoidance appears to be a favorable factor particularly in an environment offering cost advantages. The other identified pathway to high FDI attractiveness in developed countries links low tax rates with an individualistic culture. Thus, in contrast to the first path, an independent and autonomous attitude of individuals seems to be valued, which in combination with lower costs due to low corporate tax rates may provide an environment in which the necessary resources to foster innovation are available. This combination seems to be particularly appealing to investors if they are accompanied by strong formal institutions as in the first path and if the society is present-focused. The two neutral permutations of this path differ in the extent to which the peripheral conditions performance orientation, power distance and uncertainty avoidance are present. While in configuration 2a, high FDI attractiveness is achieved with a culture characterized by low performance orientation, low uncertainty avoidance and high power distance, in configuration 2b, a high FDI attractiveness is achieved by a culture characterized by high performance orientation, high uncertainty avoidance and low power distance, showing both combinations of these three conditions are considered to be equally attractive by investors given the above conditions. Configurations 2a-e leading to low FDI attractiveness in developed countries are clustered around prevailing high corporate tax rates. Therefore, while low corporate tax rates only in combination with further institutional elements lead to FDI attractiveness within developing countries, high corporate tax rates and associated increases in costs of doing business seem to be sufficiently important to investors to be solely decisive for FDI unattractiveness. Neutral permutations 2a-e show that this observation holds in several different environments. Firstly,

high corporate tax rates lead to low FDI attractiveness in the context of strong formal institutions, a culture characterized by high performance orientation, high power distance and either of three equally effective combinations of uncertainty avoidance, collectivism, and future orientation (configurations 2a-c). Furthermore, high tax rates in countries with low performance orientation, uncertainty avoidance, collectivism, and future orientation as well as high power distance lead to low FDI attractiveness both in the context of mostly strong (configuration 2d) as well as mostly weak (configuration 2e) formal institutions.

In developing countries, the combination of high political stability and high uncertainty avoidance seems to be conducive for attracting investment. This suggests that high uncertainty avoidance alongside political stability may satisfy investors' desire for a stable and predictable setting in developing countries. This is further supported by the mutual peripheral conditions of high performance orientation, high power distance and collectivism within this path, which likewise contribute to an environment of stability and controllability. Given these conditions, two different combinations of the remaining peripheral conditions are perceived as equally functional environments for the attractiveness of a location by investors.

Another institutional configuration that makes developing countries attractive for FDI seems to be a combination of political instability and low corruption. As discussed in the theory section, political instability, despite its generally negative connotation, can be seen as independent of a country's existing rules and may therefore represent an attractive institution from an investor's perspective in a given context. This configuration could thus be particularly attractive to MNEs if they perceive political instability in a developing country as an opportunity for a favorable improvement of current regulations. However, this only seems to be a strategy worth considering if the environment is not affected by corruption, possibly as in such situations incumbent authoritarian offices may appear adverse towards foreign investors. The two neutral permutations show that this observation applies to democratic countries where low uncertainty avoidance as well as collectivism are practiced and that two different combinations of the remaining peripheral conditions are considered to be equally conducive to an FDI attractive environment by MNE.

In the case of developing countries, institutional configurations 5a and 5b show that the combination of political instability, corruption and a performance oriented society is detrimental for FDI attractiveness. This might be the case because it creates an unpredictable and uncertain environment that prevents companies from operating effectively and planning ahead. It additionally reinforces the notion that political instability may only be exploitable by MNE in the

absence of corruption. In this specific configuration a high level of performance orientation seems to exacerbate the issue as indigenous firms might use their capability to better exploit corrupt structures through superior local knowledge and existing network connections in order to gain competitive advantages over foreign MNEs. The neutral permutations show that this observation particularly applies in the context of weak rule of law, low tax rates and a power distant and non-uncertainty avoidant society and that given these conditions two distinct combinations of the degree of democracy, collectivism and future orientation equally contribute to an environment in which investors evaluate a location as unattractive for FDI.

In the context of developing countries, configurations 6a and 6b suggest that the combination of political stability, a strong rule of law, low tax rates and a non-uncertainty avoidant society also leads to an unattractive location for FDI. This might be the case because this specific combination of institutions represents a contradictory picture to investors in the sense that political stability and rule of law signals a stable and predictable environment whereas this is contradicted with low tax rates and a society that is non-uncertainty avoidant. The two neutral permutations show this observation applies given conditions of low corruption and a collectivist society as well as two different combinations of the remaining peripheral conditions which equally contribute to an environment which investors view as unattractive for investment.

### **5.3. Theoretical Contribution**

Our study contributes to theory in several ways. First, we confirm prior research by showing that host country institutions play a central role in FDI decisions. Second, we provide empirical evidence that the influence of institutional factors on FDI flows varies, especially depending on a location's level of development. Most importantly, we contribute to a configurational perspective on institutions by showing that institutions, understood as holistic systems, have different implications for investment depending on their specific configuration. We demonstrate that the three central concepts of the configurational perspective – causal conjunction, equifinality and asymmetry – help to understand the effect of host country institutions on foreign direct investment flows. With respect to causal conjunction our research shows that institutions do not exert their influence on FDI as a single entity, but together with other institutions with which they are inherently related with. With respect to the principle of equifinality, we demonstrate that various configurations of institutions can lead to the same outcome, i.e. that different host country institutional designs can lead to high or low FDI flows. Regarding the concept of asymmetry, our results indicate that individual institutional elements can have substantially

different effects on the outcome, depending on the institutional configuration a single institution is embedded in.

Taken those insights together, our study provides strong support for the configurational perspective on institutions and the propositions formulated. This suggests that there is a benefit in conceptualizing host country institutions as holistic systems that may produce certain outcomes such as FDI flows. This substantiates North's (1990) notion of markets being a "mixed bag of institutions" (p. 69) in which institutions interact with each other and jointly produce an outcome. Ultimately, by specifically including informal institutions into the configurational perspective, we extend the insights of Pajunen (2008) and show that formal and informal institutions are part of this "mixed bag" and together exert influence on FDI flows.

#### **5.4. Practical Implications**

Our study also provides several practical implications for policy makers seeking to increase the FDI attractiveness of their country. Based on the recognition that institutional elements influence the FDI attractiveness of a country in interaction and that the impact of individual institutional components is not linear, changing only single institutional elements has limited potential for success. Rather, policy makers are advised to consider the overall institutional context of formal and informal institutions. However, policymakers should acknowledge that informal institutions change only in the long term and that they may have only limited influence on their trajectory (e.g. Tekic & Tekic 2021). Furthermore, in the context of institutional change and in line with remarks by Dunning and Lundan (2008a), policymakers should be advised not to blindly imitate best practices of other nations' formal institutions as these are likely to be embedded into fundamentally different cultural contexts and therefore are not necessarily guaranteed to yield the intended effects. It is therefore important to consider the country's specific institutional design, to critically evaluate the working of institutions of countries with comparable institutional systems and to transform institutional systems for the better by specifically acknowledging their interrelatedness. Moreover, the necessity analysis revealed that some institutions are of greater importance than others. In the context of developing countries, for example, policymakers should put special attention to reduce political instability, a weak rule of law and corruption. High tax rates seem to be detrimental in both set of countries. However, as outlined previously, these measures should only be considered as key elements in avoiding the unattractiveness of a location. Addressing these issues therefore tends to help create a foundation on which an attractive investment environment can be built.

While the assessment of the impact of institutional configurations on corporate outcomes is beyond the scope of this study, nevertheless some important general implications can be drawn for enterprises intending to internationalize or further diversify their international portfolio. Considering that different institutional configurations may prove equally attractive for investment, decision makers in MNE may be well advised to consider a broad range of potential target locations as part of their investment considerations. In this way, it may be possible to identify investment opportunities that, while offering equal utility in terms of institutional profile, provide comparative advantages beyond the institutional dimension and thus are more attractive overall. Furthermore, given an institutional profile's utility to MNE emerges by interaction of individual institutional elements, decision makers should assess whether anticipated or probable changes in single institutional elements may affect the perceived utility of the overall institutional environment prior to investing into a location. As a corollary to this, MNE could also strategically seek to invest into locations whose prevailing institutional profile does not provide utility at the present time, however, for which anticipated changes in individual institutional elements are likely to result in a favorable shift in utility. By early identification of such opportunities, MNE may be able to gain decisive competitive advantages. As discussed in Section 5.2., political instability of a target location in an appropriate setting could indeed be seen as an advantageous circumstance by decision makers.

## **5.5. Limitations**

While this study contributes to the understanding of the relationship between institutions and FDI flows, it is subject to several limitations. First, although the division into a sample of developed countries and a sample of developing countries appears reasonable from a theoretical point of view, it inherently results in skewed set-membership scores (Schneider & Wagemann 2012, Chapter 9) within the data set. This particularly applies to political stability, rule of law, democracy, and corruption within Sample 1 (developed countries) as developed countries usually perform better on those metrics. While the introduction of a coverage threshold alleviates concerns of potentially problematic interpretations, we cannot rule out that we may have missed important interactions between institutional elements within those samples. Future research may try to address this issue by either looking at combined samples of developing and developed countries or trying to create samples with more institutional variance. A second limitation, closely related to the first, is the size of the examined data set. While the analysis of small samples does not violate assumptions of fsQCA, the examination of a larger dataset may reveal further empirically evident institutional patterns leading to high or low FDI attractiveness. As

we relied in this study on the number of countries included in the GLOBE culture data, future research could leverage data from the GLOBE 2020 research project, which will cover a significantly larger number of countries. This may lead to more variation in the data and might also help to address the previously outlined limitation of skewed set memberships. Third, as other empirical studies, our study depends on the specific data sources and measurement of institutions. Even though we relied on established measures of institutions, we cannot rule out that other ways to measure and quantify host country institutions, formal as well as informal, may show disparate effects from our results. Future research could therefore address this issue by using alternative institutional measures.

## **6. Conclusion and Outlook**

This study used a configurational perspective on institutions and looked at the three propositions conjunction, equifinality and asymmetry in the context of FDI. We explored the interrelated effect of formal and informal institutions on FDI with a sample 57 host countries by applying a set theoretical fuzzy set Qualitative Comparative Analysis (fsQCA) technique. Our results suggest that the attractiveness of a country for FDI depends on the specific configuration of the host country institutional system. By showing that there is value in adopting a holistic view of institutional systems to explain multidimensional patterns of FDI, we address specific calls in IB that criticize the way how institutional theory is applied in research as “thin” (Jackson & Deeg 2008, p. 541) and “narrow” (Kostova et al. 2008, p. 994). We believe that our approach provides a promising pathway for gaining deeper insights into the mechanisms and workings of institutional systems that goes beyond traditional approaches and perspectives which may have reached a stage of “diminishing returns” (Kim & Aguilera 2016, p. 149).

Our study offers several avenues for future research. Whereas we looked at aggregate FDI, future research could take a more specific approach and investigate whether different host country institutional systems may have disparate effects on distinct types of FDI. A possible classification could be based on Dunning (1998) and distinguish between market-seeking, resource-seeking, efficiency-seeking and asset-seeking FDI, or differentiate between industries or markets from which FDI activities originate. Another avenue for future research lies in shifting the level of analysis. While this study focuses on institutions at the country level, valuable insights could be gained by examining subnational institutional configurations or institutional commonalities of economic areas on a supranational level. Furthermore, future research could explore other contexts of institutional configurations such as the effect of MNE home country

institutional systems on FDI outflows or implications of various institutional systems on MNE performance. Finally, the configurational perspective employed in this study may be applied to future research about FDI that consider configurations of non-institutional factors such as natural resources in host or home countries.

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## Appendix A

Determination of anchor points for data calibration:

In order to determine meaningful anchor points for FDIAT, we considered information from various sources. First, we calculated FDIAT using an alternative method. Following UNCTAD (2012), we calculated FDIAT as the sum of its rank in FDI inflows relative to its GDP. Then the absolute level of its FDI flows in USD and the resulting country scores were compared with those of the FDIAT index used in this study. Furthermore, we consulted the quantitative and qualitative information of the UNCTAD world investment reports of the years 2013 to 2017 (UNCTAD, 2013, 2014, 2015, 2016 and 2017). Finally, we computed the 90th, 50th and 10th percentiles of FDIAT. After reviewing and evaluating this information, Singapore was defined as the country with the lowest FDIAT score within the full fuzzy membership group and the threshold for full fuzzy membership was therefore calculated as the average of the scores of Singapore and Hungary as the country with the second lowest FDIAT score. We set the cross-over point at the 50th percentile of the data distribution. We defined Ecuador as the country with the highest FDIAT score within the full non-fuzzy membership group. Thus, we computed the threshold for full non-fuzzy membership as the average of the scores of Ecuador and Italy as the country with the second highest FDIAT score.

In order to determine anchor points for RL as well as PS, we used the 90 % confidence intervals in the full dataset of the World Governance Indicators (Kraay et al. 2010, Chapter 4). The threshold for full fuzzy membership was defined as the lowest identified rule of law score within the group of countries whose score was determined on the basis of at least two data sources and whose upper confidence interval indicates a score of at least 95. The full non-fuzzy membership threshold was accordingly defined as the highest identified rule of law score within the group of countries whose score was determined on the basis of more than one data source and whose lower confidence interval indicates a score of no more than 5. The crossover point was set at the 50th percentile of the respective data distribution. For DE, the anchors chosen are based on the Freedom House classifications of countries as free, partly free or not free. Freedom House classifies countries with a score of 2.5 or less as free, countries with a score between 3.0 and 5.0 as partly free, and countries with a score of 5.5 or more as not free (e.g. Freedom House 2016). As described in Section 3.2., we inverted this scale. Consequently, on the inverted scale, countries with a score of 2.5 or less are classified as not free, countries with a score between 3.0 and 5.0 are classified as partly free, and countries with a score of 5.5 or more are classified as free. While the thresholds for full fuzzy membership and non-fuzzy membership could be

taken directly from the cut-off values for the categorization as free and not free, the crossover point was calculated as the mean value of the range of scores assigned to the partly free category.

For determining the anchor points for CO, we used the scale of the CPI world map as well as the specified 90 % confidence intervals determined within the full dataset (Transparency International 2016). Then the threshold for full fuzzy membership was set equal to the lowest CPI score of the group of countries whose upper confidence interval indicates a value of at least 90. The threshold for full non-fuzzy membership was set equal to the highest CPI score of the group of countries whose lower confidence interval indicates a value of less than 10. The crossover point was set at the 50th percentile of the data distribution determined.

The anchor points for TR were calculated using percentiles. Accordingly, the threshold for full non-fuzzy membership was set at the 10th percentile of the distribution, the threshold for full fuzzy membership was set at the 90th percentile of the distribution and the crossover point was set at the 50th percentile of the distribution.

For the anchors of the cultural dimensions, we used the values determined in the GLOBE study's method of test banding (House et al. 2004, Chapter 11). The methods goal is to counteract an overinterpretation of the meaning of different scores. For the cultural dimensions PD, UA, IC and FO, the GLOBE study identifies four bands (A-D). The highest scores are assigned to band A and the lowest scores are assigned to band D (House et al. 2004, pp. 304, 468, 539 and 622). Based on this classification, we computed the threshold for full fuzzy membership as the average of the lowest score within band A and the highest score within band B. For determining the crossover point we calculated the average of the lowest score within band B and the highest score within band C. We computed the threshold for full non-fuzzy membership as the average of the lowest score within band C and the highest score within band D. As only three bands could be identified for PO (House et al. 2004, p. 250), the average of all values contained in the middle band B was defined as the crossover point in this case while the thresholds for full fuzzy membership and non-fuzzy membership were calculated analogously to the principle applied for the other cultural dimensions.

## Appendix B

Fuzzy-set membership scores for causal conditions of Sample 1:

<i>Country</i>	<i>PS</i>	<i>RL</i>	<i>DE</i>	<i>LCO</i>	<i>HTR</i>	<i>PO</i>	<i>PD</i>	<i>UA</i>	<i>IC</i>	<i>FO</i>	<i>FDIAT</i>
Australia	0.98	0.97	1.00	0.93	0.81	0.98	0.51	0.81	0.85	0.80	0.57
Austria	0.99	0.97	1.00	0.89	0.50	0.99	0.77	0.99	0.85	0.96	0.03
Canada	0.99	0.97	1.00	0.93	0.60	1.00	0.62	0.91	0.89	0.96	0.55
Czech Republic	0.98	0.92	1.00	0.70	0.18	0.69	0.00	0.84	0.14	0.31	0.57
Denmark	0.95	0.97	1.00	0.96	0.44	0.89	0.00	1.00	0.98	0.96	0.08
Finland	0.99	0.98	1.00	0.96	0.31	0.12	0.71	0.99	0.96	0.89	0.56
France	0.63	0.95	1.00	0.87	0.97	0.69	0.96	0.84	0.51	0.18	0.09
Germany	0.93	0.96	1.00	0.92	0.82	0.89	0.96	0.99	0.27	0.87	0.18
Greece	0.31	0.72	0.98	0.56	0.53	0.00	0.98	0.03	0.02	0.13	0.08
Hungary	0.89	0.78	0.99	0.71	0.18	0.00	0.99	0.01	0.10	0.06	0.90
Ireland	0.96	0.96	1.00	0.89	0.04	0.98	0.91	0.74	0.96	0.70	1.00
Italy	0.76	0.74	1.00	0.59	0.87	0.02	0.98	0.19	0.20	0.07	0.05
Japan	0.98	0.95	1.00	0.90	0.95	0.89	0.89	0.49	1.00	0.92	0.02
Netherlands	0.98	0.97	1.00	0.94	0.50	0.96	0.01	0.95	0.92	0.98	1.00
New Zealand	1.00	0.97	1.00	0.96	0.71	1.00	0.71	0.96	0.98	0.17	0.08
Poland	0.95	0.86	1.00	0.80	0.18	0.21	0.89	0.09	0.94	0.04	0.50
Portugal	0.94	0.92	1.00	0.82	0.84	0.02	0.98	0.30	0.49	0.39	0.66
Slovenia	0.96	0.91	1.00	0.78	0.12	0.04	0.97	0.19	0.72	0.27	0.25
Spain	0.54	0.91	1.00	0.79	0.74	0.44	0.99	0.37	0.40	0.20	0.51
Sweden	0.99	0.97	1.00	0.95	0.37	0.06	0.66	1.00	1.00	0.95	0.09
Switzerland	1.00	0.97	1.00	0.95	0.28	1.00	0.71	1.00	0.69	0.98	0.79
USA	0.84	0.95	1.00	0.90	0.98	1.00	0.69	0.58	0.78	0.85	0.32
United Kingdom	0.75	0.96	1.00	0.92	0.30	0.62	0.91	0.93	0.83	0.91	0.56

Fuzzy-set membership scores for causal conditions of Sample 2:

<i>Country</i>	<i>PS</i>	<i>RL</i>	<i>DE</i>	<i>LCO</i>	<i>HTR</i>	<i>PO</i>	<i>PD</i>	<i>UA</i>	<i>IC</i>	<i>FO</i>	<i>FDIAT</i>
Albania	0.57	0.34	0.88	0.37	0.05	1.00	0.31	0.91	0.95	0.57	0.79
Argentina	0.46	0.18	0.98	0.36	0.95	0.03	0.99	0.11	0.18	0.03	0.22
Bolivia	0.24	0.05	0.88	0.35	0.50	0.02	0.17	0.03	0.63	0.29	0.53
Brazil	0.29	0.53	0.98	0.55	0.94	0.50	0.97	0.09	0.37	0.51	0.56
China	0.15	0.30	0.01	0.51	0.50	0.99	0.85	0.98	0.98	0.44	0.51
Colombia	0.06	0.40	0.77	0.46	0.62	0.30	0.99	0.08	0.34	0.08	0.60
Costa Rica	0.87	0.79	1.00	0.73	0.81	0.72	0.51	0.22	0.51	0.28	0.67
Ecuador	0.30	0.09	0.86	0.30	0.33	0.87	0.99	0.12	0.47	0.42	0.06
Egypt	0.04	0.19	0.06	0.36	0.44	0.94	0.74	0.48	0.94	0.57	0.22
El Salvador	0.42	0.19	0.95	0.51	0.81	0.06	1.00	0.09	0.23	0.49	0.31
Georgia	0.19	0.67	0.88	0.71	0.08	0.20	0.94	0.05	0.62	0.14	0.79
Guatemala	0.13	0.06	0.65	0.22	0.71	0.12	0.99	0.02	0.22	0.07	0.50
Hong Kong	0.97	0.96	0.27	0.90	0.11	1.00	0.78	0.75	0.72	0.75	1.00
India	0.06	0.56	0.95	0.50	0.93	0.92	0.98	0.58	0.89	0.87	0.23
Indonesia	0.16	0.30	0.90	0.36	0.50	0.99	0.93	0.60	0.95	0.57	0.44
Iran	0.07	0.08	0.02	0.15	0.50	1.00	0.98	0.12	0.44	0.38	0.04
Israel	0.07	0.91	0.99	0.80	0.54	0.62	0.49	0.41	0.92	0.56	0.55
Kazakhstan	0.34	0.19	0.04	0.17	0.22	0.02	0.96	0.11	0.85	0.25	0.67
Kuwait	0.45	0.66	0.12	0.60	0.08	0.31	0.90	0.65	0.93	0.07	0.05
Malaysia	0.50	0.76	0.50	0.68	0.49	0.97	0.92	0.96	0.96	0.98	0.55
Mexico	0.11	0.26	0.88	0.31	0.81	0.67	0.94	0.61	0.65	0.58	0.52
Morocco	0.20	0.45	0.27	0.48	0.82	0.39	1.00	0.11	0.42	0.07	0.53
Namibia	0.93	0.72	0.98	0.68	0.91	0.04	0.96	0.64	0.72	0.19	0.67
Nigeria	0.04	0.06	0.40	0.14	0.81	0.26	1.00	0.73	0.73	0.80	0.08
Philippines	0.08	0.31	0.88	0.42	0.81	0.99	0.98	0.28	0.97	0.85	0.25
Qatar	0.98	0.88	0.05	0.85	0.02	0.01	0.49	0.39	0.94	0.47	0.03
Russia	0.08	0.11	0.02	0.17	0.22	0.00	0.99	0.00	0.94	0.01	0.31
Singapore	1.00	0.96	0.50	0.94	0.12	1.00	0.81	1.00	0.99	1.00	0.98
South Africa	0.34	0.64	0.98	0.59	0.78	1.00	0.03	0.89	0.91	0.98	0.11
South Korea	0.58	0.91	0.99	0.73	0.45	1.00	0.99	0.07	1.00	0.69	0.05
Thailand	0.06	0.51	0.14	0.46	0.25	0.28	0.99	0.32	0.62	0.15	0.49
Venezuela	0.08	0.02	0.10	0.04	0.94	0.00	0.98	0.04	0.54	0.11	0.05
Zambia	0.68	0.41	0.69	0.50	0.95	0.80	0.96	0.52	0.96	0.30	0.69
Zimbabwe	0.12	0.03	0.06	0.06	0.56	0.91	0.99	0.58	0.71	0.46	0.38

## Appendix C

Results of necessity analysis for Sample 1 with modified crossover points for selected conditions:

<i>Condition</i>	<i>High FDIAT</i>		<i>Low FDIAT</i>	
	<i>Consistency</i>	<i>Coverage</i>	<i>Consistency</i>	<i>Coverage</i>
PS	0.99	0.48	0.93	0.60
RL	0.97	0.46	0.95	0.60
DE	1.00	0.43	1.00	0.57
CO	0.95	0.49	0.91	0.63
TR	0.57	0.46	0.73	0.79
PO	0.70	0.51	0.65	0.63
PD	0.81	0.47	0.84	0.66
UA	0.76	0.49	0.75	0.65
IC	0.81	0.51	0.77	0.66
FO	0.74	0.53	0.66	0.64
~PS	0.16	0.62	0.19	0.98
~RL	0.16	0.68	0.15	0.87
~DE	0.00	1.00	0.00	1.00
~CO	0.29	0.71	0.27	0.89
~TR	0.74	0.67	0.50	0.61
~PO	0.50	0.51	0.50	0.69
~PD	0.42	0.67	0.33	0.69
~UA	0.46	0.58	0.41	0.70
~IC	0.46	0.60	0.43	0.76
~FO	0.51	0.53	0.52	0.73

Note: "~" indicates negation.

Results of necessity analysis for Sample 2 with modified crossover points for selected conditions:

<i>Condition</i>	<i>High FDIAT</i>		<i>Low FDIAT</i>	
	<i>Consistency</i>	<i>Coverage</i>	<i>Consistency</i>	<i>Coverage</i>
PS	0.58	0.73	0.43	0.66
RL	0.60	0.75	0.46	0.71
DE	0.73	0.57	0.62	0.59
CO	0.66	0.79	0.50	0.73
TR	0.72	0.59	0.74	0.75
PO	0.70	0.56	0.63	0.63
PD	0.90	0.48	0.91	0.60
UA	0.61	0.69	0.49	0.68
IC	0.88	0.56	0.84	0.65
FO	0.63	0.64	0.61	0.77
~PS	0.73	0.51	0.82	0.71
~RL	0.77	0.54	0.84	0.72
~DE	0.48	0.51	0.55	0.71
~CO	0.78	0.56	0.85	0.75
~TR	0.69	0.68	0.59	0.72
~PO	0.54	0.54	0.56	0.69
~PD	0.25	0.70	0.21	0.71
~UA	0.72	0.53	0.77	0.71
~IC	0.45	0.70	0.43	0.82
~FO	0.77	0.62	0.71	0.70

Note: "~" indicates negation.

Results of sufficiency analysis for Sample 1 with modified crossover point for selected conditions:

<i>Configuration</i>	<i>High FDIAT</i>			<i>Low FDIAT</i>					
	1	2a	2b	1	2a	2b	2d	2c	2e
PS	●	●	●	●	●	●	●	●	⊗
RL	●	●	●	●	●	●	●	●	●
DE	●	●	●	●	●	●	●	●	●
CO	●	●	●	●	●	●	●	●	⊗
TR	⊗	⊗	⊗	⊗	●	●	●	●	●
PO	●	⊗	●	⊗	●	●	⊗	●	⊗
PD	●	●	⊗	●	●	●	●	●	●
UA	●	⊗	●	●	●	●	⊗		⊗
IC	●	⊗	⊗	●	●		⊗	●	⊗
FO	●	⊗	⊗	●		●	⊗	●	⊗
Consistency	0.84	0.84	0.95	0.89	0.93	0.92	0.85	0.90	0.98
Raw Coverage	0.35	0.18	0.13	0.17	0.39	0.35	0.17	0.34	0.11
Unique Coverage	0.26	0.12	0.06	0.08	0.07	0.04	0.04	0.03	0.01
Overall Solution Consistency		0.84					0.88		
Overall Solution Coverage		0.54					0.66		

Note: The notation follows Fiss (2011): Black circles = causal presence, cross-filled circles = causal absence; large circles = core condition, small circles = peripheral condition; blank spaces = indifferent condition.



Results of sufficiency analysis for Sample 2 with modified crossover point for selected conditions:

Configuration	High FDIAT						Low FDIAT									
	1a	1b	1c	1d	2a	2b	1	2	4	5	6a	6b	7a	7b	8	9
PS	●	●	●	●	⊗	⊗	⊗	⊗	⊗	⊗	●	●	⊗	⊗	⊗	⊗
RL	●	●	⊗	⊗	⊗	●	⊗	⊗	⊗	●	●	⊗	⊗	⊗	⊗	⊗
DE	⊗	●	●	●	●	●	⊗	●	●	⊗	●	⊗	⊗	⊗	⊗	⊗
CO	●	●	⊗	⊗	●	●	⊗	⊗	⊗	●	●	⊗	⊗	⊗	⊗	●
TR	⊗	●	⊗	●	⊗	●	●	●	●	⊗	⊗	●	⊗	●	●	●
PO	●	⊗	●	●	⊗	●	⊗	●	●	●	⊗	●	●	●	⊗	⊗
PD	●	●	⊗	●	●	⊗	●	●	●	●	⊗	●	●	●	●	●
UA	●	●	●	●	⊗	⊗	⊗	●	●	⊗	⊗	⊗	⊗	⊗	●	●
IC	●	●	●	●	●	●	●	●	●	●	●	●	●	⊗	●	●
FO	●	⊗	●	⊗	⊗	●	⊗	●	●	⊗	●	⊗	●	⊗	●	⊗
Consistency	0.98	0.98	0.94	0.95	0.95	0.99	0.96	0.96	0.97	0.98	0.90	1.00	0.99	0.99	1.00	1.00
Raw Coverage	0.20	0.15	0.11	0.15	0.19	0.10	0.21	0.27	0.24	0.18	0.13	0.06	0.16	0.15	0.11	0.11
Unique Coverage	0.11	0.04	0.03	0.03	0.09	0.03	0.09	0.04	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02
Overall Solution Consistency	0.96						0.95									
Overall Solution Coverage	0.48						0.64									

Note: The notation follows Fiss (2011): Black circles = causal presence, cross-filled circles = causal absence; large circles = core condition, small circles = peripheral condition; blank spaces = indifferent condition.

## Diskussionspapiere des Instituts für Organisationsökonomik

Seit Institutsgründung im Oktober 2010 erscheint monatlich ein Diskussionspapier. Im Folgenden werden die letzten zwölf aufgeführt. Eine vollständige Liste mit Downloadmöglichkeit findet sich unter <http://www.wiwi.uni-muenster.de/io/de/forschen/diskussionspapiere>.

- DP-IO 11/2022** Institutional Configurations in International Investment Research  
*Christopher Weber/Pascal Mayer*  
November 2023
- DP-IO 10/2023** 13. Jahresbericht des Instituts für Organisationsökonomik  
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Oktober 2023
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Herausgeber:  
Prof. Dr. Alexander Dilger  
Universität Münster  
Institut für Organisationsökonomik  
Scharnhorststr. 100  
D-48151 Münster

Tel: +49-251/83-24303  
Fax: +49-251/83-28429

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