

Fachbereich Wirtschaftswissenschaft

**Shifting the Rules of the Game: Institutional Change as a
Barrier to MNE Investment Activity**

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1 Introduction

The rate of [institutional] change is often of no less importance than the direction of the change itself; but while the latter frequently does not depend upon our volition, it is the rate at which we allow change to take place which may well depend upon us.

Polanyi (1944, pp. 36-37)

[B]oth the IB [International Business] and CC [Comparative Capitalism] literatures have stressed the view that institutions exhibit path dependence, and national systems tend to be stable or slow to change.

Jackson & Deeg (2008, p. 554)

Investment is the ‘process of exchanging income during one period of time for an asset that is expected to produce earnings in future periods’ (Encyclopædia Britannica, 2018) and represents a defining feature of firm activity. Firm investments can be passive, as in purely financial investments, or they may actively expand a firm’s resources, technologies and productive capacity. The latter form of investment provides the basis for ‘long-run profits’ (Penrose, 1995, p. 29) and, thus, represents a significant determinant of the competitiveness of a firm. However, investment returns can never be fully predicted in advance (Lazonick & Mazzucato, 2013). Investors that are unable to structure and make sense of their environment will lose confidence in their judgments about future returns and are likely to postpone their investment to avoid losses (Bloom, Bond & Van Reenen, 2007). The fact that investments are made, not least because they are enforced by the competition between firms, raises the question of what generates predictability in an increasingly uncertain global economy (Cantwell, Dunning & Lundan, 2010).

One way to answer this question is to turn to the uncertainty-absorbing properties of institutions. Institutions are the ‘humanly devised constraints that structure political, economic and social interaction’ (North, 1991, p. 97) embodied in laws, regulations, standards, norms and values. By providing constraints to social

interaction, institutions are powerful forces of stability, enabling individual agents to make judgments about the future trajectory of their social and economic environment and, thus, to form expectations (Dequech, 2004). This function of institutions is tied to their dynamic properties of slow, gradual and path-dependent change (Thelen, 2009). However, many events in the recent past have shown that institutions can take on much more radical forms of change. Take for instance the ongoing instabilities in Latin American countries, which have led to strong increases of economic uncertainty (Levitsky & Murillo, 2013), or the radical institutional restructuring in economies of the former Soviet Union (Murrell, 1993).

This thesis argues that these geographically dispersed instabilities are of high relevance for multinational enterprises (MNEs) which operate in multiple national institutional environments. The MNE is 'an enterprise that engages in foreign direct investment (FDI) and owns or, in some way, controls value-added activities in more than one country' (Dunning & Lundan, 2008a, p. 3). The International Business literature has long emphasized that underdeveloped institutional environments, mostly in developing and emerging economies, present significant barriers to the investment activity of MNEs (Peng, 2002; Daude & Stein, 2007; Dunning & Lundan, 2008b). While the link between FDI, uncertainty and institutional underdevelopment, e.g., in the form of deficient property rights, has been discussed in detail, the role of the *dynamics of institutional environments* has received little attention. However, the long-term nature of FDI is likely to require not only institutions that are developed, but also stable.

The following will argue that the disruptiveness of institutional change can act as a barrier to MNE activity in the form of FDI, because the resulting uncertainty makes it difficult for MNEs to judge the potential of an investment. This requires a view of FDI as a strategic investment, as described in the opening paragraph. As we shall see, the current literature in IB builds significantly on another theoretical perspective that views FDI as a result of governance choices. In part, this thesis aims to contrast these approaches and tries to unravel how the understanding of institutions as determinants for FDI may differ between them. In addition, it is my aim to extend the existing concepts of institutional determinants by integrating some of the principles of the Comparative Capitalisms (CC) approach, which focuses on the topology of national institutional systems (Jackson & Deeg, 2008), and which began to discuss institutional change in more recent years (Streeck & Thelen, 2005).

1.1 Research Questions

Following this brief introduction to the main argument, I hypothesize that radical institutional change has a negative effect on the decision of MNEs to invest in a country. Following this, I will outline four questions, each corresponding to the main part of the dissertation. The first two questions are motivated by conceptual and theoretical problems, while the latter two are empirically driven.

Question 1: Can the interrelationship between institutional change, uncertainty and FDI be conceptualized based on the existing theory of the MNE?

The Framework Chapter addresses the current status of IB theory and specifically its ability to integrate a dynamic view on institutions. This chapter will review and contrast the existing theories of FDI, as well as relate them to the underpinning institutional theories. This question aims to extend the current academic discourse by developing a conceptual framework that proposes radical institutional change as a barrier to strategic MNE activity in the form of FDI.

Question 2: How does a dynamic view on the economic and social environment of the MNE affect current theory building in International Business?

Essay 1 applies some of the implications of the previously developed conceptual framework, specifically relying on some crucial points represented in Edith Penrose's seminal work *The Theory of the Growth of the Firm* (Penrose, 1995) to a recent theoretical discussion in IB on a systematic relationship between multinationality and performance. The question, thus, aims to further advance new theory-building in IB by highlighting issues related to the dynamics of the economic and social environment of the MNE.

Question 3: How can we measure degrees of institutional change and what is the relationship between radical institutional change and the FDI attractiveness of a country?

Having established the theoretical relevance of the conceptual framework, **Essay 2** aims to explore the empirical relationship between degrees of institutional change and FDI attraction on the country level. The aim of this question is to contribute to empirical studies of institutional change in IB.

Question 4: How is the concept of institutional complementarity affected by varying degrees of institutional instability?

In the Framework Chapter, I argue that institutional stability is vital to allow foreign investors to build expectations based on their holistic judgment of an institutional system. **Essay 3** upholds the general hypothesis of a negative relationship between radical institutional change and FDI attraction but explores it with a different methodology that allows for the interdependence between institutions.

1.2 Key Concepts

The following clarifies the three central concepts of this work, providing basic definitions and some vital background knowledge.

Multinational Enterprises and Foreign Direct Investment. The MNE was already defined as a firm that ‘owns or, in some way, controls value-added activities in more than one country’ (Dunning & Lundan, 2008a, p. 3). This also characterizes the MNEs as a firm operating in more than one institutional environment. In this work, the economic activity of the MNE is understood as being motivated by its long-term performance. The term performance is meant to reflect the fact that MNEs have a variety of different strategic options, e.g., cutting-costs or increasing profits, that could make them more resilient in global competition (Dunning, 2000). Thus, I do not postulate a single objective of the firm such as profit maximization.

The MNE invests in its resources, capabilities and capacities to increase its long-term performance. Some of these investments may be confined to a single country, while FDI represents a border-crossing investment. FDI is defined as an investment resulting in at least a 10% ownership in an enterprise abroad outside of the realm of regular purchases of traded shares (Dunning & Lundan, 2008a). FDI, like any other data, represents an imperfect measure of the economic activities of the MNE. Nevertheless, an analysis of different proxies of MNE activity suggests that FDI is in fact representative of the economic activities conducted by MNEs (see, e.g., Wacker, 2016).

Institutions. In this work, I follow the definition of institutions proposed by Douglass North due its important role in the field of International Business (Dunning & Lundan, 2008a; Hotho & Pedersen, 2012), as well as due to his focus on the country level. It may seem arbitrary to choose a definition in the absence of any alternative.

However, in the context of the breadth of the institutional literature, I stick to the philosophy that ‘which definition of an institution to adopt is not an issue of right or wrong; it depends on the purpose of the analysis’ (Aoki, 2001 p. 10).

‘Institutions are the rules of the game in society or, more formally, are the humanly devised constraints that structure political, economic and social interaction’ (North, 1991, p. 97).

In his work, North defines the function of institutions as reducing the ‘uncertainty by providing structure for everyday life’ (North, 1990 pp. 3-4). This work will concentrate on formal institutions because of the difficulty of empirically assessing informal institutions, especially in the setting of country comparisons (see Voigt, 2018), as well as due to their very static character.

Uncertainty. I have argued that a mechanism between the disruptiveness of institutional change and FDI is based on the presence of uncertainty. Uncertainty can be defined in at least two ways. One of the most popular perspectives on uncertainty in business studies is based on the bounded rationality of individuals (Simon, 2000). North (1990) explains this type of uncertainty ‘as a consequence of both the complexity of the problems to be solved and the problem-solving software (to use a computer analogy) possessed by the individual’ (p. 25). Hence, this views uncertainty as an epistemological problem in which more information could be acquired, but the mental capacity to assimilate and interpret this information is too limited, or too costly to acquire (Casson, 1999).

The second form of uncertainty developed from the seminal contribution of (Knight, 1921) and is based on the contention that true uncertainty is reflected in situations where knowledge about the future simply does not exist. Hence, it is an ontological form of uncertainty as there is no information about a future event to be discovered in the first place (Slater & Spencer, 2000; Dunn, 2001). Most epistemological accounts of uncertainty retain the idea of a set of probabilities attached to possible outcomes (Dunn, 2001). Here, institutions could be the necessary constraints to shape the behavior of agents so that subjective probabilities can emerge. Institutional change could lead to an ontological form of uncertainty since the constraints necessary to attach probabilities to outcomes are themselves

in flux. Thus, I suggest that the occurrence of radical institutional change is likely to be a source of radical uncertainty of the kind assumed by Knight (1921)¹.

1.3 Methodology

Due to my focus on national institutional environments, i.e., social constraints on the country level, as well as FDI, i.e., the aggregate investment activity of MNEs, the analysis is situated at the macro- and meso-level. Studies on this level of abstraction require conceptual work in order to go beyond mere statements of empirical regularities. Therefore, I take the stance of critical realism (Foss, 1994; Bhaskar, 2010), including the position that empirical observations are imperfect reflections of the underlying mechanisms that have created these observations in the first place (Fleetwood & Ackroyd, 2004). This ontological realism incorporates a perspective on causality as a complex phenomenon, suggesting that the positivistic interpretation of isolated cause and effect is naturally inapplicable in an open system such as the global economy (Collier, 1994; Lawson, 1999). Instead, we must accept that any empirical observations may result from the interaction of the mechanism we wish to uncover with other mechanisms, and that the combination of mechanisms might be context specific. This leads critical realists to accept methodological pluralism drawing on literature, logic and empirical observation to generate conceptual frameworks that can be the starting point for future research, helping to approximate the underlying mechanisms in an iterative process.

This philosophical stance has some implications for the methods chosen to explore the last two research questions. Essay 2 utilizes a panel regression approach to analyze radical institutional change and FDI on the country level. In critical realism, regressions are an attempt to detect macro-level patterns that are not expected to be universal, but rather more probable to be traced in aggregate data. In other words, the regression is firmly defined as a tool to obtain an interpretable observation of reality and not as the manifestation of reality (causality) itself (Jones, 2010). This view implies that a regression analysis might be the most suitable for a specific research problem but must be accompanied by other methods that may operate at its epistemological limits.

¹ Blyth (2002) makes a similar connection between institutional change and 'Knightian uncertainty', although in the context of economic institutions and policy.

Therefore, Essay 3 uses Qualitative Comparative Analysis (QCA) based on the analysis of conjunctions of explanatory conditions and, thereby, allows one to explore causality in a non-linear and contextual form (Schneider & Wagemann, 2012). Due to the inductive nature of QCA, this thesis also provides a combination of hypothesis testing and an inductive approach, reducing the exclusive reliance on a single methodological stance and its respective limitations (see, e.g., Goldstone, 2004).

As with any other research design, this thesis faces several limitations. While the empirical essays spell these out in more detail, an overarching limitation is its interdisciplinarity. Even if I would suggest that interdisciplinarity is vital as it introduces perspectives otherwise underexplored in the primary field of study, the complexity of interdisciplinary work puts limits on the depth that this thesis can accomplish, specifically in terms of its empirical analysis. Thus, the conceptual framework developed here is not devised in a way that could allow an exhaustive empirical testing in the three essays but as a basis for further inquiry.

1.4 Structure and Content

The thesis is written in an independent-essay structure. All parts can be read independently from each other, including the Framework Chapter. This Framework Chapter is confined to Chapter 2 and establishes a conceptual framework based on existing literature. Chapter 3 is composed of three essays that operate within this broad framework and follow the outlined research questions. Chapter 4 concludes the thesis by summarizing the findings and presenting their relevance for theory and practice. *Table 1.1* represents the structure of the thesis in relation to the contents that were discussed in this chapter.

Table 1.1: Structure and content of the thesis.

Chapter 1	Introduction		
Chapter 2	Framework Chapter		
	Reviewing the Economic Theory of the MNE		
	Section 2.2		
	New Institutional Economics as an Underpinning of MNE Theory		
	Section 2.3		
	Conceptual Framework		
	Section 2.4		
	Implications for developing the theory of the MNE.	Implications for the relationship between uncertainty and a country's attractiveness for FDI.	Implications for the theory of Comparative Capitalisms in the context of FDI attraction in institutional unstable countries.
Chapter 3	Essay 1 Dynamic Perspectives on the (Dis)economies of Multinationality: Insights from the Penrosian Theory of the Firm	Essay 2 Institutional Change as a Source of Non-Market Uncertainty and its Impact on MNE Investment Activity in Developing Countries	Essay 3 Institutional Configurations of FDI Attraction in Post-Transition Economies: The Roles of Commonality, Diversity and Stability
Chapter 4	Conclusion		

2 Framework Chapter

The contention that radical institutional change has a negative effect on FDI must be approached from the existing theories of the MNE and their understanding of the role of changing institutions. However, a dynamic view on institutions in IB is still in its infancy. The central argument that I will advance in this chapter is that some of the existing MNE theory is underpinned by a rather static and narrow perspective on institutions. To begin with, I will set the stage by introducing the important contribution of Jackson and Deeg (2008) that departs from the traditional view of institutions in IB. The authors provide a concise characterization of the existing paradigmatic view on the nexus between MNEs and institutions, as well as some ideas to guide future research. This will serve as a first orientation before the chapter will review the theory of the MNE in more detail. In the following, the attention shall be on two core themes of Jackson and Deeg's (2008) paper, namely the narrow conception of *strategic fit* and the need to recognize *the topology of institutional systems* in IB.

2.1 Institutions in International Business Theory

Jackson and Deeg (2008) aver that the current state of institutional scholarship in IB has a specific approach to institutions akin to the notion of *strategic fit*. For IB scholars, institutions are defined as constraints to MNE strategy so that the MNE must adapt to its institutional environment in order to improve its performance (Ingram & Silverman, 2000; Jackson & Deeg, 2008). There are essentially two views on the origin of this performance improvement.

The first suggests that MNEs benefit from increased access to resources and networks as a result of gaining legitimacy by adapting to the conventions of a society (Kostova & Zaheer, 1999). This mechanism results in the operation of three sets of isomorphic (convergent) forces, namely coercive, mimetic and normative pressures (DiMaggio & Powell, 1983). For example, while the coercive pressure arises from the need to comply with the law of a host country (see Ingram & Silverman, 2000), the mimetic pressure arises from an active mimicking of the established approaches of local firms that could reflect best practice in a foreign environment (see Henisz & Delios, 2015, pp. 354-355). Normative adaptation results from activities of the MNE to avoid organizational conflicts and may provide access to relational resources such as business networks (Johanson & Vahlne, 2009; Tihanyi, Swaminathan & Soule, 2012). This perspective on institutions is strongly associated with the field of Organizational Institutionalism (Hotho & Pedersen, 2012).

The second view claims that MNEs maximize their performance by adapting the governance mode of economic transactions (Hennart, 1982; Brouthers, 2002; Powell, 2014). The latter are mainly reflected in transactions of knowledge, technology or intermediary goods (Buckley & Casson, 1976). MNE performance is seen to be directly determined by the costs of conducting economic transactions and these, in turn, are affected by the institutional environment (Casson & Wadeson, 2012). For example, since knowledge generated in research and development (R&D) activities is a public good and may be appropriated in the context of insecure intellectual property rights, the MNE is likely to conduct such a transaction inside of its organizational boundaries to safeguard its proprietary assets. If such a situation arises between two country markets, this *internalization* of transactions would result in FDI (see, e.g., Buckley & Casson, 1976). This perspective builds on the foundations of the New Institutional Economics (Hotho & Pedersen, 2012).

Jackson and Deeg (2008) point out that both views share the position of an institutional environment as a stable backdrop for the MNE to either strive to conform to social pressures or to optimize their transactions. Moreover, while the organizational institutionalist perspective has produced interesting findings on issues pertaining to individual MNEs, such as problems in practice transfer between two differing institutional environments (Kostova, 1999), this literature has not yet contributed significantly to the economic theory of FDI; not least because economic variables tend to be sidestepped². Maybe due to this unclear stance towards economic variables the institutional theory of the New Institutional Economics (NIE) view has taken a paradigmatic position in the economic theory of the MNE (Dunning, 2003; Buckley & Casson, 2009; Rugman, 2010; Verbeke & Kano, 2016). This theory is narrowly focused on economic exchanges, and strategic fit is seen as an adjustment to an existing structure.

In order to extend this view on institutions, and specifically their effect on MNE performance, Jackson and Deeg (2008) introduce the perspective of the Comparative Capitalism literature that is, as we shall see, both broader than the view of the NIE and actively focused on economic variables. While these scholars also see a firm's strategy 'as being constrained by institutional structures' (ibid., p. 546), they argue that institutional environments generate opportunities for MNEs (and firms in general) to *develop their capabilities and resources*. For example, the institutional environment of the United States, characterized by network structures, capital market financing and flexible labor markets (Aoki, 2001), catalyzed activities of radical innovation. Accordingly, the strategies of firms are based more often on the development of capabilities and resources that can be reused when product portfolios change rapidly (Hall & Gingerich, 2009). Here, the institutional system affects the *strategic investment opportunities* available to firms, which highlights the enabling role of institutions (see Nelson & Nelson, 2002). Instead of a predefined governance mode that would minimize transaction costs given a fixed institutional environment, i.e., the matching of puzzle pieces, the CC view sees firms as less constrained in their ability to strategically use the context provided by institutions.

Another characteristic of the CC approach is that institutional environments are understood as *interdependent systems* instead of individual variables (Jackson &

² I would argue that these approaches tend to 'oversocialize' (Granovetter, 1985) the MNE.

Deeg, 2008). While the authors specifically suggest the use of case-based methods, this also entails the theoretical position that it is not necessarily individual institutions that support strategic investments – see, e.g., the popular focus on property rights in the FDI literature (Bailey, 2018) – but the combinations of multiple institutions. These institutional configurations generate institutional complementarities that lead to very broad and stochastic, but nevertheless persistent specializations of firm investments through increasing returns³ (Amable, 2000). Institutional complementarities are largely seen as self-stabilizing, even though some researchers have challenged this contention (Schneider, M. R. & Paunescu, 2012). This raises the important question if firms can utilize these complementarities in situations where institutional stability cannot be maintained.

To summarize, there are two critical points that are taken up in this work: First, the concept of strategic fit to an institutional environment differs depending on if it is viewed from the perspective of governing transactions or conducting strategic investments. Second, the concept of institutional complementarity as arising from institutional configurations suggests that firms could be sensitive to institutional changes that go beyond traditional market institutions such as property rights. This is because it is the overall configuration of social institutions that affects the opportunities for strategic investment.

These two points have hitherto not been discussed in the context of the economic theory of the MNE and its explanations of FDI, specifically in reference to the contrast between FDI as a form of governing transactions and FDI as a strategic investment. There are two corresponding positions in the theory of the MNE. The first is the transaction-cost-internalization approach, which Dunning (2003) referred to as the ‘exchange approach’. As explained before, it defines the economic problem as the need for efficient organization of transactions. The second paradigm is the ‘value-added approach’ (Dunning, 2003), which is primarily concerned with the MNE’s strategic investments in resources, capabilities and capacities to maintain or increase its long-term profitability. These distinct perspectives, as I shall argue, derive from the theoretical underpinnings of both approaches and affect their

³ This idea reflects the network effects of increasing returns of institutions, following the similar point raised by Arthur (1989) in the context of technological trajectories.

perspectives on temporal processes as well as on the related emphasis of either environmental statics or dynamics.

2.2 Reviewing the Economic Theories of the MNE

The goal of the following sections is to critically survey those economic theories most central to the explanation of MNE activity. I have introduced the distinction between theories of the value-added approach and the exchange approach. The former, which I will trace back to Hymer (1976), identifies *structural* market imperfections. These arise from the tendency of capital-intensive industries to change from a competitive to an oligopolistic or monopolistic market situation, where few large firms have pricing power and constrain output to increase profits (ibid.). It is argued that in such cases the orthodox theory of perfect competition does not provide an explanation for firm behavior or welfare outcomes (Robinson, 1969). The second approach, Transaction-Cost-Internalization Theory (TCI) elaborates on the natural (sometimes called transactional) imperfections of markets that arise from costs associated with contracting in cross-border transactions (Buckley & Casson, 1976). The third approach, the Eclectic Paradigm, is a representative of the value-added approach (Dunning, 1977, 1988a, 2001), but also unifies the two market imperfection approaches into a single framework. The following subsections are divided into two parts respectively. The first part begins with an overview of the development of the economic theory and its implications for the economic environment of the MNE. The second part reviews how the respective theory has affected the understanding of institutional environments in the context of MNE activity. *Table 2.1* illustrates the structure of the review.

Table 2.1: Aims of the review section.

Section 2.2: Review			
<i>Perspectives on the MNE</i>	Monopolistic Ownership Advantages (value-added approach) (Section 2.2.1)	Internalization Theory (exchange approach) (Section 2.2.2)	Eclectic Paradigm (value-added & exchange approach) (Section 2.2.3)
Economic	<i>Reviewing explanations of MNE investment and...</i>		
Institutional	<i>...their incorporation of institutional factors</i>		

2.2.1 Theory of Monopolistic Ownership Advantages

In the 1960s, Stephen Hymer wrote his dissertation on FDI as a form of MNE activity. Until then, scholars unsuccessfully attempted to explain FDI as investments determined by differences in cross-border interest rates (Ietto-Gillies, 2014). This caught Hymer's attention and led him to lay down the foundations of what would become IB and the theory of the MNE. Hymer's work is characterized by two distinct phases: his first steps were the creation of a microeconomic theory of the MNE, largely found in his dissertation Hymer (1960; published in 1976), whereas his further development led him to comment on the contradictory dynamics of the global economy from the standpoint of Marxist political economy. He continuously showed interest in the growth and size of enterprises (Hymer & Pashigian, 1962) and the resulting tendency for global monopolization (Hymer & Rowthorn, 1970). Even if partly ideologically motivated, all of his contributions remain important to this day (Pitelis, 2002).

Hymer (1976) began his dissertation by uncovering significant discrepancies between the prediction that FDI was allocated according to interest rate differentials and the empirical observations: Interest rates were weak predictors of FDI; FDI occurred often bi-directionally within specific industries; and the dominance of US FDI suggested the presence of other determinants (Hymer, 1976). Being familiar with developments in Industrial Economics, he concluded that microeconomic

considerations must be explored in order to understand why a firm would extend its operation to a foreign country.

Hymer proposed two main reasons for MNE activity⁴: First, he theorized that national firms may want to control ‘...enterprises in more than one country in order to remove competition between them...’ (ibid., p. 38). He therefore suggested that imperfect competition would lead to collusion in industries where a sufficiently small number of firms from different countries would establish ‘some form of accommodation’ (ibid., p. 86) on the international level. Second, he went on to assume that large national firms possess firm-specific advantages that enabled them to succeed in their home country. Given their motivation to eliminate competition from other countries and to exploit their home-grown advantages profitably abroad, such firms are likely to be pulled into international operations⁵.

In much of his writing, there is an influence of Bain’s seminal study on barriers to entry (Bain, 1956)⁶, which Hymer believed to be an important factor in determining MNE activity. In industries without entry barriers, many similar firms compete, making it unlikely for foreign firms to get a foothold. Hence, increasing industry concentration leads to a higher attractiveness for foreign firms. In reverse conclusion, this means that potential MNEs would have to overcome extant entry barriers by superior monopolistic advantages, while overcompensating the disadvantages that arise from the lack of familiarity with the foreign business environment.

Hymer also attempted to explain why firms chose FDI, i.e., the direct ownership of assets, over other forms of contractual or licensing arrangements. He argued that this was due to a combination of market imperfections and uncertainty, making the internalization of cross-border markets a more profitable outcome than its alternative of arm’s-length relations. There was a discussion of whether this was a rephrasing of the main points made by Coase (Pitelis, 2002; Buckley, 2006) and

⁴ There is a mention of diversification as a third but minor point (see, Pitelis, 2002).

⁵ This point connects to Hymer’s identification of cross-country profit rate differentials (ibid., p. 89), which is usually explained as a reference to diversification. From a dynamic standpoint, the ability to transfer capital to its highest-return location within the MNE is not only a diversification of risk but connects to the strategic exploitation of ‘monopolistic’ advantages.

⁶ In Bain’s seminal study, these barriers to new entrants are comprised of product-differentiation barriers, absolute cost advantages, economies of scale and the amount of capital required for entry.

Hymer even developed these thoughts by explicitly mentioning Coase, but later abandoned this direction (Hymer, 1968).

Hymer's second phase, rooted in Marxist political economy, is sometimes seen as a departure from his earlier approach; however, Buckley (2006) argues that several commonalities exist in the development of his thoughts. While I do not share all of Buckley's analysis⁷, he identifies Hymer's view of a dynamically unfolding global economy as a central part of the Hymerian worldview. The attention to dynamics can at least be traced back to Hymer & Pashigian (1962), who empirically investigated the firm size distribution of the largest firms operating in the US from 1946 to 1955. They found that the standard deviation of firm growth was declining with increasing firm size and made the controversial claim that this was an outcome of either increasing returns to scale and/or the ability of large firms to retain monopoly profits based on barriers to entry à la Bain (1956). This, I would argue, is the genesis of Hymer's dynamic view on competition, where successful firms grow and develop resources, capabilities and capacities that increase their probability of success in future competition⁸.

By his discovery of Marxian economics, Hymer found a representation of competition that was more in line with his earlier conclusions than most other economic theory. Marxian economics adopts the view of classics such as Smith, Ricardo and Mill that capital accumulation is an inherent feature of capitalism (Tsoulfidis, 2015). Hymer developed this idea into to his '*law of increasing firm size*' (Hymer, 1970). In a later paper, Hymer gave a brief account of how competition was driving the dynamic properties of his law, which is best cited at length.

'Business enterprises usually are built around some special discovery or advantage. Before their innovation becomes general, they can under-sell their competitors and still sell at a price well above cost of production. But their position is constantly threatened by new entrants who may discover a

⁷ Buckley tends to view Hymer's contribution from his own perspective based on Coase, which is of course legitimate, but begs the question if Hymer himself really wanted to develop his thoughts in this direction – we will never know, and going by a single article in 1968 that has the style of a hasty note seems unconvincing.

⁸ Thus, it is important to realize that Hymer saw the size of the enterprises as correlated with its evolutionary survivability. He accepted advantages arising from centralization (while we shall see that internalization theory does not discuss such advantages).

new technology, a new product, a new form of organization, or a new supply of labor' (Hymer, 1972, p. 95).

To escape the potential competitive threat of intra-industry profit equalization, firms are forced to develop new products, shifting towards higher profitability, or they can increase the length of the product cycle by means of marketing and cheaper labor supply (see Hymer, 1972). He suggested that '[t]hese two methods, of course, are intertwined, for the wider a firm's market, the more it can spread the costs of innovation, and the more it can afford to spend on research and development' (ibid., p. 96). He went on to explain the relevance of investments as follows:

'Both these methods require further investment. At a given point of time, a corporation may be earning a high rate of profit because it is onto a good thing, but competition and technological change threaten to wipe out its advantage. It must plough back its profits in order to improve production and expand its scale [...]. Thus under capitalism change becomes normal and businessmen can never afford to look upon and treat the existing form of a process as final. The incessant revolutions in production and the depreciation of the existing capital which this implies spur them on to new methods and new places' (ibid., p. 96).

For Hymer, it is competition between firms that is the crucial regulating factor of their investments. In combination with his 1962 paper, it is evident that Hymer saw the large industrial MNE as a natural *outcome of the competitive process*. Hymer and Parshagian (1962) state that, when compared with small enterprises, '...large firms with their lower unit costs will withstand adverse conditions better and will have a higher survivor value' (p. 567). Hence, the Darwinian nature of competition will favor, on average, the large enterprise or as Samuelson (1948) observed: 'Large size breeds success, and success breeds further success' (p. 125). Hymer's (1972, p. 96) argument that the 'incessant revolutions in production' will pressure the firm, including the MNE, to explore 'new methods and new places', hints at the close connection between the scale and scope of MNEs and the continuous investment in physical and social technology under competition (Cantwell, 2000). Although Hymer does not explicitly talk about radical uncertainty, the references to constant competitive threats and the imperative for novelty are indirect expressions of it.

His second conclusion was that the ever-increasing size of MNEs must lead to fewer numbers which would eliminate competition. The outcome was claimed to be a world system of monopoly capital (Hymer & Rowthorn, 1970). Here, Hymer and Rowthorn (1970) emphasized the role of national governments in their Sisyphean task to constrain the extent of monopoly mainly through altering the institutions of competition law. This brings us to Hymer's view on institutional environments.

The Institutional Environment in Hymer

Hymer's contribution to the understanding of institutions in IB must be discovered between the lines as he does not directly write about institutions. However, his interest in political economy clearly indicates an institutional perspective. The most important area in which he influenced the theory of the MNE to this day is the role of the unfamiliarity with local institutional environments as a cost factor.

In his discussion of the costs incurred uniquely by MNEs, Hymer argued that domestic enterprises '... have the general advantage of better information about their country: its economy, its language, its law, and its politics' (Hymer, 1976, p. 39). For MNEs, acquiring this information may be of considerable cost. Over time, this approach developed into the liabilities of foreignness literature that concerns itself with the broad barriers to foreign operation (Zaheer, 1995; Luo & Mezias, 2002). The literature emphasizes the social component of such barriers, especially in terms of the unfamiliarity of the local institutional environment faced by MNEs (Eden & Miller, 2004). Hymer realized that MNEs could overcome these costs (although he did not specify how), concluding that these were one-off costs (see Hymer 1976, p. 36). In other words, after establishing operations in a country, costs related to institutional factors would not have to be incurred again. Hymer, therefore, implicitly acknowledges the possibility of learning.

2.2.2 Transaction Cost-Internalization Theory

The Transaction Cost-Internalization Theory (TCI) developed from the 1970s onwards out of the foundations of Coase (1937) who argued that the 'cost of using the price mechanism' (p. 390) was the primary explanation for the nature of the firm. Contributions from McManus (1973), Buckley & Casson (1976), Swedenborg (1979) as well as Hennart (1982) were most decisive in pushing internalization theory into the paradigmatic position it holds today. All authors mentioned above were, in some form or the other, inspired by the writings of Coase. Some internalization theorists,

e.g., Buckley and Casson (1976), explicitly state that their views developed largely parallel to Williamson (1975)⁹. However, Hennart (1982), focusing on hold-up problems, remains closer to the Williamsonian framework. This short review will concentrate on Buckley and Casson (1976)¹⁰ since their study proved to be one of the most influential in the IB field and its foundations are still adopted, relatively unchanged, by recent contributions (Rugman & Verbeke, 2008; Buckley & Casson, 2009).

The kernel of internalization theory is conceptualized in Buckley and Casson (1976) (henceforth B&C) and enriches Coase's theory of the firm with the elements of location choice, the public good nature of knowledge and the relationship between R&D and profitability. In an attempt to provide a general theory of the MNE, the authors argue that MNE growth is governed by the existence of market imperfections which are overcome by internalizing an external market through the establishment of a hierarchical corporate structure. Thus, the firm grows because it can circumvent the costs of using the imperfect market mechanism by carrying out transactions within an institutional alternative which is mimicking the function of a perfect market as closely as possible (see B&C, p. 37). The boundaries of the MNE are determined at the margin of costs of internalization offsetting those of external market arrangements (Kay, 2014). In Buckley's words: '[a] firm will grow by internalizing imperfect external markets until it is bounded by markets in which the transactions benefits of further internalization are outweighed by the cost' (Buckley, 2002, p. 368).

One unique element in the theory of B&C is the focus on the internalization of *intermediate markets* both for products and knowledge. The authors show that the pre-war global economy was characterized by the emergence of MNE activity in industries heavily utilizing primary inputs (ibid., p. 36). Therefore, multinationality was mainly driven by the benefits from internalizing intermediate product markets to overcome the difficulties associated with sourcing those primary inputs from external markets. Following the Second World War, B&C observe a shift towards higher returns on R&D due to factors such as the rising income of the middle-class,

⁹ Williamson (1975; 1985) popularized the ideas of Coase throughout the economic profession. The difference between Williamson and the internalization theorists mainly comes down to the latter's refutation of opportunism as a behavioral norm and the emphasis on knowledge as a public good as the primary reason for internalization as opposed to asset specificity. The theoretical mechanism is, however, similar.

¹⁰ In the following, page numbers will be based on the 2002 edition.

the space- and arms-race as well as a tendency of consumers to favor novelty. The result was a focus on the internalization of knowledge transfers as opposed to those associated with intermediary inputs.

This shift resulted in the central role of R&D as a defining feature of the B&C framework. Due to its increased importance in the post-war global economy, it is seen as a predictor for competitive success and profitability. Thus, the theory closes a gap left by Hymer namely, by attending to the question of how monopolistic advantages are generated. The primary explanatory element in the theory remains governance cost differentials due to natural market imperfections with a focus on knowledge transfer, the difficulties of licensing knowledge and time-lags in the production process (see *ibid.*, p. 89). R&D is treated as the essential driver for the growth of the firm, because extant and newly generated knowledge will have to be transferred and such transfers are likely to be conducted internal to the firm given market imperfections.

In B&C, the theory of the location decision is subsidiary to the explanatory power of market imperfections. The choice of location is influenced by both factor costs (with reference to the principle of comparative costs) and the location specific barriers to internationalization usually conceptualized as arising from distance. Here, distance is defined not only as geographic, but also as functional, social and cultural. Thus, the degree of market imperfections and internalization barriers encountered depend on the potential location of a subunit. It is assumed that the MNE chooses the lowest cost location for its activities.

It is apparent that the TCI framework differs from Hymer's view of MNE expansion as driven by competitive pressures to acquire new competitive advantages. For TCI, competition is based on 'beating the market in flows of intermediate products and services' (Buckley, 2018) more so than beating competitors through expanding market share. This, in combination with the use of the tools of neoclassical economics, results in a much more passive view on MNE expansion where 'every firm is satisfied with the boundaries that prevail' (Casson, 2015, p. 64). Moreover, B&C do not explore the dynamic processes of learning, opportunity discovery and

investment in productive technology (Tolentino, 2001). Such determinants are only indirectly connected to MNE growth in the internalization framework¹¹.

The Institutional Environment in Internalization Theory

Casson & Wadeson (2012) provide two explanations through which institutions affect the act of internalization and with it the FDI decision. First, institutions, especially social conventions, are crucial for building trust between contracting parties, i.e., reducing exchange uncertainty. The authors argue that most theorists focus solely on the law as a disciplinary device, whereas social conventions are often overlooked. But throughout history, trade relationships have often been based on family ties or diaspora networks, allowing for social sanctioning and thereby assuring an acceptable level of mutual trust; the result of which is a lowering of transaction costs. This is a crucial extension of the original view of Williamson (1975) where trust could not play a role, but it also remains close to Williamson's later view of trust in a mechanical or calculative sense (see Williamson, 1993a).

The second mechanism is the ability of institutions to reduce communication and information costs (Casson & Wadeson, 1996; Casson, 1999). This highlights how institutions not only increase levels of mutual trust and improve contract enforcement, but also enable a reduction in the search and advertisement costs of firms in intermediary product markets. Casson and Wadeson (2012) argue that effective market institutions decrease the friction of exchange through property rights and contract enforcement as well as through reducing information asymmetry; in this regard they follow in the footsteps of North (1990).

In the wider IB literature, these characteristic interpretations of institutions stimulated two types of institutional studies, both relying on the idea that 'factors [factor endowments] are used to produce goods or services (that is, they are used for transformational activities), whereas institutions are used for the exchange of inputs and outputs with other firms (that is, for transactional activities)' (Wan & Hoskisson, 2003, p. 28). Thus, both follow the separation of the productive sphere from that of exchange. The first type of study explores the effect of *institutional quality* on MNE activity. Here, better institutions are defined as those that decrease the costs of

¹¹ That is to say that as far as these processes generate knowledge, they increase the potential for internalization *given market imperfections*.

transaction and may alter the modality with which the MNE exploits its advantages (Brouthers, 2002).

The second approach looks at the dyadic relationship between the institutional quality of the MNE's home country and its host countries (Xu & Shenkar, 2002). The gap or difference in institutional development is termed institutional distance (see Kostova, 1999) and a considerable number of studies have explored the effect of this gap on various aspects of MNE operations (for a review, see Hutzschenreuter, Kleindienst & Lange, 2016). The argument is that higher degrees of institutional distance will lead to higher information costs and lower levels of mutual trust (*ibid.*). In terms of the latter factor, cultural aspects have gained increasing attention, following internalization scholars' call for exploring the role of social conventions alongside more formal institutions (Casson, 1993; Brouthers, 2002).

Both perspectives reduce institutions to their ability to economize on transaction costs based on the argument that this is the central function of institutions in economics. Such a view has been critiqued for being too narrow (Jackson & Deeg, 2008). For example, the literature of innovation systems clearly unravels the role of national institutions in providing the basis for the generation of knowledge and not only its transaction (Lundvall, 2007). Similar arguments have been developed on the firm level by cognitive theorists (Kogut & Zander, 1996; Nooteboom, 2009) or those that focus on the innovation process (Cantwell, 2000; Lazonick, 2016).

2.2.3 The Eclectic Paradigm

The Eclectic Paradigm (EP) of international production (also known as the OLI paradigm) is based on the work of John H. Dunning (Dunning, 1977, 1998a) and aims to explain 'the extent and pattern of international production, i.e., production financed by FDI and undertaken by MNEs' (Dunning, 2001, p. 176). In the early stages of its development, the EP was mainly concerned with the interaction of so-called ownership advantages (O-As), defined as the advantages derived from the home country and the parent company, and location advantages (L-As), defined as the advantages derived from host country factors (Cantwell, 2015). In a further modification, Dunning revisited internalization advantages (I-As), which have a direct relation to the internalization theories introduced above (see Dunning, 2001). However, the motivation for foreign production was conceptualized as long-term profit seeking as opposed to the transaction cost minimizing of TCI theories

(Dunning & Lundan, 2008, pp. 63). Dunning defined his level of analysis as 'the totality of firms engaged in foreign value-adding activities' (Dunning, 1988b, p. 39).

The eclectic paradigm went through several development phases the most significant of which has altered its status from its initial intention as a theory to an analytical framework or paradigm (Narula, 2006). In the following, I will very briefly outline the developments of the EP. Given the breadth of the theories the eclectic paradigm could potentially incorporate (Dunning, 2000), I further limit myself to the insights that derive from its classification in O-As, L-As and I-As.

The core of the EP has only marginally changed from its first full iteration in Dunning (1977) and is based on three interrelated forces (adapted from Dunning, 2001, p. 176):

O-As: The competitive advantages that 'firms of one nationality possess over those of another nationality in supplying particular markets' (ibid, p. 176).

I-As: The advantages arising from the perception that 'markets for the generation and/or use of' (ibid., p. 176) O-As are better internalized into the firm's structure.

L-As: The advantages derived from operating value-added activities abroad.

Over time, Dunning made changes to the three factors, while largely maintaining their original separation. The evolution of O-As is possibly the most significant one. Based on the early work of Hymer (1976) on monopolistic advantages of MNEs, it was revised five times (Eden & Dai, 2010) so that it could encompass three sub-categories. In the original form, O-As were basically seen as advantages deriving from: (1) the ability to erect barriers to market entry, i.e., advantages from monopoly power; (2) the asset base of the firm, largely encompassing resources and capabilities; (3) the specific capabilities of a firm's managers. In order to better reflect the differences between the asset base of the MNE and its capabilities, Dunning introduced the separation between asset-based O-advantages (Oa) and transaction-based O-advantages (Ot). The newly added Ot-advantages were arising from the common governance of the (international) multi-plant firm and could stem from (1) advantages enjoyed by multi-plant firms over de novo firms and (2) advantages arising specifically from multinationality (Dunning & Lundan, 2008b).

Ot-advantages were a response to the criticism of internalization theorists that saw natural market failure as necessary and sufficient to explain MNE activity. Their reasoning, as outlined before, was based on transaction cost considerations, meaning the ability of the firm to substitute market transaction costs with (lower) hierarchical governance costs. Dunning responded by arguing that the capability of internalization was simply assumed in internalization theory. This was, however, not realistic since firms differed in their capabilities to internalize markets, i.e., to coordinate and set-up new ownership ties. Therefore, the Ot-advantages were explaining the capability of the MNE to internalize markets, as opposed to the I-advantages, which explained the potential gain behind such an act.

Moreover, this entailed a view of O-As as the central point of a theory of international production (of course, contrary to the view of TCI, which would argue for the primacy of I-As). Dunning (2001) pointed out that 'a firm's ability to benefit from such activities [*internalization*] must be related to the assets which it possesses *prior* to the act of internalisation' (p. 175, italics in the original). In other words, it is the combination (or accumulation) of existing assets with newly internalized assets that generate the benefit for the MNE, which reduces the autarky of I-As significantly. Moreover, Dunning & Lundan (2008, p. 118) argue that the internalization of transactions does not resolve the opportunism problem at the center of transaction cost theorizing but shifts it to the capability of the MNE to motivate and incentivize its own staff. The latter is determined by firm-internal institutions which would have to resemble O-As. This brings us to the next stage of the O-A development.

The institution-based ownership advantages (Oi) established the important argument that MNEs derived advantages from their internal governance systems, its shared values and norms, as well as the institutional context of its home and host economy in a non-market related context (Dunning & Lundan, 2008b). Moreover, MNEs were increasingly characterized as a coordinated network of non-ownership ties, the governance of which relies on the capability of the MNE to institutionalize certain relationships using, e.g., codes of conduct or conscious trust-building exercises (Cantwell, Dunning & Lundan, 2010). More generally, the capability of the MNE to flexibly adjust its own institutionalized form make Oi-advantages an indispensable asset.

For example, the shift towards higher modularization and outsourcing of knowledge intensive activities pressures MNEs to innovate completely new governance mechanisms (Gereffi, Humphrey & Sturgeon, 2005). In the words of Dunning & Lundan (2008): ‘..., institutions have become a more integral part in explaining the determinants and effects of IB activity, mainly, as we have said, because globalization and technological advances have widened the options for behavior of both firms and governments; and because the environment in which MNEs operate has become more uncertain, complex and volatile’ (p. 126).

The second component of the eclectic paradigm concerned the *location dimension*. This referred originally to the host country due to advantages derived from the home country being subsumed under O-As. Dunning later on realized that the advantages from location had become a relatively neglected or one-dimensional factor in the study of MNE activity (Dunning, 1998b). For example, Rugman (1976) merely defined location as a factor of risk diversification through geographical spread. Dunning argued that location choice was more than that. Besides resource endowments and factor prices, it comprised variable transportation costs, cross-country differences, and was influenced by economies of agglomeration. Moreover, government regulations and political factors are an important dimension of the L-advantages, such as different barriers or subsidies for foreign investment. From this viewpoint, a defining feature of the MNE is its access to more than one national legal and regulatory system, which again emphasizes the EPs institutional underpinnings.

Finally, *I-advantages* explain how an MNE will engage in cross-border value-added activity, i.e., through which operational and investment modality. We have already seen that Dunning modified the parsimonious concept of internalization derived from the TCI by arguing that the accruing benefits could only be understood in relation to the O-As of the MNE. Any attempt to exclude the latter from the analysis would yield a theory that focuses on a partial aspect of the determination of MNE activity (see Dunning, 2003). Nevertheless, Dunning accepted that the theory of the MNE would have to be based on structural and natural market imperfections, which would refer to the ‘situation in which markets fail to behave in the way required of them’ (Dunning, 1993, p. 59), without questioning the notion of what was required of them in the first place.

The Institutional Environment in the EP

The EP embeds institutions in all its components and, therefore, provides the most extensive treatment of social factors of the three theoretical approaches. A comprehensive overview of the role of institutions in the EP is provided in Dunning & Lundan (2008b) and Dunning & Lundan (2008a), and the previous discussion of the EP already revealed its unique approach to firm-specific institutions. By applying the ideas of North (2005), the EP highlights the interaction of macro-institutions, mainly captured in the L-As, and firm-specific institutions, captured in the O-As. In terms of the latter, Dunning & Lundan (2008b) argue that ‘some components of Oi are reflected in firm-specific norms, [...], others are more influenced by the norms and values external to the firm, and particularly that of the human environment in which the firms are *embedded* and conduct their activities’ (p. 580-581, italics added). Thus, the EP recognizes the embedded nature of the MNE in its social environments (see, e.g., Heidenreich, 2012).

Moreover, Dunning & Lundan (2008b) paraphrase Nelson & Nelson (2002) who described institutions as a ‘makeshift road across a swamp’, suggesting that the restrictions of this road generate possibilities and not just constraints. The EP also suggests that MNEs transfer institutions and may co-evolve with their external institutional environments (Cantwell, Dunning & Lundan, 2010). Both assertions are important in that they suggest that institutions, even as location factors, should not be seen as exogenous. Finally, besides all these unique elements, the EP also emphasizes the role of institutions in the coordination of the MNE as a system of economic exchanges.

2.2.4 Summary

The previous section took up the largely descriptive exercise of exploring the roots of MNE theory, specifically the foundations of the value-added and the exchange approach. The former had its roots in the imperfect competition framework established by Hymer (1976), while the latter is firmly based on Coase (1937) and his successors of the NIE. Concerning the economic activity of MNEs, both the value-added and the exchange approach acknowledge the innovative activities of MNEs, albeit with very different degrees of attention. TCI explains cross-border investment by the need to transfer already existing knowledge assets (ownership advantages) in the context of high transaction costs. Taking this view on the activity of MNEs also

defines the role of institutions in the determination of FDI activity as affecting said transaction costs.

On the contrary, the EP puts the generation and exploitation of ownership advantages at the center of the theory (see Tolentino, 2001). The purpose of FDI is to raise the long-term profitability of the MNE, which turns the attention towards issues of temporality. An investment must be understood as operating in a time horizon of which a significant portion is not yet realized and remains uncertain. This is a stark difference to the TCI, seeing FDI as a response to currently existing transaction costs. Here, uncertainty is captured in the particular transaction at a point in time. Due to the EP's greater allowance for temporality, it would be much more suitable to a dynamic understanding of MNE operations, and therefore Cantwell (2015), following Hymer's dynamic competition concept, interprets the framework as an evolutionary process of recreating ownership and location advantages. However, he admits that this is only one interpretation and that a more static interpretation of strategic fit is also taken up by many scholars.

Due to this flexibility of the EP, it also showcases the most extensive understanding of institutions on two broad levels, namely firm-specific and country-specific institutions. Firm-specific institutions, reflected in the Oi-advantages, are either seen as generating efficiency of transactions through monitoring and incentives, or as capabilities conducive to the transfer of practices into foreign environments and common values such as firm-internal visions and corporate culture. Country-specific institutions, reflected in the Li-advantages, are a critical determinant for FDI location choice. The mechanism behind this, however, is mainly adopted from the exchange perspective, based on the argument that institutional quality, in the form of transaction-cost-reducing institutions, leads to an increase in FDI attractiveness.

Table 2.2: Results of the review section.

Section 2.2: Review			
<i>Perspective</i>	Monopolistic Ownership Advantages (value-added approach) (Section 2.2.1)	Internalization Theory (exchange approach) (Section 2.2.2)	Eclectic Paradigm (value-added & exchange approach) (Section 2.2.3)
Economic	<p>MNE seeks profits.</p> <p>Exploits and expands ownership advantages.</p> <p>Competition as a disequilibrating factor generates uncertainty.</p> <p>Competition fades in the long-run due to monopolization.</p>	<p>MNE minimizes transaction costs.</p> <p>Uncertainty results from knowledge asymmetries in exchange.</p> <p>Equilibrium tendency.</p>	<p>MNE seeks profits.</p> <p>Exploits and expands ownership advantages through fitting governance modality.</p> <p>Theoretical framework includes evolutionary approaches.</p>
Institutional	<p>Institutional unfamiliarity as a source of costs for new investments.</p> <p>No particular theoretical underpinning.</p>	<p>Institutions as determinants of transaction costs.</p> <p>Coase (1937) and Williamson (1975; 1985) as theoretical underpinning.</p>	<p>Institutions as determinants of transaction costs, but also understood as ownership advantages (Oi).</p> <p>North (1990; 2005) as theoretical underpinning.</p>
		<p>Common underpinning of the New Institutional Economics</p>	

In the light of these results, displayed in *Table 2.2*, I would argue that the value-added approach as represented by the EP could benefit from a broader view on institutions as advocated by, e.g., Jackson and Deeg (2008). Currently, the institutional discussion in IB is strongly focused on the coordination of transactions in the MNE at a point in time, and much less on the development of ownership advantages in a dynamic setting. The EP is somewhere in between, and some contributions show that it could develop an institutional perspective that is much more responsive to an evolutionary view than that offered by the TCI (Cantwell, Dunning & Lundan, 2010; Dunning & Lundan, 2010). However, I claim that the common underpinnings of the NIE are not sufficient to represent the role of institutions from a dynamic perspective. This is not only essential for a conceptualization of the role of different degrees of institutional change in this work, but for a development of the value-added approach in general. I shall substantiate these claims in the following section.

2.3 New Institutional Economics as an Underpinning of MNE Theory

'[I]t seems to me that the new institutional economics is a matter very largely of selecting from the tool bag of modern economic theory those tools most apt for the study of the narrow though important range of problems, involving impediments to transactions, on which the new institutionalists have chosen to focus, maybe I am missing something.'

Posner (1993 p. 85)

Having demonstrated that the underpinnings of institutional theory in IB are largely provided by the New Institutional Economics (NIE), I will now critically review these foundations. As previously established, the TCI builds to different degrees on Coase (1937) and Williamson (1975), while the EP draws significantly on North (1990; 2005). Williamson's and Coase's primary concern was to model how the characteristics of economic transactions would influence the existence and boundaries of the firm. North (1990; 2005) on the other hand aims to explain the economic development of nation states, focusing on institutional change. He also builds on Coase, especially emphasizing the importance of efficient property rights (see Coase, 1960). The common ground of both is the concept of *transaction costs*, which will be defined below.

2.3.1 The Economic and Institutional Environment in Equilibrium

Following the foundations of Coase, both North (1990) and Williamson (1975) put forward a framework in which transaction costs represent the main explanatory concepts. Williamson (1975) argues that the characteristics of an economic transaction determine its cost and, with that, the decision of whether this transaction is organized through contractual relations in the market or by hierarchy within the firm. Williamson's transaction costs are (1) search and innovation costs, (2) bargaining and decision costs and (3) policing and enforcement costs that arise when setting up an exchange in a market or organization (see Williamson, 2000). In almost the entirety of his work¹², Williamson defines individuals as driven by opportunism or 'self-seeking with guile' (Williamson, 1975, p. 9) under conditions of bounded rationality, i.e., limited mental capacities that result in uncertainty. In this world, factors such as the collusion of suppliers or asset specificity introduce uncertainties and thereby raise the costs of market transaction¹³. The economic problem is restated so that firms: 'Organize transactions so as to economize on bounded rationality while simultaneously safeguarding them against the hazards of opportunism.', leading to '[...] a different and larger conception of the economic problem than does the imperative 'Maximize profits!'' (Williamson, 1985, p. 32).

However, while this view does indeed lead to a more encompassing view than perfectly competitive equilibrium models, it also abstracts from the very processes that the value-added approach would see as most central to the explanation of the firm: production and investment for development. In fact, both Williamson and North share the assumption that transaction costs can be separated from production costs (transformation costs in North's terminology). This neglect of production costs is a characteristic of NIE approaches (see Demsetz, 1988). There are possibly two reasons for this. First, most NIE approaches draw in some way from Commons (1931) who equally separated production and transaction costs for analytical reasons. Second, and more importantly, NIE adopts the underlying theory of prices and production from neoclassical economics (Langlois, 1998). According to North (1990), neoclassical production theory is merely incomplete and requires the

¹² In Williamson (1993b), there is an implicit acknowledgment of the role of trust, but only in relation to non-commercial relations.

¹³ Small numbers of suppliers could create a supplier monopoly that raises input prices. Asset specificity refers to investments that are specific to a transaction and have a higher value in this context than in any second-best use. Both situations increase transaction costs and would incentivize the organization through hierarchy – although this would come with its own costs that need to be traded off.

addition of transaction costs to fix it. This is a critical juncture at which the NIE implicitly adopts an equilibrium view of production derived from the notion of perfect competition.

In the zero transaction-cost world of neoclassical economics, perfect competition is defined as an equilibrium state in which firms are infinitesimally small price-takers (Stigler, 1957). Besides the issue that this understanding of competition makes it difficult to explain the increasing dominance of large scale enterprises observed throughout history, there is no need for a theory of organization as the price-taking firm is bound to set marginal costs to marginal revenue under conditions of complete information (Lazonick, 2016). Critics argued that this is an unrealistic idealization of competition and that empirical reality did not agree with the theory's predictions (McNulty, 1968; Hayek, 1996).

As a response, the imperfect competition school attempted to explain the large industrial enterprise, including MNEs (Hymer, 1976), by arguing that such firms were setting mark-up prices by exploiting their monopoly power, e.g., through erecting barriers to entry (Bain, 1956). NIE is a second response to the same issue but avoids the characterization of large firms as monopolies and, thus, necessary sources of inefficiency. For NIE, growing firms expand their boundaries to internalize transactions that would be too costly to be conducted in the market (Williamson, 1975). It adopts the marginal calculus of neoclassical theory to show that an optimum size of the firm exists and that this size is determined by the structure of transaction costs (Kay, 2014)¹⁴.

Following this, Williamson argues that the development of the firm, understood as a choice between governance alternatives, is determined by exogenous transaction cost structures. Hence, the NIE is a theory of the relative costs of transactional alternatives, i.e., economic organization, and not of production, leaving the neoclassical production function view operating in the background. As Langlois puts it, 'all deviations from the assumptions of the production-function formulation – are seen as falling exclusively under the jurisdiction of the kingdom of *transaction costs*' (Langlois, 1998, p. 2, italics in the original).

¹⁴ Kay (2014), besides showing that Coase (1937) intended to stay within the boundaries of marginalist principles, also provides a discussion of how Coase may have misapplied the principle by comparing two sets of marginal costs instead of marginal cost and marginal benefit.

There are two points that arise from this. First, as the transaction cost structure is taken as a given by the firm, the model corresponds to an optimization framework in which the firm tends towards equilibrium, which is equivalent to stating that firms grow to an optimal size (Coad, 2009; Powell, 2014). Second, by optimizing transactions, a firm simultaneously minimizes its exposure to uncertainty. On the one hand, this is because the existing uncertainty of a transaction led the firm to optimize its governance structure in a way which would eliminate this uncertainty. On the other hand, the complete sphere of production and competition are eliminated as sources of uncertainty since, by definition, the neoclassical model cannot accommodate those. The result is a perspective in which the very economic activity of the firm, i.e., governance choice, reduces uncertainty.

By introducing the link between governance choices and external institutions, this view also assumes an exogenous and stable institutional environment as part of the constraints that enable optimization. However, Williamson (1975) was mainly concerned with the institution of the firm, i.e., what he called ‘private’ institutions. Thus, the discussion of the wider institutional environment of the firm requires a shift towards the writings of Douglass North. Moreover, in contrast to the exogeneity of (public) institutions in Williamson’s basic framework (see North, 1994), North (1990) developed a theory of institutional change.

In North’s early positions, institutional change is exclusively driven by changes in relative prices, which reflects the neoclassical approach to price theory and equilibrium adjustment. However, as Vandenberg (2002) notes, North (1990) does not refer to immediate adjustments, nor does he fully exclude a circular causality in which institutions affect relative prices which affect institutions, and so on. This rather unorthodox vision of the price mechanism, further reinforced by the introduction of ideology as a cognitive filter for prices, shows that North went beyond basic neoclassicism. In contrast to the Panglossian world of Williamson¹⁵, he argued that the subjective cognitive model of agents, their ideology, can suppress progressive institutional changes. In much of North’s analysis, the efficiency of a prevailing institutional structure remains central. But since transactional efficiency

¹⁵ Panglossian in the sense that Williamson’s optimizing framework implies that the boundaries set by firms always represent the most optimal choice given a set of external (fixed) conditions. For a similar view, see, among others, Granovetter (1985).

is a state and not a process, the comparison between efficiency states, i.e., comparative statics, takes precedent (Vandenberg, 2002; Milonakis & Fine, 2007).

This is underlined by the fact that North's theory, by definition, describes institutional change as gradual, effectively standardizing the process of institutional change to a single variety. In North (1990), he presents the evolution of common law as an analogy to his theory of institutional change. In common-law systems, individual cases (agents) change the existing social structures incrementally based on what is deemed legitimate, i.e., the superior solution. While North agrees that revolutionary changes may occur, he sees these events represented by violent overthrows of governments or civil wars. That structural reform programs may differ in their intensity of change from North's common-law analogy is not discussed.

It can be concluded that North's framework does not incorporate different intensities of institutional change beyond the dichotomy of 'punctuated equilibrium' analyses (North, 1990). To his defense, when taking a birds-eye view on history, as often done by North, this dichotomy might be sufficient. After all, explaining the demise of feudalism may not require an in-depth analysis of its short-term temporal dynamics. But the enterprising activity of firms is not only affected by the efficiency outcome, as NIE would have it, but, as I will develop in the following sections, by the way the institutional environment was transformed to arrive at this outcome.

2.3.2 Contrasting Views on Economic and Institutional Dynamics

It is, perhaps, pertinent to observe that in the kind of world in which we live, any particular MNE one might like to consider is never likely to be in equilibrium, in the sense that it can be said to have achieved all the goals it sets itself.

Dunning (2014, p. 51)

Economic Dynamics and Competition. Due to the NIEs reliance on the neoclassical view of production costs, i.e., price theory and the production function, as well as its optimization framework, the economic environment of the firm takes the form of stability that is only broken when changes in relative prices occur. In the neoclassical view of competition, the market efficiently allocates resources in equilibrium as firms are unable to alter market prices (Stigler, 1957; Clifton, 1977). This views competition and the market as a form of coordination between infinitesimally small firms for the greater good of overall efficiency. The NIE allocates any form of

deviance from this ideal to the area of exchange and transaction costs (Langlois, 1998).

Alternative theories of competition¹⁶ challenge this perspective by asserting that firms do set prices and that firm size or industry concentration is not a representation of the absence of competition (Andrews & Brunner, 1975; Penrose, 1995; Moudud, Bina & Mason, 2012; Tsoulfidis, 2015). According to this literature, the problem with imperfect competition approaches is their use of perfect competition as a definition for actual competition, which is then argued to be absent due to the deviance of reality from the perfect ideal (Moudud, 2010). On the contrary, in the classical tradition starting with Adam Smith, competition is seen as a process of rivalry which is consistent with the idea that even a market served by few very large firms could be highly competitive (McNulty, 1968; Clifton, 1977).

One scholar that based her reasoning on such a pragmatic perspective on competition is Edith Penrose. Her seminal work *The Theory of the Growth of the Firm* was published in 1959 and developed independently from Coase (1937). Her inspiration was drawn from scholars as diverse as Schumpeter, Hayek and Marx (Pitelis, 2009), all of whom proposed a dynamic understanding of competition despite their otherwise conflicting views. The differences between Penrose's view of enterprising activity and contributors like Williamson (1975) lies in the recognition that firms are not simply adjusting to transaction costs but use their resources in strategic ways to overcome constraints and change their own cost structure (Lazonick, 2015).

Hence, transaction costs as well as production costs become endogenous as the firm continuously invests in its resources and capabilities in anticipation of its competition. Where neoclassical economics views the coordinating force of competition as a ballet, Schumpeter (1978) referred to the reality of competition as warfare, emphasizing that competition as envisaged by neoclassicals is a void concept for the business economist as firms are pro-active agents subjected to a struggle for survival as opposed to passive optimization. The dynamism of this view raises the issue of radical uncertainty. As Moudud points out: '[s]ince the future is

¹⁶ Classical competition approaches have developed from heterodox economics with the goal to provide a more realistic microfoundation for competition than is perfect competition. Interestingly, this approach also criticizes theories of imperfect competition as these use the notion of perfect competition as a definition for actual competition, which is then argued to be absent (Moudud, Bina & Mason, 2012).

fundamentally unknown, [...] large-sized firms shielded behind entry barriers may face the ignominy of losing their market shares to smaller-sized new entrants' (Moudud, 2010, p. 6). Thus, investments in resources, capabilities and capacity become a coercive pressure and form the explanation for the tendency of firm expansion as stated by Hymer (1972).

This view changes the NIE perspective in at least three respects. First, strategic agency is not confined to the optimization of contractual arrangements at the intersection between market and hierarchy (see Langlois, 1998; Lazonick, 2016). Second, firms tend to expand and differentiate as opposed to equilibrate at optimal size, which is grounded in the continuous investments needed to remain competitively viable against an uncertain competitive threat (Cantwell, 2000). Third, the process of competition results in a non-ergodic environment in which firms cannot objectively reflect on their position with certainty as there is no probabilistic information on future states (Davidson, 1992; North, 2005). These external sources of radical uncertainty arising from competitive interaction also cause the emergence of firm-internal uncertainty, especially through innovation (Spender & Kessler, 1995).

Penrose (1995) clearly recognized that the uncertainties entailed in such a view of business activity would provide an alternative explanation of why the firm exists as a social institution instead of a collection of arm's-length relationships. In order to cope with the economic uncertainties, firms generate knowledge and experience both in coordinative and entrepreneurial areas, generating plans or strategies on issues such as anticipation of demand, actions of competitors and technological trajectories (Penrose, 1995). With this she was in line with Knight's view of the firm as a reaction to irreducible uncertainty (Langlois & Cosgel, 1993).

In conclusion, I adopt the position that markets and competition operate to incentivize agents in a way that destabilizes their common future. In this context, Schumpeter's (1987) analogy of warfare is not so far off reality: firms develop technologies as 'competitive weapons' (Tolentino, 2001), they frequently ally in cases of a common enemy or interest (Dunning, 2015), and already won market share remains contested so much that even the victor must fear small-scale insurgency (Moudud, 2010). In this model of competition, it is impossible to ignore the issue of radical uncertainty and its endogenous occurrence. Social institutions, on the other

hand, enable stability and certainty, as was North's (1990) contention. The following paragraphs are not meant to challenge this claim, but to complement it with the possibility that social institutions fail to provide these functions in some processes of change.

Processes of Institutional Change and Uncertainty. In the past two decades, institutional change has become a vibrant research topic, not only in the NIE but also in other institutional approaches (Campbell, 2004). In the context of global political economy, one aspect of this research revolves around the lasting dynamic of liberalization observed since the 1970s. Based on a survey of various indicators, Spilimbergo, Prati & Ostry (2009) outline these changes in institutional conditions from the 1970s onwards, pointing out the longevity of the process. Agreeing with this empirical reality of institutional change, Streeck & Thelen (2005) developed a framework in which institutional change is transformative but proceeds only gradually, i.e., it is *persistent*.

This concept of transformative but gradual institutional change was a response to so-called punctuated-equilibrium models of institutional change (Krasner, 1988; Campbell, 2004). These view institutions as generally stable with change proceeding in a revolutionary fashion; from one equilibrium to a new equilibrium. The crucial difference to the mode of gradual change is the higher *intensity* of change once an equilibrium shift occurs. Instead of high levels of persistence and low levels of intensity, the punctuated equilibrium model argues for low levels of persistence and high levels of intensity. These two perspectives, I would argue, are not only competing theoretical models but hold insights for different empirical realities of institutional change.

If this is so, it would be likely that there exists another variety of institutional change that represents high persistence and high intensity. Indeed, Levitsky & Murillo (2013) draw our attention towards the gap that exists between these two views of institutional change. More precisely, they argue that Streeck & Thelen (2005) are correct in seeing gradual change as predominant; however, only in developed economies in which institutions are supported by strong enforcement mechanisms. Looking at the developing world, in particular Latin America, Levitsky & Murillo (2013) conceptualize a third form of institutional change, namely *serial replacement*.

Serial replacement is ‘frequent and radical’ (Levitsky & Murillo, 2013, p. 8) change of institutions. In their paper, Levitsky and Murillo provide several empirical examples of serial replacement in different areas of the political economy of Latin America, citing, among others Loveman (1994) for evidence of frequent constitutional changes. While constitutional changes may not necessarily be critical to foreign investors, economic liberalization is of considerable importance. Here, Levitsky and Murillo (2013) paint a very different picture than Streeck and Thelen (2005), stating that ‘[i]n Latin America, ..., economic liberalization often entailed the rapid and wholesale dismantling of economic institutions’ (Levitsky & Murillo, 2013, p. 9) and ‘governments undertook sweeping institutional reforms—including large-scale privatization and deregulation and a dramatic restructuring of trade and foreign investment regimes—of a kind that had previously been associated only with Pinochet-style dictatorships’ (p. 19).

These processes of change are frequently supported or challenged by policy making institutions with different capacities and, hence, there is the possibility that change can advance at different speeds and intensities. This was visible in the process of economic transition in former states of the Soviet Union, driven by extensive and persistent reforms under the moniker of the ‘Washington Consensus’ (Rodrik, 2006). These forms of institutional transformation processes progressed with high intensity and speed, but both factors were found to be varying across countries (Heybey & Murrell, 1999; Godoy & Stiglitz, 2007).

According to this empirical evidence, it seems important to differentiate between different forms of institutional change. The *intensity* of change, here defined as the depth of institutional restructuring, and the *persistence*, here defined as the duration of ongoing change, seem to be a good basis for determining whether institutional change could be considered as radical. In the following I define radical institutional change as institutional change that is both intense and persistent. *Figure 2.1* illustrates the different types of institutional change in relation to a continuum between *intensity* and *persistence*.

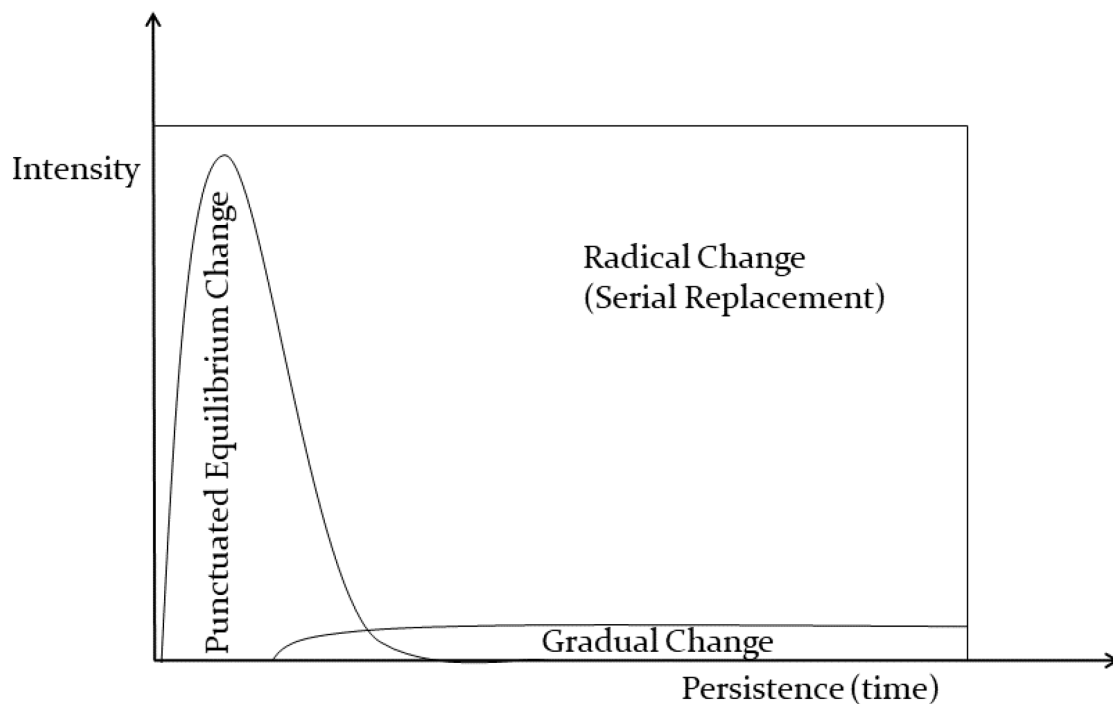


Figure 2.1: Classifying institutional change in a continuum.

2.4 Conceptual Framework

The NIE provided an important but narrow path for IB theory to acknowledge the role of institutions in the investment activity of the MNE. The criticism of the NIE's core theories and the contrast to alternative approaches has supported the contention that the NIE is largely focused on comparative statics and equilibrium conditions. By contrast, the economic environment of the firm is a source of endogenous and prevalent uncertainty. At the same time, I have argued for the possibility that the institutional environment could cease to be a factor of stability, e.g., in times of ongoing political reforms. This results in a general framework that separates between the institutional and the economic environment as two distinctly different spheres, specifically due to the former's tendency of destabilization. *Figure 2.2* illustrates this general conceptual idea. In the following, I will first elaborate on the relationship between investment and institutions by drawing on the alternative view of the CC. Afterwards, I shall briefly take the findings back to the context of the MNE.

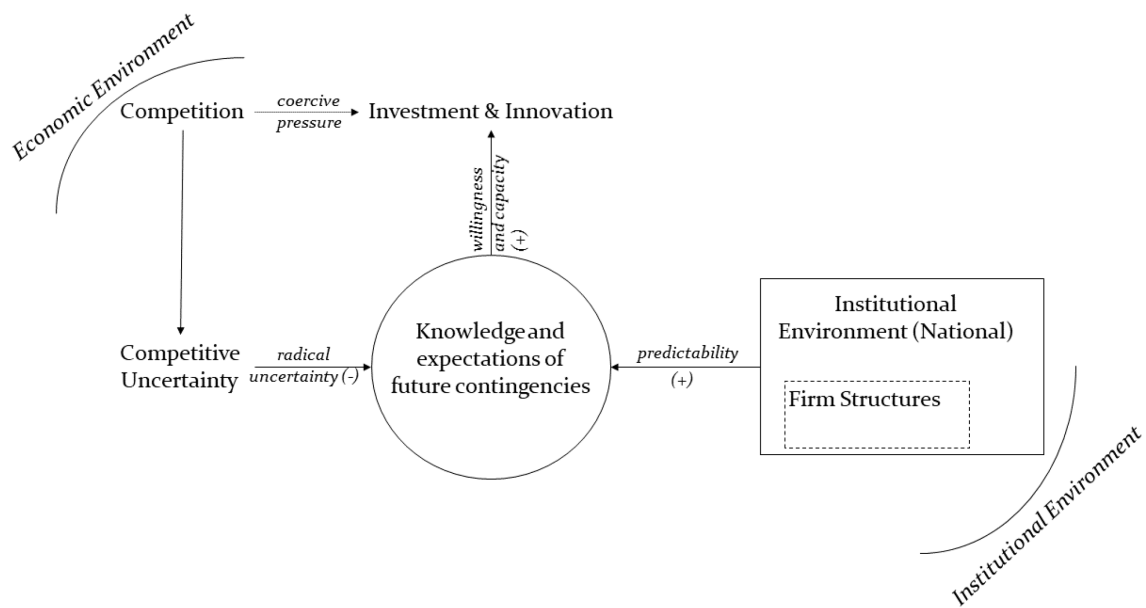


Figure 2.2: The economic and institutional sphere of firm activity – a framework.

2.4.1 Institutional Environments and Investment under Economic Uncertainty

I began this chapter with an overview of the points made by Jackson and Deeg (2008), which presented the institutional theory of the CC view to the IB discussion. In the broader tradition of the CC view, firms are found to *actively* embed themselves in institutional structures. The idea of embeddedness can be traced back to Polanyi (1944) and was re-popularized by Granovetter (1985) with his concept of relational networks. Beckert (2007) points out that the embeddedness literature after Granovetter failed to fully explain why social embeddedness is necessary for economic entities. In his view, embeddedness is a reaction to the *endogenous instability of market relations* and, thus, enables firms to *remain actionable under uncertainty* (see *ibid.*, p. 11). Thus, firms seek orientation in relatively stable social institutions.

An example of this type of embeddedness can be found in the Varieties of Capitalism approach (VoC) (Hall & Soskice, 2001). The VoC literature identifies the stability of two institutional arrangements of capitalism, namely coordinated market economies (CMEs) and liberal market economies (LMEs), for reasons of economic efficiency. This efficiency arises from comparative institutional advantages in productive activity that emerge from the complementarity of institutions (Amable, 2000; Hall & Gingerich, 2009). The crucial aspect of the VoC is that ‘the institutional structure of the economy encourages certain types of investments’ (Hall & Soskice,

2001, p. 49) so that firms develop distinct advantages depending on the form of institutional context they are embedded in. This was already outlined with the example of firms that operate under an institutional logic of radical innovation, focusing on 'switchable assets' (Hall & Soskice, 2001).

According to this logic, institutions can affect the rate of return on certain types of investments, e.g., increasing the costs of low-capital intensive investments by maintaining strong labor market institutions, or through legitimizing investment that was deemed illegitimate before. The process of financialization provides a good example of the latter. As global financial markets became increasingly deregulated in the 1980s, profits in heretofore regulated industries began to soar, and firms started to invest in these new opportunities amidst a relatively weak state of industrial capital at the time (Milberg, 2008). This guidance of capital flows towards whole economic sectors is of course only one manifestation of the directional vector on the macro-scale. On the micro-level of the firm, where the uncertainties of the competitive process prevail, the sense of direction and predictability established by institutions may be critical to support any strategic investment at all.

Strategic Fit vs. Strategic Agency

At this point I come back to the previously raised issue of how strategic fit is viewed in IB *versus* the CC approach. IB approaches that build on the NIE maintain that individual behavior is explained through a set of exogenous preferences: '[f]or transaction cost economics [...] institutions do not fundamentally alter the strategic preferences of actors' (Allen, 2004, p. 100). In this case, strategic fit is simply the choice-within-constraints framework outlined and criticized by Jackson and Deeg (2008). Contrary to this, the CC approach recognizes that institutions can affect these preference structures (see Allen, 2004, p. 89). This explains why the institutional function of a directional vector for strategic actions is difficult to integrate into the NIE, namely because the direction of lowering transaction costs is hard-wired into the system so that other options of strategic behavior cannot be fully recognized.

In the NIE view, strategic behavior of firms is characterized by optimization according to price signals, i.e., transaction costs, and history unfolds as a sequential chain of such optimizing decisions. Institutions can only matter in each slice of time as an outcome condition for transaction costs. The extended view presented here

argues that strategic agency goes beyond optimization according to transaction costs. Generally, strategic agents make decisions not merely based on current variables, but by considering their potential unfolding in the future, which is essentially the problem of investments under uncertainty that was laid out in the introduction. The institutional environment is of special importance since the market endogenously generates the uncertainties that make optimization decisions impossible, as argued in Section 2.3.2.

As opposed to the endogenous uncertainty of the economic environment, institutions are sticky and path-dependent precisely to enable long-term orientation for agents (Thelen, 2009). In the VoC approach, firms assess their institutional environment to derive a directional vector that reduces otherwise radical uncertainty about strategic investments. This directional vector is part of a firm's judgement or expectation about the future. This connects to the basic Keynesian position that investment is driven by expectations and enabled by the confidence that entrepreneurs have in them (Dequech, 1999; Ferrari-Filho & Conceição, 2005). But instead of assuming that radical uncertainty is ubiquitous and, thus, 'animal spirits' and conventions determine investments (Akerlof & Shiller, 2010)¹⁷, we can take the VoC approach into account. Here, sticky and path-dependent institutions generate a topology of broad profitable areas for investment which firms utilize in order to form their expectations. This does not mean that institutions determine particular investment projects, but that they generate some information for the firm that can be used to generate a credible expectation about the future of the investment. In other words, firms are enabled to be *strategic* about an otherwise very uncertain future.

In this context, Beckert (1999) emphasized that any form of strategic agency must rely on institutions as these 'reduce uncertainty by creating expectations of what others will do' (Beckert, 1999, p. 782), and so form 'the basis for rational assessment of means-ends relationships' (ibid., p. 786). Dequech (2004) proposes that institutional structures have a second function besides achieving transactional efficiency, namely a cognitive function. This function goes beyond the equalization of knowledge asymmetries between individuals in exchange and refers to the role of

¹⁷ It is popular to interpret Keynes approach to expectations through animal spirits as a reference to pure emotions. However, what objective factors may trigger these animal spirits seems to be of relevance as well.

institutions in reducing the variability of reality through time. Dequech (2004) points out that radical uncertainty comes in degrees; hence, the amount of traction that institutions have on fixing the variables of relevance for decision-makers over time may directly affect their confidence in the expectations they hold (he calls this the '*informational-cognitive-function*').

In summary, I propose that institutions are an important source of predictability in an economic environment that tends to generate radical uncertainties endogenously. Instead of thinking of investment as a by-product of some optimization function, I follow the alternative view of strategic investments. Institutions enable strategizing and may directly affect the relative profitability of broad areas of investment as in the VoC. From this, I induce two potential mechanisms that would affect the investment activity of firms in cases where institutions are in flux, namely (1) due to organizational disintegration, and (2) due to a loss of confidence in expectations.

(1) Organizational Integration, Knowledge Generation and Investments

New investment, understood as the growth of the firm in some strategic direction, is characterized by a material component of capital expenditure which is underpinned by the generation of experience and knowledge (Penrose, 1995). These cognitive resources are the source for identifying new investment opportunities and enable the firm to support the planning and implementation of strategic investments. Lazonick (2015) refers to this as the 'social conditions of innovative enterprise' (p. 24) and suggests that strategic investment programs require the 'essential social condition [...] to engage in and make use of collective and cumulative, or organizational, learning' (p. 24).

The precondition for organizational learning is the existence of prerequisite structures to organize and accumulate knowledge (Kogut & Zander, 1993). Lazonick (2015) refers to these structures as 'organizational integration' necessary for the generation, transfer and, especially, accumulation of knowledge. The latter point is also prominent in evolutionary accounts where institutional structures serve as organizational memory (Nelson & Winter, 1982) and even as the basis for technological paradigms (Dosi & Nelson, 2010). If these firm-internal institutional structures are, as the VoC and related approaches emphasize, strategically

embedded in wider institutional environments, radical institutional change could lead to disordered unembedding.

In the extreme case of radical (intense and persistent) institutional change, organizations may have to fall back to ad-hoc structures and their very capacity of generating structures to support the generation of new knowledge is reduced. Newman (2000) provides some empirical evidence of this micro process in the transition economy context, showing that, in the rapidly changing environment of the Czech Republic, many firms had trouble establishing new organizational structures and those that did initially lost their capacity of further adjustments due to organizational disintegration.

(2) Future Expectations and Institutional Systems

Jackson and Deeg (2008) argued that institutional environments should be viewed as configurations or systems of institutions with high degrees of *interdependency*. This explains why institutional changes are prone to result in radical uncertainty as their interdependence (or complexity) will generate unforeseen consequences (see North, 2005). Moreover, this generates another point of contact to the theory of the firm in the tradition of Penrose. Penrose (1995) described the process of building expectations of the future as driven by an ‘image’ of the environment that guides entrepreneurial judgment. While this image is subjectively construed, it is partly based on an interpretation of the external environment over time (Foss, 1998; Blundel, 2015). Such a broad interplay of subjective and objective views of reality implies that firms will not be focused on a single institutional structure such as property rights. Instead, the image is generated in relation to the interplay of the structure with the activities of the firm so that even a disturbance of non-market institutions could reduce the confidence in new investments.

The persistence of institutional change is likely to be a crucial factor in distorting the relationship between expectations and experience as it causes the directional vector of institutions to break down. As a response, Penrose suggested that when ‘expectations are disappointed, a sharp curtailment of investment plans may follow’ (Penrose, 1995, p. 73). Beckert (1999) points out that the failure to develop stabilizing institutions in Eastern Europe has suppressed ‘a rational type of entrepreneurship’ (p. 782). In cases where institutional change undermines the institutional support for future expectations, firms may refrain from bearing the uncertainties of long-

term investments altogether. This situation is exemplified in *Figure 2.3*, where I take the example of a potential investment in an assembly subsidiary, i.e., an investment with moderate complexity whose effective return depends strongly on labor costs.

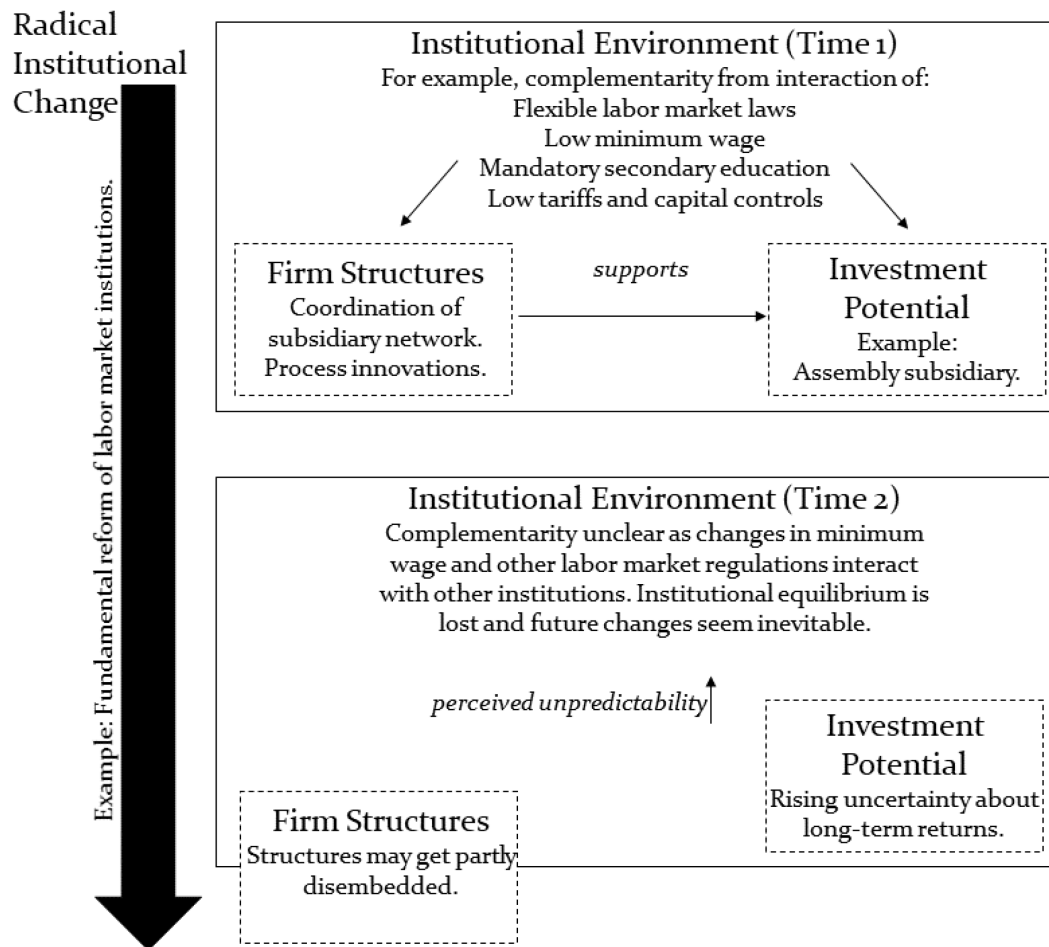


Figure 2.3: The effect of radical institutional change on strategic investment.

2.4.2 Radical Institutional Change as a Barrier to MNE Investment

One of the main tenets of IB theory is that the complexity of cross-border business results strongly from the fact that the MNE operates in multiple, foreign institutional environments. This results in the multiple embeddedness of the subunits of the MNE, meaning that host country subsidiaries are institutionally embedded both in the corporate network and the host countries' institutional environment (Meyer, Mudambi & Narula, 2010). From a simplified but quite accurate perspective, the MNE extends the strategic decision-capacity of the headquarters by the use of local interfaces, which are integrated through an administrative system of firm-internal institutions. Only the Eclectic Paradigm

develops this concept of multiple embeddedness directly by suggesting that Oi factors are partially embedded in Li institutions (Dunning & Lundan, 2008b).

Foreign direct investment is a form of strategic investment that requires the generation of cognitive resources, as was explained in the previous section. This links the strategic investment activity of the MNE with supporting firm-internal institutional structures. For example, Dunning & Lundan (2010) discuss the way in which the interaction of Oi and Li factors can form the foundation for capability development, the latter being a form of strategic investment. For example, they state that '[t]he firm provides the institutional framework within which the formal and informal rules and incentives that guide the process of knowledge generation and transfer are formed and implemented' (ibid., p. 1234).

Moreover, firms develop 'communities of practice' (ibid., p. 1235) as a response to the uncertainties of the innovative process 'that provide a context for structured experimentation' (p. 1235). Hence, strategic investments in the process of extending the MNE's resources, capabilities and capacities require Oi's that are at least partly embedded in the Li's of a given location. Disintegration possibly severs this link between Oi's and Li's, reducing the effectiveness of these institutional support structures, and hampering the ability of discovering new profitable investment opportunities through experimentation. Without the discovery of profitable opportunities, the likelihood of investment is strongly reduced. On the contrary, subsidiaries in particularly stable institutional environments may feature more resilient Oi's and, given their more innovative and experimental stance, represent a more attractive target for capital allocations by the corporate center. These complications are captured in *Figure 2.4*.

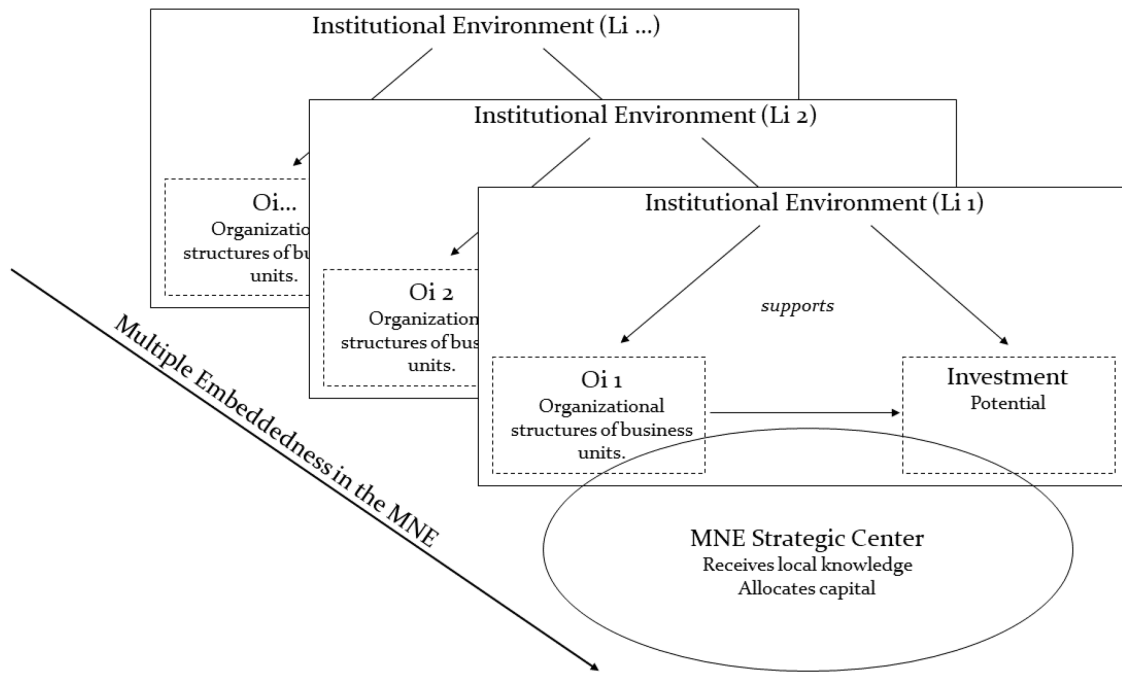


Figure 2.4: Multiple embeddedness in the context of the conceptual framework.

This introduces the *sine qua non* of IB, namely spatial heterogeneity. The MNE is unique in its ability to shift capital not only between different utilizations, e.g., sectors and industries, but also between different institutional environments (Dunning & Lundan, 2008a). If MNEs face radical institutional change in one their operating environments, they have the capacity to withhold investment and determine a more suitable location for it. Hence, I would propose that radical institutional change has a specifically marked effect on the strategic investments of MNEs. In addition, this reminds us of Hymer's important realization that MNEs suffer from liabilities of foreignness (see Zaheer, 1995, 2002). Thus, institutions are likely to be even more crucial in their function as cognitive orientation devices. If institutional continuity breaks down, MNEs might not be able to adapt as fast as domestic enterprises that have a deeper understanding of the wider institutional environment, including its informal components, and access to other important assets such as stakeholder networks.

I conclude that radical institutional changes are likely to affect the investment activity of MNEs. However, I have outlined that there are some qualifications that arise from the unique character of the MNE, mainly that the MNE has options of circumventing the negative effects of radical institutional change. This may not be so in cases where large capital sums were already committed to an environment,

effectively tying the MNE to its location. Nevertheless, MNEs are more flexible in their capital allocation which would suggest that the relative institutional stability of a country vis-à-vis another country could operate as an attractor for FDI. From this conceptual perspective, the FDI attractiveness of a location is not only determined by the institutional structure at a point in time, but also by the consistency of this structure through time. The following three essays will develop some of the ideas that derive from this.

3 Essays

3.1 Essay 1: Dynamic Perspectives on the (Dis)economies of Multinationality: Insights from the Penrosian Theory of the Firm

Abstract

What drives and simultaneously constrains the growth of multinational enterprises (MNEs)? International Business theory has identified potential economies and diseconomies of multinationality as potential answers. Contractor (2007) argues that the transaction-cost-focused perspective on (dis)economies of multinationality is faulty since it ignores the dynamic evolution of MNEs. He proposes a model in which MNEs grow and evolve in the profitable direction of increased multinationality. This paper argues that the latter approach equally ignores dynamics and the associated uncertainty. This is supported by developing a critique based on the principles outlined in Penrose (1959), and with an application of the derived concepts on the example of (dis)economies of the global value chain.

3.1.1 Introduction

One of the core areas of inquiry of International Business (IB) studies is to identify the advantages and disadvantages associated with international production activity as embodied in the organizational arrangement of the Multinational Enterprise (MNE). Many studies have attempted to uncover whether the multinationality¹⁸ (M) of a firm will lead to higher levels of performance (P) (Lu & Beamish, 2004; Thomas & Eden, 2004; Kirca, Roth, Hult & Cavusgil, 2012; Nguyen, 2017). This M-P literature claims that increasing M must increase P as we would otherwise not see the persistent drive towards expanding MNE operations (Contractor, 2012). Accordingly, the M-P literature has established its own theoretical principles, where increases in M result in economies of scale, scope and arbitrage (Hennart, 2011). However, empirically, the M-P literature has produced inconclusive evidence (Hennart, 2007).

The commendable work of Contractor (2007a, 2012), who partly synthesized the empirical evidence into a single framework, has led to the so called s-curve model. In this model, initial increases in M are subject to decreasing returns since young MNEs lack the needed business experience to benefit from cross-border operations. However, for the largest number of firms in the middle part of the distribution, increasing M affects their performance positively (economies of M). Only at the extreme of over-internationalization do very large MNEs face diseconomies of M. This theory explains the diversity of empirical findings in a way that is complementary to the liabilities of foreignness and MNE regionalization literature (Contractor, 2007a)¹⁹. The resulting theory is given the prefix 'evolutionary' (Contractor, 2007b), referring to its dynamic underpinnings that should form a contrast to static theories of MNE growth (see *Figure 3.1*).

¹⁸ In this paper, I define multinationality (M) as both multinational scale and scope. Since the discussion of this paper does not revolve around the conceptualization of M, I argue that this is appropriate. For an appreciation of the conceptual depth of the M construct, see Letto-Gillies (2009).

¹⁹ Liabilities of foreignness refers to the additional costs of operating abroad that may put MNEs in a disadvantaged position vis-à-vis domestic firms (Zaheer, 1995). Regionalization refers to the relatively high regional concentration of sales and assets of the majority of large MNEs (Rugman & Verbeke, 2004).

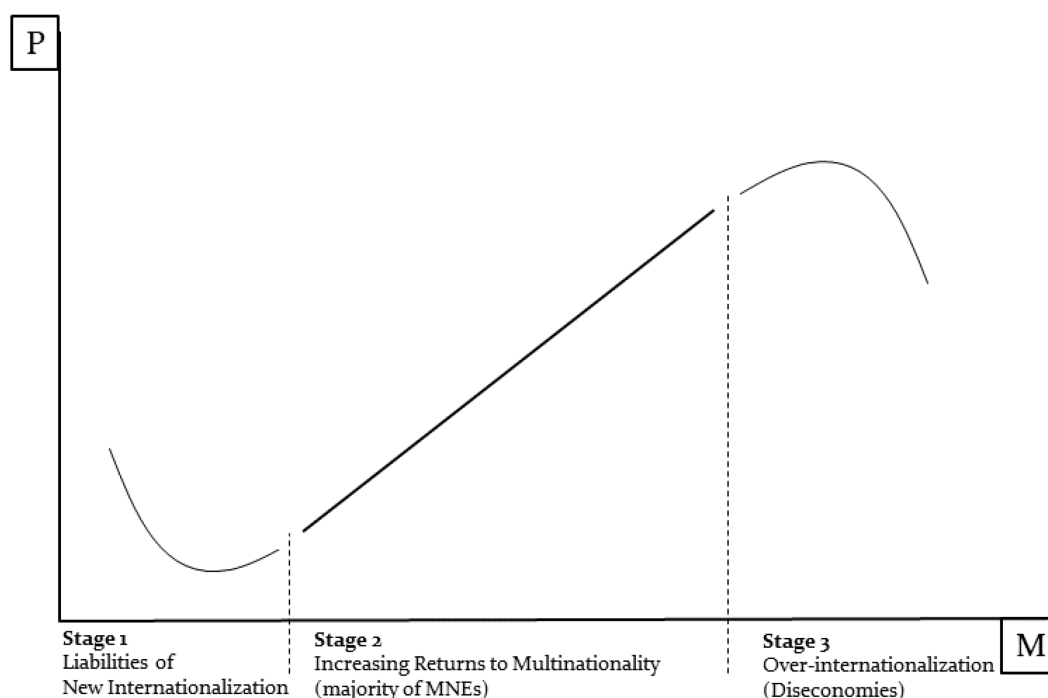


Figure 3.1: S-Curve model. Illustrated following Contractor (2007).

P stands for performance and *M* for multinationality.

In this paper, I question the dynamic character of the s-curve model by building on Edith Penrose's seminal work *The Theory of the Growth of the Firm* (TGF), which I argue to be a theoretical basis for a dynamic theory of the firm. Most other criticisms of the s-curve model are developed from a transaction-cost/internalization theory (TCI) perspective (Hennart, 2007; Verbeke & Brugman, 2009; Verbeke, Li & Goerzen, 2009; Powell, 2014). For example, Hennart (2007, 2011) comes to the conclusion that a positive M-P relationship is untenable under the assumptions of TCI.

By drawing on TGF, I argue that the s-curve model is not evolutionary in the sense that it could reflect the general dynamism of MNE activity, leading to several conceptual gaps. TGF is to be understood as a 'single argument' (Blundel, 2015) and, hence, the structural separation of arguments in this paper is not meant to represent the independence of the issues discussed. In fact, most of the arguments are dynamically interrelated and I present an attempt to synthesize them through an application to the phenomenon of global value chains (GVCs).

The paper is structured in the following way. Section 3.1.2 introduces the theoretical foundations of TGF alongside its implications both for economies and diseconomies of multinationality. Section 3.1.3 develops the implications derived from a discussion

of diseconomies of multinationality in the context of institutional diversity as an external barrier to cross-border business activity. Section 3.1.4 uses the established theoretical principles to analyze the growth of global value chains (GVCs) and its relationship with the M-P model. Section 3.1.5 concludes the paper.

3.1.2 Penrosian Insights and M-P Research

To begin with, I will revisit some core tenets of Penrose (1959); a work that is often claimed to have preceded the resource-based view but that goes far beyond questions of resource generation and exploitation (see Rugman & Verbeke, 2002). In her writings on the firm, Penrose incorporated an unorthodox and eclectic approach to economic theory. TGF does not explain firm growth as an adjustment to equilibrium conditions but as a continuing spiral of accumulation. This intrinsic expansionary tendency sets Penrose's theory apart from much of the transaction cost/internalization (TCI) literature which theorizes about an equilibrium at which 'every firm is satisfied with the boundaries that prevail' (Casson, 2015, p. 64).

Such an intrinsic expansionary tendency is more in line with the evolutionary theory of the firm (Nelson & Winter, 1982; Dosi & Nelson, 1994). The most important characteristic of a theory of evolutionary economics is its *general dynamism*. An evolutionary view in business economics must deal with change and the question of where an observed phenomenon originated from, i.e., the issues of historicity and path-dependency (Dosi & Nelson, 1994, 2010). Besides this more general focus on dynamic explanations, an evolutionary theory is based on a *procedural understanding of competition* as a selection mechanism that coerces investments in innovation akin to the Schumpeterian concept of 'creative destruction' (Metcalfe, 1998). Finally, the *concept of co-evolution* can explain the complex interdependence between firms and the broader environment, according to which the environment is neither exogenous nor fully endogenous (Lewin, Long & Carroll, 1999; Cantwell, Dunning & Lundan, 2010).

It is somewhat paradoxical that Penrose refuted the usefulness of evolutionary analogies in economics²⁰, the most famous of these certainly being the variation-selection-retention framework (Penrose, 1952). I will not discuss her position in-depth here, but will simply point out that TGFs concepts are closely related to what

²⁰ Incidentally, the same is true for Joseph A. Schumpeter who has since been a core influence in evolutionary economics (Saviotti & Metcalfe, 2018).

most evolutionary economists talk about. For example, Penrose conceptualized firm growth as an open-ended expansionary process driven by the search for and generation of productive opportunities (Pitelis, 2009); a mechanism of *variation*. She argued that competition pressures firms to invest their retained profits in the process of innovation to further their competitive strength (Penrose, 1995, p. 26). Even an innovative firm ‘must expect that in time it will be overtaken if it fails to continue to develop its advantage’ (ibid., p. 120); a mechanism of *selection*. Firms actively seek competitive differentiation to survive and to grow their ‘defenses in depth’ (ibid., p. 121), which entails a degree of specialization; a mechanism of *retention*. In the light of these dynamics, Penrose suggested that ‘expansion is necessary in a competitive world’ (ibid., p. 31).

One reason why Penrose did not accept evolutionary analogies might be that some formalizations of evolutionary models require the modeling of the variation process as a random search, which is in contradiction with Penrose’s observations (the bulk of her criticism was specifically addressed to Armen Alchian’s model)²¹. Nevertheless, it seems reasonable to argue that the commonalities between evolutionary views of the firm and TGF are quite strong. Moreover, the critical characteristic that unifies these theories against those of the TCI variant is the expansionary tendency of firms, which cannot exist in a framework based on a notion of optimal firm size (Coad, 2009, pp. 100). The implications of TGF’s dynamic theory for the economies of multinationality will be expanded in the following section.

²¹ For a short rejoinder on Penrose’s critique, see Alchian (1953).

3.1.2.1 Economies of Multinationality

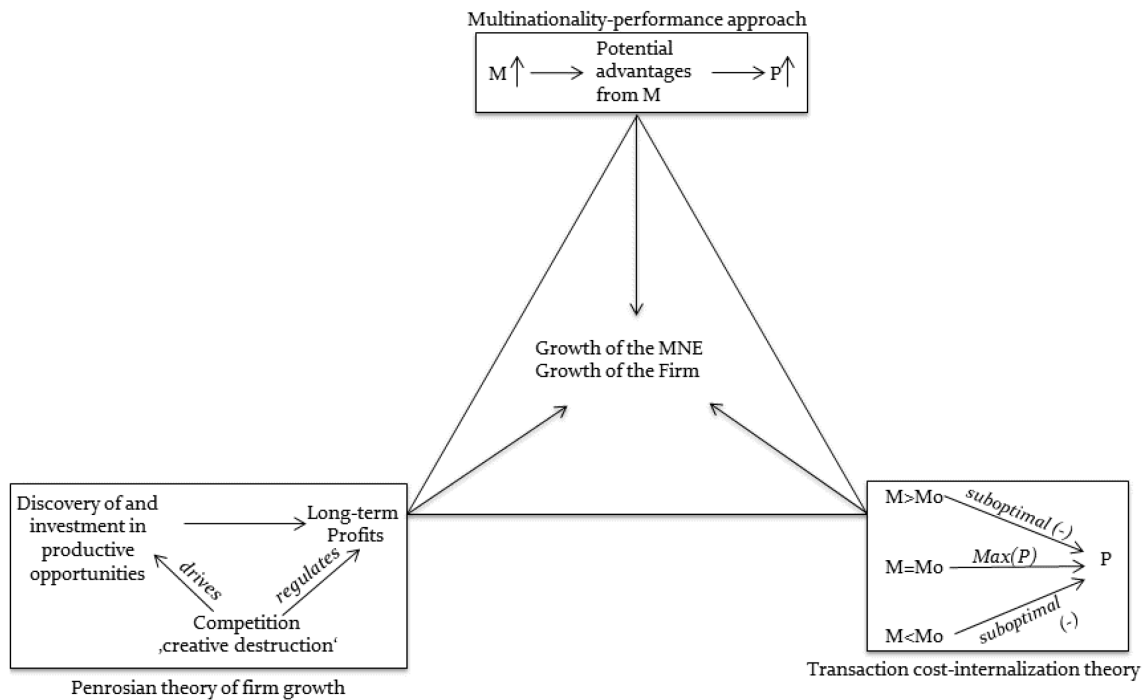


Figure 3.2: Three models of MNE (firm) growth.

The graphical representation of the Transaction-cost-Internalization box is adapted from Powell (2014). M stands for multinationality; P for performance; M_o is the optimal level of M ; $\text{Max}(P)$ is maximized P .

Economies of M play a different role in TGF, TCI and M-P approaches respectively, as shown in Figure 3.2. In the M-P approach of Contractor, multinational expansion is explained as being driven by a direct relationship with performance (Contractor, 2012). In his view, the performance increase resulting from increases in M has led to the steady increase of MNE activity over the past decades. Only inexperienced or extremely over-internationalized MNEs fail to benefit from this positive M-P link. In contrast, the TCI approach argues that firms grow by seizing advantages derived from internalizing otherwise costly market-transactions. MNEs maximize their profits by internalizing markets until the cost of an additional marginal unit of internalization offsets the benefits derived from it (Hennart, 2011; Casson, 2015). Thus, expansion is explained as an adjustment towards optimal environmental fit and the economies of multinationality play a secondary role. In TGF, long-term profitability is seen as the outcome of investments in productive opportunities that inevitably cause a growth of the firm (Penrose, 1995, pp. 23). Thus, growth is an outcome of the competitive process and the effects of economies of scale are subjected to this dynamic.

General dynamism: Economies of size and growth

The M-P approach claims that a positive link between M and P explains the existence and growth of the MNE; i.e., the profitability of increasing M is a necessary condition for MNE activity (Contractor, 2012). From a dynamic perspective, this raises two issues. The first is the question of how an increase in M was made possible in the first place – I will return to this issue in the next section. The second logical question is whether it is the accumulated M, i.e. the *level of M*, or *increases in M* that explain the positive effect on performance. This difference is important as advantages from size do not necessarily result in expansion in the absence of advantages from growth. Penrose made precisely this distinction between economies of size and economies of growth.

TGF argues that firms could potentially reap advantages from either the process of growth or the static condition of size (Penrose, 1995, Ch. 6). Here, *economies of size* are equivalent to traditional scale and scope advantages²² (for a discussion, see Gold, 1973). The economies of size can be further separated into *economies of size in operations*, a sustainable advantage that is realized after expansion, or *economies of size in expansion*, an advantage of transitory nature that disappears after the completed expansion process. Economies of size in expansion suggest that large firms may be able to expand more cost-efficiently into new markets or industries due to an advantage from size, e.g., the availability of large advertising budgets for positioning a new product (ibid, pp. 84). However, this does not entail any advantage in the productive operations following the positioning. Expansion can, thus, be motivated by advantages that are non-persistent, which raises the question if advantages from multinationality are accumulative, or partly dissipate after the expansion is completed.

Another example of such *economies of size in multinational expansion* is an MNE that has gained international experience in setting up subsidiaries from prior expansion. This experience could provide the MNE with an advantage in future expansions as the costs of setting up subsidiaries in foreign countries is reduced. Here, the advantage stems from the level of M, but there is likely to be no persistent performance impact on the operations of new subsidiaries under competitive conditions. Moreover, experience is subject to decay as conditions change in a

²² They are defined by both technological and managerial economies acting on the level of the firm or the level of the plant.

dynamic environment. For example, Argote, Beckman & Epple (1990) emphasize the transitory nature of experience-based production advantages.

By establishing the *economies of growth*, Penrose invokes the theoretical core of TGF according to which firms endogenously discover new productive opportunities from unused resources. These productive opportunities exist irrespective of size (Penrose, 1995, pp. 87)²³. Hence, while economies of size in expansion exclusively refer to situations in which the attained size of the firm, and the associated advantages, have a positive effect on future expansion, economies of growth also include those situations in which advantages from growth are independent from firm size²⁴. Therefore, economies of size are not necessary for firm growth. Penrose gives the example of firms that could benefit from economies of size but, as they are incapable of challenging already existing large producers due to a lack of economies of growth, would only be able to exist in the ‘interstices of the market’ (ibid., p. 88).

For example, an MNE that expands into a foreign market to satisfy a country-specific demand by producing a new product with an entirely new form of production is motivated by economies of growth. While it is possible that economies of size in expansion have made it less costly for the MNE to enter, geographic scope *per se* might be of no sustainable advantage to the new expansion. In the example, there is no necessary reason that multinational scope generates a sustainable advantage, especially if the technology with which this new product is produced is in no way linked with the existing productive activities of the firm. This leads to two conclusions.

First, it is problematic to assume that economies of M are necessary for the existence and growth of MNEs without clearly specifying the type of economies referred to. On the one hand, acquiring a foreign supplier to avoid the risk of supply chain disruption is hardly motivated by the fact that the firm expects necessary increases in performance as it hedges against the risk of underperformance (for similar

²³ Coad interprets this part as evidence that TGF remains in a world of constant returns to scale. While Penrose clarifies that it is not helpful to assume that an abstract notion of firm size is driving expansion, she also does not argue against the existence of economies of size. In fact, economies of growth can simultaneously be derived from size: ‘economies of growth may exist at all sizes, and *some of them* may have no relation either to the size of the firm before it undertakes an expansion based on them, or to any increase in efficiency due to a larger scale of production’ (Penrose, 1995, p. 88).

²⁴ ‘This means not that the firm has no competitive advantages in its new operations, but that these advantages do not rest on the fact that the new activities are part of the activities of a larger firm’ (Penrose, 1995, p. 89).

examples, see Hennart, 2011). On the other hand, MNEs that could benefit from economies of M might be unable to challenge existing competitors at a higher level of output and so have no advantages from expanding. Therefore, putting forward the superiority of multinational expansion as the reason for multinational expansion seems circular and devoid of explanatory content. In the evolutionary process of firm growth, multinationality can only be understood as an outcome of the competitive process, not a parameter to be set.

Second, some performance advantages derived from M only benefit the expansion process and, thus, are of transitory nature. The experience example is a case in point. In an evolutionary setting, this suggests that MNEs with high levels of M might have considerable advantages in expanding into new foreign markets, even if this does not imply any sustainable advantage. For individual MNEs, the lower cost to expand internationally might even raise the danger of ‘empire building’ where managers push expansion plans for their own benefit, often with negative long-term performance effects on the corporate level (Hope & Thomas, 2008)²⁵. Besides these transitory economies of expansion, TGF argues that economies of growth are predominantly of transitory nature as well. This is because of the constant pressure of competition, which I will explore in the next section.

Dynamic competition: The motor of expansion and exploration

‘Big-business competition’ (Penrose, 1959, p. 204) plays a major role throughout TGF. It is the driving force for continuous reinvestments of retained earnings in new productive opportunities. Penrose argues that the firm can never stand still and must constantly search for new options to avoid the attacks of competitors. In contrast to neoclassical economics, competition is seen as a disequilibrating process (Pitelis, 2009). In order to survive, a firm must constantly ‘develop its [competitive] advantage’ (Penrose, 1995, p. 120). For reasons of consistency, I will henceforth refer to these as firm-specific advantages (FSAs)²⁶. There are two implications of TGF’s view on competition which I will treat separately in the following. First, FSAs are necessary for firms to grow and, in a dynamic process, growth is necessary for the further development of FSAs. Second, the firm is not a profit maximizer but may

²⁵ Penrose (1995, pp. 163) also discusses the issues of empire-building as a distortion.

²⁶ The term firm-specific advantage reflects the necessary separation from country-specific advantages in the context of the MNE.

rather forego short-term profits in the process of developing future advantages to secure long-term profits (see Penrose, 1959, pp. 23).

Firm specific advantages and multinationality. In a critique of the M-P view, Verbeke & Brugman (2009) argue that performance is exclusively determined by FSAs and not by multinationality per se. Against this, Contractor (2012) points out that 'the full exploitation of the internalized FSAs certainly requires expansion into several multinational markets' (p. 326). From a dynamic perspective, it is possible that both views are partially correct. Consider the following examples that Contractor (2012) outlines in support of his contention that multinationality is a sufficient advantage for MNE expansion. On one occasion, Contractor points out that 'it would be akin to arguing that the primary determinant of a consultant's income is his/her education level and training and that the number of clients he/she has or their geographic spread are unimportant variables. Consultants, however well trained, who serve clients in only their own municipality will have lower income until they go farther afield and secure distant clients' (Contractor, 2012, p. 326). In this thought experiment, he fails to explicitly acknowledge the simple fact that a consultant will not have achieved multinational customer scope through incompetency and failure. This is important, however, as it suggests that the potential of increasing multinational scope can only be realized by commanding superior capabilities and resources.

In a second example, Contractor (2012, p. 326) argues that some trucking companies are essentially devoid of FSAs and are 'winners' due to their multinational scope. This again overlooks the fact that integrated trucking companies invest in FSAs such as fuel-efficiency, IT-systems, just-in-time processes and, indeed, managerial capability to compete (Engel, 1998; Parming, 2013). The multinational scope of the top performing transport MNEs is precisely the *cumulative outcome* of knowledge generation and investment in capital-intensive FSAs.

Contractor (2012) rightly observes that investment in capital goods and R&D will drive up fixed costs requiring increasing 'global amortization scope' (p. 322); hence, multinationality enables the spreading of costs over additional markets. But it is not explicitly discussed that the increase of global market scope is in itself an application of FSAs in competition. As Penrose observed, the beneficial effect of a firm's scope increase depends on 'whether or not its resources are likely to be sufficient for the

maintenance of the rate of investment that will be required to keep up with competitors' innovations and expansion in its existing fields as well as in the new one' (Penrose, 1995, p. 120). Consistent with this, Gimeno & Woo (1999) found that 'economies [of scope] may not result in superior performance if rivals are able to draw on similar economies and are motivated to compete intensely' (p. 239).

From a dynamic perspective, advantages of both scale and scope are conditional upon the ability to increase demand, the chance of which is increased by the possession of strong FSAs in an uncertain competitive environment. It is (at least) problematic to think about any benefits of scale and scope in a cross-sectional setting. Even if scale advantages derive from engineering-related reasons, e.g., a minimum economic scale of automobile production, the final condition to realize these advantages is to sell the added output. This requires FSAs to either take market shares from existing competitors or to generate new markets (Pitelis & Teece, 2010). From a dynamic perspective, the development of advantages of M is strongly supported if not conditional upon the exploration and exploitation of FSAs.

At the same time, there is no reason to object to the reverse causality highlighted by Contractor (2012), namely that with higher levels of M, MNEs can outspend competitors in R&D and technology acquisition due to their ability to spread fixed costs over a larger number of country markets. Penrose realized the dynamic interrelationship of lowering variable costs through technological investments at the expense of fixed costs, and the fact that this requires market share is also part of the Penrosian theme (Lazonick, 2001).²⁷

Thus, not only is FSA development a precondition to realize and maintain multinational scale and scope, but the attained scale and scope may provide advantages for future FSA developments. This spiraling accumulative process is directly related to Penrose's theory of the firm and complements her view on the equally important accumulation of knowledge. M-P defenders and critics like Verbeke & Brugman (2009) seem to be on two sides of the same coin. From a Penrosian perspective, it seems undisputable that the *primary* factor influencing MNE performance are FSAs, but the development of these advantages requires

²⁷ 'For any given product larger firms probably do require a larger margin over direct cost for profitable operations, not because of a larger administrative overhead as is sometimes alleged, but because of the kind of oligopolistic competition in which they become engaged' (Penrose, 1995, p. 198). To avoid giving too much credit to TGF, the importance of low prices as opposed to monopolistic mark-ups in supporting large investments is made explicitly later in Penrose (1990).

adequate scale and scope in multiple markets to reduce unit-costs in the context of rising investments and capital intensity – a form of dynamic advantage.

This argument could also explain the problems of endogeneity that have plagued empirical M-P studies (Powell, 2014). For example, when statistically controlling for endogeneity, Berry & Kaul (2016) were unable to replicate the results of Lu & Beamish (2004) - a seminal article lending support to the s-curve model. Similarly, a qualitative study conducting interviews with managers concluded that it would be more accurate to see the multinational expansion process as the generation of real options for the exploitation and exploration of FSAs (Carneiro, Amaral, Pacheco, Moraes & Figueira da Silva, 2014). This is consistent with the evolutionary view put forward here.

Profitability is an imperfect measure of evolutionary fitness. One of the core difficulties in M-P research is how to define P. This is not merely a methodological issue, but it has theoretical relevance as was indicated by Verbeke and Brugman (2009). The bulk of M-P studies focuses on profitability measures and so increasing M is expected to increase profit rates such as return on assets (ROA). TGF, on the other hand, integrates a broader view of performance as understood in concepts such as evolutionary ‘fitness’ (Dosi & Nelson, 1994). The implications of this view on performance are the most pronounced in a later article on the MNE (Penrose, 1990). Here, Penrose establishes the importance of pricing strategy as a competitive device.

What follows from her discussion is that firms may sometimes forego profits by lowering prices to expand their revenue in later periods and to pressure competitors with weaker cost advantages²⁸. In such situations, profits cannot fully capture the competitiveness of the firm. If managers consider the *sustainability* of performance, i.e., the evolutionary fitness of their firm, retaining price-flexibility can be an equally important dimension of competitive performance. This price flexibility is enabled by reducing variable costs and one of the most potent ways of achieving this is the investment in new technologies (Penrose, 1990).

Given that investment in new technologies tends to increase the capital employed relative to the firm’s competitors (Dunne & Hughes, 1994; Lazonick, 2015), a

²⁸ Lazonick (2016) puts this the following way: ‘A potent way for an innovating firm to attain a greater extent of the market is to share some of the gains of this cost transformation [*transforming variable costs into fixed costs through investment in technology*] with its customers in the form of lower prices’ (p. 12).

strengthening of the profit margin from reduced variable costs may not be represented in profitability measures that also capture the increasing amount of capital assets. While the firm might have gained price flexibility and even increased its absolute profits, a measure of ROA could simultaneously be stagnating²⁹. Hence, profitability measures are a very imperfect representation of the survivability of a firm. Accordingly, studies found that market selection is not driven by profitability but by ‘survival-of-the-more-efficient’ (Foster, Haltiwanger & Syverson, 2008; Cantner, Krüger & Söllner, 2012)³⁰.

This has some concrete implications for the M-P view. First, the effect of M must be tested on different forms of P in a dynamic competitiveness framework³¹. In other words, to develop a complete picture, more M-P studies must consider measures besides ROA such as unit-costs, profit margins or even firm survival, which is also stressed in a recent review of the M-P literature by Nguyen (2017). Second, as the largest MNEs also tend to have high capital intensities, we must pay more careful attention to the potential link between MNE size and *reduced* profitability. In a meta-analysis, Yang & Driffield (2012) found that the firm size distribution of the sample affects the reported M-P effect. This calls for further research to clarify whether very large MNEs do indeed face diseconomies from over-internationalization or are simply characterized by higher capital intensity. With this question we can shift our attention to the diseconomies of multinationality.

3.1.2.2 Diseconomies of Multinationality

In this second part of the paper, I review Penrose’s position on decreasing returns to size and how these relate to the diseconomies associated with M in the IB literature. Contractor, Kundu & Hsu (2003) to some extent agree with the TCI view by modeling two balancing forces of economies and diseconomies of M. Comparing the TCI view of Powell (2014) to that of the s-curve model reveals that the fundamental difference is TCI’s proposition of an individual optimal size at which the firm maximizes its performance (Powell & Lim, 2018). Against this the s-curve suggested that an expansion of M can lead to persistent performance benefits and only causes

²⁹ Research has not found a general positive relationship between the size of the firm and its profitability (Dhawan, 2001). Moreover, there is some evidence that large firms, in terms of capital advanced, tend to have lower but more stable profitability than relatively smaller competitors (Hymer & Pashigian, 1962; Pomfret & Shapiro, 1980; Dunne & Hughes, 1994)

³⁰ For a discussion of the evidence, see Dosi, Pugliese & Santoleri (2017).

³¹ One of the more rare cases of an M-P study utilizing costs-to-sales ratio is Al-Obaidan & Scully (1995). However, only unit production costs can avoid an influence of pricing on the performance measure.

diseconomies in extreme cases. The common point, thus, is that diseconomies of M are bound to occur at some level of *multinational size*. I shall begin discussing this view on systematic diseconomies by juxtaposing the internal limit of firm expansion in TGF to that of TCI and the M-P view. Afterwards, I will outline Penrose's view on external limits in relation to the environment that complements the view on diseconomies of organizational coordination.

General dynamism: Diseconomies of size and growth as internal limits

Most contributions exploring decreasing returns to scale draw on the neoclassical theory of the firm, which explains the upward sloping part of the cost curve with the existence of fixed factors of production, here particularly management (Lazonick, 2016). Contributions such as Coase (1937) and later Williamson (1975) have further refined these principles of generally declining effectiveness of management with firm size and added the critical role of transaction costs. The TCI perspective, e.g., as presented by Buckley & Casson (1976) and Hennart (1982), follows this general position.

Casson (2014) argues that '[a]s the complexity of the division of labour increases, record-keeping becomes more onerous. As the workforce expands, relations become impersonal, trust becomes weaker, and morale may suffer, and as specialisms proliferate rivalries may develop between different specialist groups' (p. 216). Thus, at a threshold size of the MNE, organizational conflict emerges, deriving from opportunistic predispositions and more benign failures of commitment (Verbeke & Greidanus, 2009). With increasing size and diversity, interpersonal trust is difficult to maintain and rising specialization results in an increase of intra-firm group distance or rivalry (for an evolutionary approach to this dynamic, see Cordes, Schwesinger, Müller & Lundan, 2016).

Managers are seen as the lynchpin that hold these diverse organizations together, but a single manager's capability is limited so that increasing size translates to a larger administrative overhead, higher costs, and eventually failure from overcomplexity (Casson, 2014). Building on Coase (1937), TCI argues that besides these costs of internal coordination (costs of hierarchy), there are costs of using the market as an institutional alternative. MNEs grow to the size and diversity at which the diseconomies of expansion offset any further gain from internalization (Casson,

2015). This reflects a trade-off between internal costs of coordination as well as external 'costs of using the price mechanism' (Coase, 1937, p. 390).

To this conceptualization of the size of the MNE as an internal limit to expansion, TGF adds a dynamic component. Analogous to the distinction between economies of size and growth, TGF differentiates between the diseconomies of size and growth. The former would only present fixed limitations, even for individual firms, if management indeed was a fixed factor. However, the real constraint arises from the resource limitations of the firm to realize expansion at any given point in time, since the development of managerial capacity cannot be achieved ad-hoc (Foss, 1998). Even an attempt to buy managerial capacity does not circumvent the need to integrate and train new managers (Slater, 1980). Managerial capacity becomes a crucial bottleneck to the amount of expansion any organization can withstand at a given point in time.

Therefore, diseconomies of growth arise from the need to allocate managerial (and other) resources to the process of growth³². What is unique to Penrose's view is that after this process ends, the managerial diseconomies are neutralized by a process of knowledge generation and routinization (Best, 1990). Even more so, the initial diseconomies are overcompensated as routinization generates new managerial capacity to be used in further expansion. This learning mechanism is the core of TGF and explains both the source of new productive opportunities and the necessary managerial capacity needed for further expansion. In a way, TGF conceptualizes the firm as an institutional structure implying a dialectical relationship between entrepreneurial dynamics on the one side and the stability necessary for the accumulation of knowledge and routines on the other. For these reasons, TGF introduces no *theoretical* limit to the size of the firm but only to its growth.

Penrose recognized that such an incremental process of learning to deal with ever larger enterprise structures would lead to organizational transformations, a point forcefully formulated by Chandler (1990). Her perspective was also an anticipation of the co-evolutionary view on the firm-environment relationship, which, in the context of IB, emphasizes the mutual influence between MNEs and their external environment (Cantwell, Dunning & Lundan, 2010). From the co-evolutionary view,

³² 'A firm has a given amount of experienced managerial services available at any one time. Part of these are needed for ordinary operations; the rest are available for planning and executing expansion programmes' (Penrose, 1995, p. 57).

MNE structure is not independent from the challenges it faces in a changing global economy. Equally, there is no reason to believe that the conditions of the global economy are exogenous to MNEs at least in the long-term. Penrose envisioned that firms would discover new forms of ‘authoritative communication’³³ (Penrose, 1959, p. 18) enabled through an innovation of firm-internal policies or, in modern jargon, institutions³⁴.

Penrose transfers the Schumpeterian view of technological change from the physical to the social realm. In line with this, Lundan (2010) argued that the institutional structure of an MNE may grant it unique capacities to overcome its multidimensional expansionary limits. Innovative institutions provide managerial capacity to overcome many of the issues related to multinationality, offer efficiency gains through routinization and coordination, and generate a support structure for innovation and learning processes (Kogut & Zander, 1993a, 1996; Spender & Kessler, 1995; Dunning & Lundan, 2010). Thus, expansion is not only about how coordination is maintained in the context of transaction costs, but also about the generation of administrative structures and other firm-internal institutions that enable efficient transactions in the first place (see Kogut & Zander, 1993b).

In the analysis of diseconomies of multinationality, we should not only be concerned with static variables, like the level of multinationality or the overall size of the MNE, but also with *those dynamic factors that enable or prevent the MNE to accumulate knowledge over time* in an effort to overcome the negative implications of the static variables. This should result in an increased focus on the dynamic limits of MNE expansion instead of an elusive optimal size that has yet to be supported empirically (Coad, 2009). In this context, the foundations of Penrose integrate managerial creativity, entrepreneurial judgment and planning in an uncertain world, whereas TCI remains centered on passive adaptation and fit to achieve optimality (Lazonick, 2015). The s-curve model must separate more clearly between factors that may be

³³ ‘Authoritative communication’ can consist on the one extreme of the actual transmission of detailed instructions through a hierarchy of officials and, on the other, of the mere existence among a group of people of observed and accepted policies, goals, and administrative procedures established at some time in the past (Penrose, 1995, p. 18).

³⁴ Penrose seemed to mainly think of formal institutions and less of the informal underpinning of firms such as common values and visions (she mentions these on the side). This might be more of a case of essentialism than reductionism since growing organizational complexity beyond a point can only be achieved through formal institutional authority (Dunbar, 2011).

transformed into temporary constraints by MNEs and those factors that potentially decrease the MNEs' capacity to do so.

Environmental dynamism: An external limit in Penrose

At various points in TGF, Penrose highlights how the environment is closely connected with internal processes of the firm. In terms of the entrepreneurial mechanism, i.e., the discovery of new productive opportunities, the environment acts as an 'image' in the entrepreneur's head (see Penrose, 1995, p. 189). The image is not a carbon copy of reality but a judgment of the observable contingencies and an extrapolation of possibilities into the future (Foss, 1998). Hence, the firm and the environment are seen as interdependent by Penrose.

Accordingly, administrative adjustments may not only be triggered by internal expansion but equally by environmental changes. Penrose (1959) argues that '[o]f the managerial services available to a firm, some will be required for current operations; the amount required will depend on the size of the firm and on *external conditions*' (p. 175, italics added). In TGF, these external conditions refer to 'market conditions' (p. 181). If the environment is highly competitive and characterized by constantly changing demand and supply conditions, '...the firm may not be able to do much more than keep on its feet and, if it expands at all, can expand only slowly' (p. 179).

I would argue that there is no reason to assume that these environmental disruptions are exclusively driven by competitive conditions, and Penrose herself constructs a more general counterfactual. Based on the thought experiment of a totally stable environment, she concluded that firms with 'optimum administrative procedures and framing an optimum set of policies could operate successfully without any overt acts of 'central management' at all' (ibid., p. 15). They would exploit 'established regulations' and existing policy 'directives' (ibid., p. 15) without adaptation. Thus, TGF views environmental change as necessitating adjustments of the firm's routine-based administrative system.

The adjustment problems of environmental disruption are compounded by the fact that environmental change causes uncertainty. Penrose writes: 'the effect of uncertainty is to require that some of these available [managerial] services be used to gather information, digest it, and reach conclusions' (p.57). Much in line with the above, Thompson (1967, p. 159) agreed that '[u]ncertainty appears as the

fundamental problem for complex organizations, and coping with uncertainty, as the essence of the administrative process'. This has interesting implications for diseconomies of multinationality as it shifts the attention from coordination problems to planning problems that go beyond the variation of transaction costs.

Here, I see the potential to integrate Penrose with the IB focus on global institutional diversity as developed by both TCI and the M-P. It seems important to explore how dynamic environmental factors impact the ability of the MNE to expand and maintain an administrative system, i.e., to stabilize and routinize activities at its periphery. This requires institutions that provide a degree of predictability to the task environment.

3.1.3 Dynamic Institutions and MNE Expansion Beyond TGF

In IB, distance and diversity of institutions feature prominently in the discussion of external limits to MNE expansion, specifically in relation to transaction costs. There are at least three different perspectives of how institutions affect the diseconomies of multinationality. First, institutions affect the efficiency of exchange in a given economy (North, 1990). This transactional efficiency of institutions is usually captured in the concept of *institutional quality* (Peng, 2002). Second, institutions differ across countries, which can result in even stronger inefficiencies when exchanges bring together individuals socialized in only one of the two systems. The difference between two institutional environments is referred to as *institutional distance* (Hutzschenreuter, Kleindienst & Lange, 2016). Third, the MNE is an organization that spans several institutional environments and, thus, aggregates *institutional diversity* from the heterogeneity described above, leading to network management issues (Arregle, Miller, Hitt & Beamish, 2016).

Most applications of these approaches, implicitly or explicitly, follow the general thinking of Coase (1937) or Williamson (1975), i.e., the TCI approach. For some TCI scholars, transaction-cost-related factors are exogenous so that they become variables in the optimizing decisions of MNE managers. Other scholars, especially TCI scholars with a strategic management focus, have suggested that these factors can be manipulated by MNEs through strategic action (Verbeke, Li & Goerzen, 2009). For example, organizational learning enables the MNE to understand, cope with, and even prevent the problems deriving from diverse institutional environments (Javernick-Will, 2009; Henisz & Delios, 2015). Here, the

environmental diversity is more akin to a moveable constraint as envisioned by Penrose.

But moving such a constraint through learning and adjustment is costly. Already Hymer (1976) established that an increase of international scope would lead to additional costs incurred by the MNE due to its limited familiarity with local conditions, including institutions (Zaheer, 1995; Eden & Miller, 2004). Hymer (1976) treated this in the context of a one-off 'fixed cost' (p. 39). However, these initial disadvantages could also be overcompensated by organizational learning. Recently, IB scholars have argued for the existence of dynamically arising advantages of foreignness (Shi & Hoskisson, 2012; Edman, 2016). There are several reasons why an active process of embedding in, and learning about, local institutional environments can translate into an advantage.

For example, national institutions create necessary regularities that are leveraged by MNEs, granting them efficiency and operational stability as a result of the predictability of their task environment (Whitley, 2007). Moreover, local institutions provide the context and foundation for developing administrative structures with the goal to implement centralized practices and routines; this increases efficiency and reduces the potential of intra-organizational conflict (Kostova, 1999; Hotho, Saka-Helmhout & Becker-Ritterspach, 2014). Third, the MNE faces unforeseen institutional issues (Orr & Scott, 2008; Slangen & Beugelsdijk, 2010) and institutional voids (Khanna & Palepu, 2010), which could open strategic options otherwise not encountered or considered (Cantwell, Dunning & Lundan, 2010).

However, while these active processes of learning can be investments into future advantages, they all represent initial expenditures, some of them of the non-monetary kind of managerial capacity as outlined by Penrose. For example, Verbeke & Kenworthy (2008) suggest that the relevance of these managerial costs is often overlooked both in IB theory and practice. This raises an important issue. If institutional environments are dynamic systems, institutional change can affect the 'return' to these 'investment' processes. In case the local institutional environment changes, previously established routines may become obsolete and the MNE must allocate managerial services to newly arising learning processes. This would result in adjustment costs and an allocation of managerial attention away from

entrepreneurial tasks that might be important to secure future competitive advantages.

Such dynamics of the institutional environment have not been frequently discussed in the IB literature, even though different forms of institutional change have caught the interest of scholars in related research areas (Campbell, 2004; Thelen, 2009). There is also some evidence for cross-country heterogeneity in the dynamics of institutional change, including persistently turbulent institutional trajectories (Levitsky & Murillo, 2013). As MNEs span several institutional environments, it seems important to acknowledge these non-market dynamics. Following Penrose's ideas, it may be difficult for MNEs to expand their administrative structures into environments that are institutionally unstable. Moreover, institutional changes are likely to result in reconfigurations of the already established operations and structures of the MNE, leading to managerial deficits.

For the M-P view and the s-curve model, two implications arise from this. First, the contingency of coordination costs is more complex when considering both the possibility of learning and environmental changes. In fact, the degree of complexity that arises from such a conceptualization of coordination costs raises doubts as to whether it is reasonable to integrate systematic diseconomies proportional to multinationality in a general model of MNE expansion. Powell (2014) rightly argues that diseconomies are determined at the level of the individual firm, not least because every MNE has its own topology of institutional environments both in terms of its spatial dispersion, but also in terms of the dynamic challenges these produce from a temporal perspective. Even so, the contention of Powell (2014) that MNEs are constantly searching for an optimal size at which their performance is maximized still maintains that there must be some fixed limit to M for each MNE. However, especially large MNEs are likely to develop the capacity to transform these limitations (Cantwell, Dunning & Lundan, 2010).

Second, dynamic diseconomies do not exclusively arise from increases in M as they can equally be associated with environmental changes in the existing network of the MNE. This seems to be not yet recognized in the s-curve model. For instance, Contractor (2012) argues, possibly much to the discontent of the TCI scholars, that the reason for observed diseconomies of M are to be explained by either path-dependency or randomness. The former would reflect the idea that managers,

having experienced gains from increasing M over a long time, overextend due to false extrapolations. From the perspective introduced here, the fact that environmental conditions, including institutional environments, are changing can explain why some MNEs may be exposed to diseconomies of multinationality even if the decision-making wasn't characterized by severe irrationality and in the absence of changes in the level of M.

3.1.4 The Growth of the Global Value Chain

In this section, I present some findings of the global value chain (GVC) literature to emphasize the explanatory capacity of a Penrosian discussion of MNE expansion. GVCs are production networks in which a lead firm, usually a large MNE, controls suppliers often without direct ownership. It may seem problematic to apply TGF's principle outside of the ownership boundaries of the firm, but Penrose's definition of the firm is not based on ownership as much as on administrative reach³⁵. The GVC literature has analytically and empirically supported the view that lead firms have considerable control over suppliers using multiple governance modes on which I will comment further below (Gereffi, Humphrey & Sturgeon, 2005).

The phenomenon of the GVC raises two interesting issues. First, how do the economies of multinationality manifest in this specific form of organized production? Second, how does the GVC structure relate to the diseconomies of multinationality? Both questions require us to decide whether M is related to the multinationality of an integrated firm or, equally, to the multinational network of a lead firm³⁶. Contractor (2012) pointed out the potential importance of non-ownership networks in his perspective on M, which is why I will assume that an expansion of the non-ownership network of the MNE, e.g., through outsourcing, corresponds to an increase in M. In the following, I will shortly discuss how the Penrosian principles of economies and diseconomies of multinationality relate to the GVC phenomenon and what that implies for the M-P approach.

In terms of the *economies of multinational size*, the M-P approach specifically emphasizes the benefits of multinational scale to reduce the fixed costs of R&D

³⁵ Very similar views are found in Hymer (1976) and Cowling & Sugden (1987). These authors differentiate between different levels of authority and decision-making, emphasizing the centralization of the strategic level of decision-making and the decentralization of more peripheral decisions.

³⁶ It is unclear if a single dimension of multinationality could simply include both ownership and network aspects of the firm. For example, does a lead firm (hypothetically situated in a single country) with 100 independent suppliers in 10 countries have the same level of M as an integrated MNE with 100 subsidiaries in the same countries? I will avoid a discussion of this issue here.

spending. With respect to the current global economy, there is considerable evidence of financial activities such as share buy-backs that have partly replaced productive investments (Davis, 2017; for a detailed analysis, see Milberg and Winkler, 2013). For many lead firms, externalization has meant the shifting of the exploitation of internal FSAs to the external FSAs of suppliers (Strange & Newton, 2006). The use of externalized FSAs has decreased the need for investments in productivity enhancing assets (Milberg, 2007). For this reason, the lead firm's imperative to secure economies of scale abroad to amortize investment is reduced. This is especially so as the ability to lower prices due to cost-savings has opened new demand in already established markets. Moreover, the cost-efficiency of the GVC is not necessarily supported by the overall economies of multinational size, as it is the supplier's scale and technology, instead of the size or dispersion of the network, that becomes critical.

The GVC may be better analyzed from the view of *economies of multinational growth*. By optimizing the structure of its supplier network, the lead firm can improve its operational cost structure through *specific* expansions. This benefit arises from independent suppliers and is not related to an economy of size of the lead firm. For instance, there is no knowledge to be gained, no market share attained and a complete separation between supplier and lead firm would affect the former's production costs only marginally. Thus, there is an incentive for the lead firm to expand their network selectively in the direction of the most cost-efficient set of suppliers.

In relation to this mode of expansion, Strange & Newton (2006) remind us that the growth of the MNE is a 'double movement' (p. 138). With this they refer to the simultaneous occurrence of centralization and decentralization as well as integration and differentiation resulting in 'more and more sub-parts that can function relatively independently of each other' (p. 138). In other words, MNE expansion enables the generation of new planning and administration capabilities that may even allow greater autonomy at the periphery while retaining strategic control³⁷. This entails that the expansion of the periphery of large MNE networks tends to be driven more by economies of growth than multinational size, as the

³⁷ According to the authors, this argument is originally made by Stephen Hymer.

overall degree of integration of these activities is reduced to control costs of coordination.

In this light of different sources and types of economies, the M-P relationship becomes more complex as the advantages of multinational size and growth must be analyzed separately. To complicate the issue, Penrose reminds us that such advantages must not persist in the process of competition. *Dynamic competition* has been a major force in the rise of the GVC structure since lead firms were able to decrease their production costs sometimes by as much as 40-60% through outsourcing (Dossani & Kenney, 2003; Lazonick, 2006). It is likely that this has greatly increased the lead firms' competitive pressure because of the relative imitability of the outsourcing strategy (at least for large MNEs). The imitation of other competitors and the ensuing price pressures would suggest that the economies of multinational growth gained by individual lead firms may not lead to very persistent performance benefits (Milberg, 2006).

For example, consider two MNEs serving the same market with equal levels of M. MNE A is an early mover and expands its outsourcing activity to increase its profit margin through lower costs (resulting in higher M). MNE B imitates the strategy (achieves the same level of M) and decides to undercut MNE A to challenge its market share. MNE A has two potent strategic options: match the price or aggressively undercut it based on the expectation that it has the stronger cost advantage. No matter which strategy is chosen, the initially gained net profits from increasing M are altered through the competitive process.

Consider a third MNE C with lower levels of M that enjoys a differentiation advantage (e.g., product quality) and, thus, is not in direct competition with MNE A and B. Even if MNE C does not have the cost-efficiency entailed by the larger supplier network of MNE A and B, it may still report higher profits as its less competitive environment does not force it to fully utilize its price flexibility. Capturing these complexities with linear models and an escalating number of control variables seems to be a difficult, if not impossible, task. If the individual competitive position over time is fundamentally uncertain, as suggested in Schumpeterian views of competition (Metcalf, 1998), identifying a linear link between economies of multinationality and performance for the individual firm in any *predictive* framework seems impossible.

Therefore, I would argue that the M-P theory has some merit as an *explanatory* framework on the *aggregate level*, but that it cannot and should not be used as a predictive theory for individual MNEs. For example, Milberg (2007) used sectoral data of the US to show that outsourcing has increased the profit share³⁸ in several US sectors. On the contrary, Jiang, Frazier and Prater (2006), using panel-regressions on a sample of individual US firms, found that there is an impact of outsourcing on cost-efficiency but not on profitability. With our discussion in mind, we could make two propositions here. First, outsourcing did increase aggregate profitability, i.e., it strengthened the M-P relationship in the aggregate, while the ensuing competition has distributed these gains more evenly across individual lead firms. Second, this raises the margin of error in the M-P mapping over time, because increased levels of M can result in increasing price competition. *Figure 3.3* reflects this dynamic ‘error’ using the example of MNE A, B and C above.

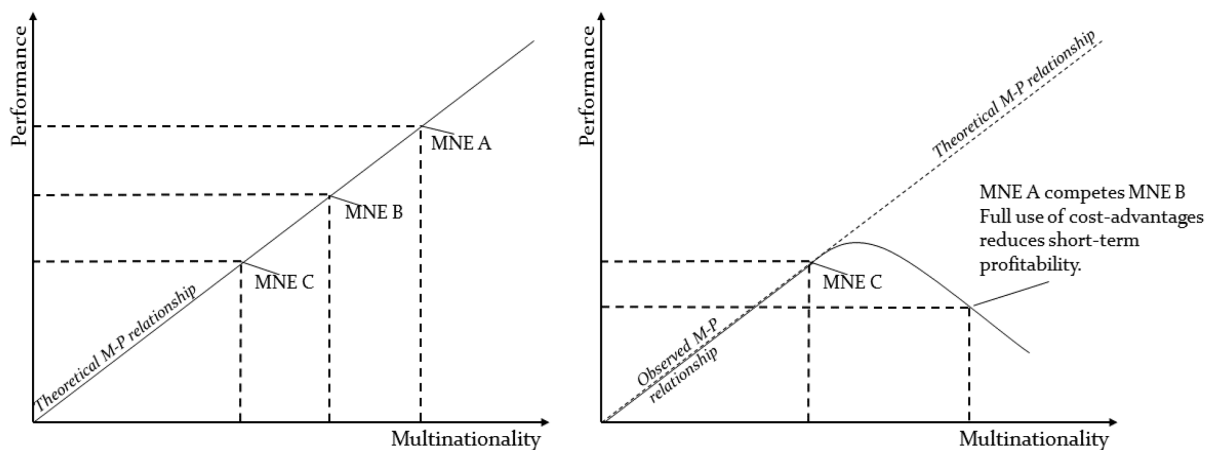


Figure 3.3: Example of increasing competition through increasing multinationality.

The left graph resembles time 1, where MNE A reaps benefits from its level of M. The right graph resembles a time 2, where MNE A is challenged by MNE B matching its level of M and struggling for cost-leadership.

Using the s-curve model, increased aggregate profitability of M could be pictured as an upward shift of the curve, representing the tendency of higher gains on average. At the same time, a reduced slope of the middle part of the s-curve would indicate stronger competition and less gains from each increasing unit of M on the individual level of the lead firm. Due to these contestable gains and the uncertain nature of

³⁸ Defined as the profit/wage share. Hence, this measure reflects the distribution of the surplus, but it contains no information of the profitability of individual firms.

competition, the mapping between profitability and M is prone to deviations over time.

Finally, it must be noted that the aggregate M-P relationship is constantly in flux. The increasing prevalence of the GVC structure in the past decades suggests increasing gains associated with these supplier structures. It could be argued that one reason for this is the stagnating purchasing power in many developed countries which has pushed MNEs towards price competition (Dobbs et al., 2016). Moreover, changes in corporate governance towards shareholder value principles have been put forward as partial causes for the GVC phenomenon (Lazonick, 2010). These conditions are historically contingent, meaning that the strength of an aggregate M-P relationship is not as fixed as it may seem in the s-curve model.

The example of the GVC structure can also elucidate the complexities of the *diseconomies of multinationality*. One of the arguments derived from TGF is that the intrinsic expansionary tendency of enterprises requires organizational evolution. Alongside this Schumpeterian angle of TGF, I have discussed Penrose's stance on environmental change as a condition that moderates and defines diseconomies of size and, more importantly, growth. The GVC is a case in point for the evolutionary mutation of the large integrated MNE to accommodate environmental conditions but also to specify the mode of influence of the lead firm on its environment.

From the TCI point of view, the GVC is often seen as a response to reduced transaction costs (Williamson, 2008); although, it is far from obvious if transaction costs have declined to the extent that would fully explain the GVC (Milberg & Winkler, 2013). Moreover, while it is true that outsourcing has gained prominence, it has not substituted the growth in proprietary assets and employment of the largest enterprises (Gospel & Fiedler, 2007). In other words, Penrose's endogenous growth in the presence of moveable constraints performs better as an explanation than the idea that the GVC is the outcome of a reduced optimal size of the MNE due to transaction costs.

TGF argued that growth requires the maintenance of administrative reach via firm-internal institutions. I would argue that the GVC structure is a response to these evolutionary pressures. For instance, Lundan (2010) points out that the ability of extending the non-ownership network of the MNE comes with the benefit of economizing on managerial services as externalization 'requires neither the resource

commitment, nor carries the problems of hierarchical coordination, envisaged by Penrose' (p. 56). The lead firm not only reduces its resource commitments through externalizing its capital-intensive FSAs, but also shifts most forms of interaction with local institutions (and other environmental conditions) to a subcontractor or independent supplier. It thereby reduces the costs associated with responding to changing institutional environments, which are prevalent both in developing countries with weak governance and emerging markets whose reforms need to keep pace with economic development.

But the GVC structure goes further than this and simultaneously allows the lead firm to reduce its managerial burden of hierarchical coordination, while retaining the capacity of being an 'orchestrator' of value-added activities (Buckley, 2014). This represents the social innovation of the GVC structure. Its functioning is dependent on new forms of governance mechanisms that have varying – but generally lower – needs for managerial oversight (Gereffi, Humphrey & Sturgeon, 2005). The high level of competition in low-margin supplier markets, combined with the monopsony power of the lead firm, has created a dependency and, thus, the potential for enacting authoritative communication without necessitating an expansion of firm-internal institutions (Milberg & Winkler, 2013).

The implications for a theory of systematic diseconomies of multinationality are significant. In a classic contribution to the IB field, Rugman & Verbeke (2004) empirically traced the concentration of sales and assets in home-regions, arguing that MNEs face diseconomies when operating beyond these spatial discontinuities. However, more recent work on the geography of MNE activity through input-output tables has uncovered the far greater globalization of production hidden in the GVC networks of these enterprises (Los, Timmer & Vries, 2015). This implies that systematic diseconomies of multinationality are at least contingent upon the form of MNE activity and that MNEs have strategic capabilities to affect their exposure to the very sources of diseconomies.

3.1.5 Conclusion

Any form of evolutionary theory needs to be based on a dynamic mechanism. The M-P approach substitutes this mechanism by a fixed relationship between M and P. This is seen as the principal law governing the growth of the MNE. In this paper, I have argued that alternatives to the TCI-based theory of the firm exist and should

be considered as a starting point for M-P scholars. With her focus on growth processes and her unique view on the economies and diseconomies of size and growth, Penrose provides an interesting starting point to entangle some of the theoretical conundrums that still plague an M-P based model such as the s-curve.

I have focused on three dynamic concepts of TGF. First, the analytical separation between states and processes – ‘*general dynamism*’ – emphasizing the importance of historicity and path-dependence. While this is often connected to Penrose’s view on related diversification, the separation between (dis)economies of size and growth equally arose from her dynamic perspective. Second, *dynamic competition* is the catalyst that perpetuates the endogenous processes of capital and knowledge accumulation in TGF. Advantages acquired by the firm, and to this we must count the potential advantages from increasing M, are likely to be transitory and may require further actions to reap sustainable advantages. Moreover, in a dynamic competitive process, the firm’s performance is a multidimensional construct of evolutionary fitness, which raises concerns about the ability to measure P through profitability or in static cross-sectional studies. Third, *environmental change* was introduced as a factor that stands in conflict with the need for administrative stability. While environmental change can often be seen as exogenous, the possibility of strategic responses on behalf of the MNE endogenizes the constraints that arise from it.

With the example of the GVC, I attempted to show that these dynamic concepts can be used as analytical instruments to understand the relationship between M and P. I suggest that the s-curve as proposed by Contractor (2007) does not lend itself very well to be a basis for normative implications in the context of individual firms, but it can be a starting point for understanding an aggregate relationship between the relative profitability of multinational expansion and the prevalent (or paradigmatic) type of organized cross-border production and exchange.

Competition has reduced the sustainability of advantages derived from the GVC structure and, thereby, from increases in multinationality. This also raises the question as to the relative importance of advantages derived from multinationality *per se*, which in the GVC example tend to be transitory, and those derived from the introduction of new social and physical technologies. I would agree with Cantwell & Sanna-Randaccio (1993) that ‘[t]his [the M-P] literature has perhaps tended to

overplay the role of multinational advantage, though, which appears to be less significant than technological advantages, the growth of technological opportunities, and the size of the firm' (p. 239). In the case of the GVC, it is the specific advantage derived from a new form of governance – an innovation in social technology – paired with the reduced need for investment in productive assets which represents a historical peculiarity of the current global economy.

Furthermore, I have argued that the competitive conditions in GVC-heavy industries can put significant pressures on lead firms to forego profits due to pricing or follow-the-leader strategies, which is captured by Dunning & Lundan (2008), observing that '[t]oday, it is often *imperative* for a firm to produce outside its national boundaries if it is to remain competitive in global markets – *even though, as a result, it manages to earn only an average or below-average rate of return*' (italics added, p. 526).

Finally, a dynamic perspective enables us to explain what happens in cases where competitive or environmental conditions change and, thus, affect the M-P relationship. Currently, we can observe such a change as both the extent of foreign direct investment and GVC expansion is stagnating (UNCTAD, 2018). This suggests a new mapping of the aggregate M-P relationship, which could, hypothetically, be driven by institutional and political changes with more protectionist overtones. The point that TGF makes is that, in time, it is possible that a new form of social or physical technology will recast the M-P relationship in unpredictable ways. Thus, Penrose (2002) concluded that 'universal truths without reference to time and space are unlikely to characterise economic affairs' (p. 11).

I want to conclude this paper with some final points on the s-curve model as a theoretical device. In this model, M is a placeholder for a multitude of possible effects that are enabled by an expansion across borders. But does this then not also entail the question of how this expansion became necessary and possible in the first place? Isn't the competitive mechanism behind the growth of the MNE an *inseparable* part of the M-P puzzle, as the close theoretical link between the development and exploitation of FSAs and the expansion of the MNE suggests? Contractor criticizes the view of TCI and, specifically, its sterile neoclassical principles, which I think is a fair point. At the same time, the s-curve model also applies a very peculiar *ceteris paribus* condition according to which an effect of MNE expansion on performance can be assessed holding the competitive process

constant. This paper has argued that it is the competitive process that should be the basis for explaining how and why an increase in M might occur.

The important contribution of the M-P approach is to bring back the idea of growth in the direction of profitable opportunities which is underdeveloped in many TCI accounts as Contractor points out. In the World Investment Reports of the UNCTAD³⁹, the return on foreign investment is continuously argued to be a robust factor governing the dynamic of foreign direct investments over time. Penrose (1995) also equated the growth of investment with the growth in profits but only over the long-term. This is not a generalization, but a stochastic relationship based on a dynamic theory. The M-P approach and any theoretical model associated with it should be based on a dynamic explanation, because expansion and the ensuing (dis)economies can only be fully analyzed in an evolutionary setting. The current nature of the s-curve model is not evolutionary but linear and based on stages. Future theory development should consider Sid Winter's credo: *Dynamics first!*⁴⁰

³⁹ United Nations Conference on Trade and Development

⁴⁰ Taken from Dosi (2013).

3.1.6 References

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3.2 Essay 2: Institutional Change as a Source of Non-Market Uncertainty and its Impact on MNE Investment Activity in Developing Countries

Abstract

Progressive reforms towards efficient and effective institutional environments increase the chances for developing countries to attract foreign direct investment (FDI). However, this conventional wisdom presupposes that the process of institutional change has no adverse effect as a source of uncertainty. This paper departs from the conventional wisdom by developing a conceptual framework from a review of the existing empirical and theoretical literature on the FDI-uncertainty link. I hypothesize that the intensity, volatility and persistency of institutional change processes can have an adverse effect on FDI inflows. I test these contentions quantitatively on a sample of developing countries. The results support the view that it is not only the *outcome* but the *process* of institutional change that matters. In this context, the development of accurate measures of institutional change over time is a frontier for future research.

3.2.1 Introduction

The cross-border activity of multinational enterprises (MNEs) is affected by the economic as well as socio-political conditions in different countries and institutions have taken a central position in explanations of its spatial patterns (Dunning & Lundan, 2008a). High quality institutional environments reduce transaction costs and alleviate excess uncertainty, thereby attracting the investments of MNEs. Conversely, low quality institutions may 'act as a tax' on cross-border business operations (Daude & Stein, 2007, p. 18). Therefore, the goal of good state governance should be to strive towards higher quality institutions through reform programs (Cuervo-Cazurra & Dau, 2009). However, this perspective presupposes that the process of institutional change itself has no effect on investor uncertainty and, thus, has no effect on the attractiveness of locations for foreign capital.

This paper approaches two problems that arise from this line of reasoning. First, much of the discourse in the existing literature is about calculable risks akin to a tax on investment, which disregards the process of institutional change as a source of uncertainty. Based on a review of the relevant literature, I propose that this could be explained by the analytical focus placed on single *events* and on structural *constraints* that has taken precedence over more dynamic considerations. Second, the paper presents a theoretical framework with testable hypotheses that link the characteristics of the process of institutional change to FDI inflows. The findings of the empirical analysis strengthen the argument that it is not just the *outcome* of institutional change that is relevant, but also the characteristics of its *process*.

The paper will proceed as follows. Section 3.2.2 reviews the literature on the FDI-uncertainty link with a special emphasis on non-market uncertainty and the goal of introducing the issue of institutional change as a source of uncertainty to the existing discourse. Section 3.2.3 develops a theoretical framework and three hypotheses. Sections 3.2.4 and 3.2.5 explain the data and methods used to test the hypotheses. Section 3.2.6 reports and discusses the results, while Section 3.2.7 concludes the paper.

3.2.2 Foreign Direct Investment and Non-Market Uncertainty

FDI⁴¹ is associated both theoretically and empirically with the cross-border activities of MNEs (Dunning, 2001; Wacker, 2016). Compared to portfolio investments, FDI is a long-term capital flow, which must be interpreted as a bundle of resources, including physical and organizational technologies as opposed to pure finance capital (Dunning, 1988, p. 123; Dunning & Lundan, 2008b). Due to its relative irreversibility, FDI could also be considered as more susceptible to environmental uncertainty of the kind that is associated with disruptive environmental change. Seminal contributions in economics have argued that investment could be both positively or negatively affected by uncertainty (Caballero, 1991; Dixit & Pindyck, 1994), whereas more recent empirical research has suggested that the negative link is more prevalent (Bloom, Bond & Van Reenen, 2007; Noria, Fernández & others, 2018).

Much of the earlier FDI-uncertainty research primarily focused on the impact of uncertainty arising from market-related (or economic) variables, such as the unpredictable variance in exchange rates or aggregate demand (Cushman, 1985, 1988; Goldberg & Kolstad, 1994). Other researchers have clarified that these market-related disruptions have to be seen as co-determined by non-market factors (see Easterly, 2005). Indeed, according to the World Investment Report of UNCTAD (2017), 'significant uncertainties about the shape of future economic policy developments could hamper FDI in the short term' (p. 2)⁴². Non-market uncertainty is driven by some form of disruption in the socio-political context (Ramcharran, 1999). For example, Rodrik (1991) argues that the risk of governments to suddenly reverse reforms can act as a 'hefty tax on investment' (p. 229). However, the term *tax* may not be entirely adequate here, due to the difference between uncertainty that is perceived as a tax, i.e., a calculable expense, and uncertainty that makes it impossible for the investor to estimate the potential gains or losses resulting from an environmental disruption.

⁴¹ In this paper, I follow the IMF definition of FDI as direct investments resulting in at least a ten percent stock in an enterprise abroad.

⁴² With the renewed interest in the uncertainty-investment link after the last global recession, some interesting concepts and methodologies were developed in economics (Denis & Kannan, 2013; Baker, Bloom & Davis, 2016), and also adapted in IB (Nguyen, Kim & Papanastassiou, 2018).

Wei (1997) picks up on this difference by separating between the level of corruption in a country and its variability⁴³. His argument goes as follows: Even if country A has the same level of corruption compared to country B – the first-moment (average) effect – it may be that the process of corruption in country A is more variable compared to country B – the second-moment (variability) effect. In this example, corruption in country B is more predictable and calculable, leading to a stable cost akin to a tax. Country A, on the other hand, shows a variability in corruption-related costs due to unpredictable contingencies in the *process* of corruption. Wei (1997) concludes that ‘the second-moment (uncertainty) effect can and does have first-order importance’ (p.15).⁴⁴ In the following, I review the FDI-uncertainty literature to further develop this distinction between first- and second-moment effects.

First-moment effects of uncertainty. In the case of FDI, contributions in the area of non-market uncertainty began to appear in the 1970s with an increasing awareness of political risks, especially expropriations (for an early review, see Kobrin, 1979). Nowadays, this literature pays significant attention to ‘the risk that a government will opportunistically alter policies to directly or indirectly expropriate a firm’s profits or assets’ (Holburn & Zelner, 2010, p. 1290). Given the decline in direct expropriations after 1980 (Hajzler, 2012), scholars extended the analysis from direct political intervention to other non-opportunistic political events. For example, adverse shocks such as regime instability, local riots, armed conflict or terrorism are usually not intentional policies by local governments, but are important determinants of uncertainty (Kobrin, 1976; Ramcharan, 1999).

Much of this literature has explored the effect of political *events* from a punctuated-equilibrium perspective. In such studies the interest is on determining the extent to which an instantaneous disruptive event may increase the uncertainty of foreign investors as compared to the pre-event situation. For instance, Senga et al. (2017) explored the effect of the 2012 island conflict between Japan and China on Japanese outward FDI to China, finding support for the contention that the disruption resulted in a persistent increase of investor uncertainty. On the contrary, in a study of US outward FDI, Enders & Sandler (2011) found that the New York terrorist attack

⁴³ In an unpublished working paper, Büge (2018) also uses the contribution of Wei (1997) in a similar way, but in the context of trade.

⁴⁴ Heybey & Murrell (1999) propose a similar distinction in the context of policy reform. It is not only the ‘level’ of the reform that matters, but also the ‘speed’ of reform. In the terminology I adopt here, ‘speed’ would be a second-moment effect.

of 2001 had no persistent impact. Another example of political events that directly affect the area of cross-border investment are state-led expropriations of foreign asset owners (Kobrin, 1980). The deterrent effect of expropriations on FDI has long been established theoretically (Thomas & Worrall, 1994) and studies have empirically analyzed expropriation events (Minor, 1994; Hajzler, 2012). These studies focus on a specific context and point in time. Single disruptions of the event-type usually do not have a long enough time dimension to be explored outside of a punctuated-equilibrium model.

Another group of scholars has shifted their attention towards the institutional environment as a source of uncertainty. Here, uncertainty is argued to be structurally determined and not necessarily tied to realized interventions and events. Instead, the focus is on constraints of behavior that make countries more attractive to incoming FDI such as intellectual property rights (Khoury & Peng, 2011) or the strength of contract enforcement (Gastanaga, Nugent & Pashamova, 1998). There is also evidence that the presence of institutional constraints in the form of political veto-players (Tsebelis, 2002) will decrease the risk of expropriations (Li, 2009a) and, thus, reduce investor uncertainty. Similarly, Büthe & Milner (2008) argued that preferential trade agreements reduce uncertainty by constraining the future policy choice of host governments. Finally, investors in institutional environments characterized by a lack of political constraints are more likely to face sudden government changes (Kaufmann, Kraay & Mastruzzi, 2009).

Indeed, the argument that political constraints reduce uncertainty has gained notable support (North & Weingast, 1989; Henisz, 2000) and it has been extended to the discussion of democracy as a 'meta-institution' that actively generates the necessary constraints and veto-players (Rodrik, 2000). Evidence highlights that FDI is, on average, attracted to democratic environments (Feng, 2001; Jensen, 2003). However, one problem of these studies is limited empirical diversity as most countries have some form of democratic regime. Therefore, Li & Resnick (2003) explore in how far democracy strengthens other institutions such as property rights. Their findings suggest that democracy itself has a negative effect on FDI flows, while its strengthening effect on property rights creates the impression of an overall positive effect.

This finding could be related to the fact that democratic processes do not only generate political constraints in favor of the interests of foreign investors. While extreme political interventions are less likely under the constraints imposed by democratic checks and balances, there may be a significant degree of uncertainty attached to the question of who develops policies in which direction – questions that could sometimes be less nebulous in non-democratic environments. However, these issues are of a dynamic nature and the literature on institutional constraints remains focused on states instead of processes.

Second-moment effects of uncertainty. The literature that explores occurrences over time as a source of non-market uncertainty is relatively thin. In an early contribution, Kobrin (1976) explores the effect of the frequency of political assassinations and revolutions, finding no impact on manufacturing FDI in less developed countries. Globerman and Shapiro (2003) used indices from the World Governance Indicators to test for the FDI deterring effect of the frequency of terrorist threats, armed conflict and unrest, but found no impact on FDI inflows. Using a different methodology and a larger dataset, Busse & Hefeker (2007) did find robust support for a negative relationship between the indicators used by Globerman and Shapiro (2003) and FDI inflows. The data used in these studies exclusively tracks the frequency of events.

Few studies have been concerned with issues such as the variance or volatility of occurrences over time. In the context of monetary policy, research has indicated a negative impact of policy volatility on FDI (Albulescu & Ionescu, 2018). Outside the FDI literature, Brunetti, Kisunko & Weder (1998) proposed some additional proxy measures of policy volatility such as the standard deviation of the black-market premium on foreign exchanges or the standard deviation of the inflation rate, finding support of negative relationships with domestic investment. Sahay & Goyal (2006) investigated the effect of reform volatility on economic indicators, similarly with a negative result on domestic investments.

In terms of the process of institutional change, i.e., the evolution of constraints, the current literature is also limited. Bénassy-Quéré, Coupet & Mayer (2007) suggest that ‘in the short run institutional reforms can be detrimental to inward FDI’ (p. 26). Unfortunately, their data does not allow for a substantiation of this proposition, and they do not elaborate on the theoretical reasons for their contention. Shi, Sun, Yan

& Zhu (2017) presented evidence for a positive effect of institutional fragility, conceptualized as the irregular pace of intra-country institutional change in China, on outward FDI as a form of escapism. Outside the FDI literature, Hartwell (2014) operationalized institutional volatility by relying on measures of contract-intensive money, finding evidence for a positive relationship with financial volatility. Godoy and Stiglitz (2006) found that the speed of institutional change had a negative effect on the economic development of transition economies.

While there seem to be very few studies of country-level FDI that take the process of institutional change into account, there exist some related firm-level studies. In terms of firm-level FDI decisions, Demirbag, McGuinness, Wood & Bayyurt (2015) explore data on foreign subsidiaries in the Eastern European post-transition economies, finding a negative effect of local corruption on reinvestment decisions; reinvestment being a component of FDI. They argue that this effect is more pronounced for subsidiaries in the more unstable post-transition periphery, which weakly suggests that more dynamic institutional environments might be an additional burden for FDI decisions. Santangelo & Meyer (2011), similarly in a transition economy context, found that investors tend to prefer flexible low-commitment entry-modes when institutional changes are not transparent. Finally, for domestic firms in India, Chari & Banalieva (2015) conclude that the initial uncertainty caused by pro-market reforms can reduce profitability. In so far as business unit performance motivates MNEs to invest, such studies could also have implications for FDI flows.

In summary, the review of the FDI-uncertainty literature has suggested a negative link and can be categorized into four different perspectives. First, the separation between first- and second-moment effects was established: (1) the first-moment effect draws our attention to an *event*, i.e., an *occurrence in time*; (2) the second-moment effect puts the focus on processes, i.e., *occurrences over time*. Second, the reviewed studies can be classified into (3) those that are concerned with the non-structural or ad-hoc features of the non-market environment and (4) those that relate to institutional constraints. These categories are displayed in *Table 3.1*, where columns represent (1) and (2). The rows represent (3) and (4).

The studies in the upper left category (1;3) were focusing on ad-hoc events such as terrorist attacks, diplomatic conflict and expropriations. Because of the

instantaneous character of these environmental disruptions, processes are of little concern and the findings might differ according to the specific disruption under scrutiny. The upper right category (2;3) is defined by analyzing the occurrences of events over time. Most of the identified literature looks at measures of frequency and less on the variability or volatility of a series of events unfolding in time; for an exception, see Albuлесcu & Ionescu (2018).

The lower left category (1;4) explores the relevance of institutional constraints for decreasing the uncertainty of institutional environments. Here, the structural features of institutions outweigh dynamic considerations even though Li & Resnick's (2003) study on the democracy-FDI link suggests that this could be an important avenue to explore. However, the lower right corner (2;4), which focuses on the process of institutional change as a disruption, has received little attention. The following sections aim to further develop this corner of *Table 3.1* both conceptually and empirically. *Table 3.1: Conceptualization of the review (Essay 2)*

	First-Moment Effect Occurrence in time	Second-Moment Effect Occurrence over time
Ad-hoc events (non-structural)	<i>Events</i> (Thomas, J. & Worrall, 1994; Enders & Sandler, 2011; Senga, Chen & others, 2017)	<i>Evolution of events</i> (Kobrin, 1976; Albuлесcu & Ionescu, 2018)
Institutional constraints (structural)	<i>Constraints</i> (Henisz, 2000; Kaufmann, Kraay & Mastruzzi, 2009; Li, 2009a)	<i>Changing constraints as the focus of this paper</i>

3.2.3 Second-Moment Effects of Institutional Change in FDI Theory

In order to discuss the theoretical implications of second-moment effects of institutional change for International Business theory, I structure the following section in two parts relating to the *origin of uncertainty* and the *composition of uncertainty* respectively. The first refers to the differences between uncertainty originating from institutional change versus those emitting from either of the three other identified categories in *Table 3.1*. The second part will introduce some thoughts on the composition of uncertainty, which refers to the extent that uncertainty occurs in the form of radical unpredictability. These two themes reflect the idea that a discussion of uncertainty should be based on its characteristics rather

than its occurrence. After all, uncertainty in social reality is a ubiquitous phenomenon (North, 1993).

The origins of uncertainty were already established as market and non-market uncertainties caused by their corresponding environmental disruptions; the latter being further divided into a non-structural and an institutional arena. The most noticeable difference lies between market- and non-market uncertainty as social agents tend to associate the social arena with predictability and stability (Thelen, 2009), up to the point at which the response to institutions becomes habitual (Hodgson, 2007). On the contrary, MNEs would not view global markets as a source for stability and predictability, and it is in the nature of the MNE to react to a variety of dynamics, including innovations, demand fluctuations and aggressive competitors (Tolentino, 2001). The regulatory environment, however, is not something MNEs would necessarily expect to be in flux. Any disruptive change could introduce uncertainties on top of those already endured in their market operations. Thus, the origin of uncertainty matters as social agents can be expected to actively hedge against those uncertainties that they assume are bound to occur. For example, Frank Knight made the related argument that the institution of the firm was a response to the need of entrepreneurs to absorb uncertainty (Langlois & Cosgel, 1993). Therefore, uncertainty originating from the change of institutional constraints is likely to be a significant disruption.

These disruptions of social constraints can be connected to the Eclectic Paradigm (EP) (Dunning, 1977, 1988), which explains MNE investments via FDI in the context of the exploitation or augmentation of ownership advantages⁴⁵ by accessing various locational factors. Advantages derived from the various locational factors, including institutions, determine the spatial allocation of FDI (Nielsen, Asmussen & Weatherall, 2017). The EP suggests two links between the location of FDI and institutions. The first link follows the new institutional economics of (North, 1990a, 2005), arguing that FDI is attracted by institutional quality (Bénassy-Quéré, Coupet & Mayer, 2007; Daude & Stein, 2007) defined as the extent to which an institutional environment allows for efficient transactions, i.e., reducing uncertainty in market exchange (North, 1990b; Wan & Hoskisson, 2003 p. 28)⁴⁶. The second link takes a

⁴⁵ Ownership advantages refer to MNE advantages derived from its home country and from competitive advantages derived from its resources, capabilities and markets (Dunning & Lundan, 2008b).

⁴⁶ This link is also characteristic of the internalization theory of the MNE.

broader view, based on the idea that institutions have an important enabling role in shaping and supporting the exploration and augmentation of ownership advantages (Dunning & Lundan, 2008a). Here, the importance of the stability of institutional structures for innovation, capability development and the absorption of related uncertainties could be mentioned as examples (Spender & Kessler, 1995; Dunning & Lundan, 2010).

In order to explain this wider role of institutions, the EP builds significantly on the contributions of Douglass North. In North's words, institutions 'reduce uncertainty by providing a structure for everyday life' (North, Douglas C., 1990b p. 3-4). This overarching function of institutions is enabled by their structural and limiting properties. The structure of society generates stickiness and path-dependence of behavior (Jackson & Deeg, 2008) as well as orders and hierarchies (Williamson, 1985; North, 1993). In his attempt to explain the interrelationship between enterprises and institutions, North is inspired by Knight (1921), stating that:

the real tasks of management are to devise and discover markets, to evaluate products and product techniques, and to manage actively the actions of employees; these are all tasks in which there is *uncertainty* and in which investment in information must be acquired. (North, 1990, p. 77, italics added)

The institutional environment partly absorbs this uncertainty by offering the enterprise cognitive guidance in directions which 'offer the greatest promise in maximizing the organization's objectives' (ibid., p. 77)⁴⁷. The problem with North's account is that this function of institutions is assumed, due to his exclusive attention on incremental institutional change. Moreover, his model is one of comparative statics, i.e., institutional change is perceived as an instantaneous adjustment from one state to another (Vandenberg, 2002); thus, representing a first-moment effect. This, however, leads to a problem. If institutions change incrementally, this necessitates that there is a process of institutional change, and only in cases of revolutionary change does this process collapse to an event. However, North's theory does not really involve revolutionary change in a systematic way and the

⁴⁷ Some readers might have realized that the idea of profit maximization assumes an ergodic world. In a way, North (2005) makes similar observations. Here, I do not assume that firms maximize profit but that they are driven by purposeful, nevertheless heuristic, long-term profit-seeking (see, e.g., Penrose, 1959).

result is that institutional change is pictured as so incremental that a study of its process seems out of place. Given the primacy of North's ideas in the EP, the question of how uncertainty from institutional change affects the investment activity of MNEs has yet to be explored.

There is, however, empirical evidence of disruptive forms of institutional change, often observed in the context of developing countries (Levitsky & Murillo, 2013a). Moreover, institutional change subjects an economy to structural shifts that regularly result in unintended consequences (Eggertsson, 2009). This can only be explained by acknowledging the complex contingencies and resulting uncertainties in the process of institutional change. Thus, I propose that a disruptive process of institutional change affects the type of uncertainty that is prevalent, i.e., the composition of uncertainty.

There are currently two predominant views on types of uncertainty in the IB literature. First, Simon (1955) established the concept of bounded rationality, which is reflected in North, p. 18 (2003, p. 18) as '[t]he incomplete information and limited mental capacity by which to process information'. This view is explicitly reflected in the internalization theory of MNE activity. Second, Knight (1921) famously suggested a difference between risk and uncertainty. A situation was affected by risk when the decision-maker had access to the probability distribution of possible future events. Contrary to this epistemological problem, uncertainty affects situations in which future states could not be classified and are thus unpredictable in the substantive sense, i.e., an issue of ontology (Langlois & Cosgel, 1993; Dunn, 2001)⁴⁸. This form of *radical uncertainty* was also discussed in North (2005) and taken up by Cantwell, Dunning & Lundan (2010) in the IB context.

Disruptive institutional change is argued to create situations in which social agents are exposed to higher degrees of radical uncertainty (Beckert, 1999; Blyth, 2002; Dequech, 2004). However, not all types of institutional change are generating radical uncertainty for MNEs. Gradual institutional change combined with a transparent process of policy-making would lead to significant degrees of predictability as to the outcome of reforms (Santangelo & Meyer, 2011). Hence, we must conceptualize the

⁴⁸ North (2005) refers to the source of Knightian uncertainty as the 'non-ergodicity' of complex social systems.

disruptiveness of the process of institutional change for which I propose three dimensions, namely intensity, volatility and persistency.

Intensity. As a first dimension I propose the concept of *intensity*. For instance, a reform of intellectual property rights might be a small reduction in the bureaucracy of filing a patent or a full-fledged reform of enforcement and litigation mechanisms. The latter reform has higher *intensity* referring to its more encompassing character, which is likely to generate uncertainty on behalf of investors. An investor who is faced with an intense institutional change will attempt to reduce the uncertainty of this change by acquiring new knowledge. The *intensity* will affect the amount of new information needed and its complexity so that an investor with limited mental capacities might consider acquiring additional knowledge as too expensive (Casson, 1999), increasing his perceived uncertainty.

Volatility. Rodrik (1991) suggested that policy reversals can have adverse effects on investment activity and examples of this were observed in some Latin American countries. Such reversals could be seen analogous to fluctuations around a trend. The dimension of *volatility* must be distinguished from *intensity*. Even in the absence of high intensity, a volatile institutional change process could put a significant burden on investors' expectations due to mixed signals about its direction and the reliability of the outcome.

Persistency. The *persistency* dimension reflects whether a reform process is dragging and ongoing instead of temporary contained. This dimension is special as its uncertainty emitting function is only activated in combination with either *intensity* or *volatility*. Persistence alone is also compatible with gradual institutional change which would not result in uncertainty that is likely to affect the capital commitment of foreign investors. Reforms that combine *volatility* or *intensity* with *persistency*, however, create environments in which previously acquired knowledge and experience ceases to be relevant. Hence, either high *intensity* or *volatility* seems to be a necessary factor for the composition of uncertainty to shift towards its radical kind. All three factors are displayed in context in *Figure 3.4*.

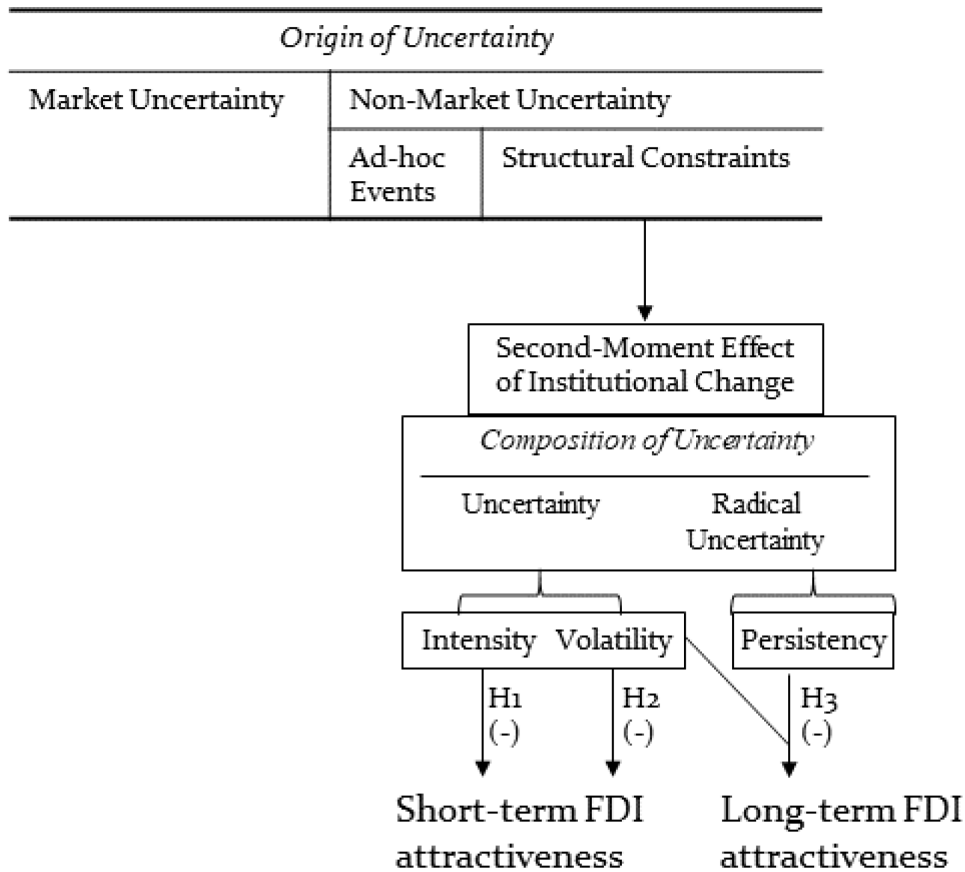


Figure 3.4: Conceptual Framework and Hypotheses (Essay 2).

Coming back to the theory of FDI, we must assume that investors are not only affected by the state of the institutional environment, but also by its rate of transformation. In cases of persistent institutional change, radical uncertainty makes it difficult to assess possible future contingencies or to develop expectations of future return. MNE investors are sensitive to these issues as FDI usually implies a degree of irreversibility and, therefore, investors are driven by long-term expectations (Jose & Campa, 1994; Dunning & Lundan, 2008b). Moreover, the MNE-specific capability of having multiple location alternatives, even when it comes to institutional environments, makes it more probable that foreign investors would react to environmental conditions by modifying their spatial capital allocation. This leads me to the following hypotheses, which are presented in context with the conceptual discussion in Figure 3.4.

Hypothesis 1: An increase in the intensity of institutional change will lead to lower FDI inflows over time.

Hypothesis 2: An increasing number of reversals of institutional change will lead to lower FDI inflows over time.

Hypothesis 3: Countries that persistently face high intensity of institutional change will, on average, receive lower FDI inflows compared to more stable countries.

3.2.4 Data and Operationalization

Our sample is comprised of 96 non-OECD countries with a population of more than a million. According to prior research, it may be problematic to run regressions on a too diverse set of countries (Blonigen & Wang, 2004) and according to our theoretical discussion, institutional change of the disruptive kind is most prevalent in developing countries. Hence, a sample of developing countries is used. The sample is an extended version of that used in Busse and Hefeker (2007)⁴⁹. The years covered by the data are 2004 to 2017. The average panel length is 13 years and total observations amount to 1244 and 96 for the cross-section (with slight variations due to data availability for the independent variables).

The dependent variable is annual FDI inflows in current dollars at time t for country j exported from the online statistics database of UNCTAD (2018). Some studies use alternative measures such as FDI inflows as a percentage of GDP or even per capita (Büthe & Milner, 2008); however, Li (2009b) argues that the GDP deflated FDI inflows do not represent investment volume, but rather the openness of the economy. FDI per capita seems to have no specific advantage over the FDI flow data except that it is argued to control for country size (Büthe & Milner, 2008). To avoid potential collinearity issues between population size and the market size control variable applied in this analysis, I have decided to use absolute FDI flows. This data

⁴⁹ The sample is comprised of the following countries: Albania; Algeria; Angola; Argentina; Armenia; Azerbaijan; Bahrain; Bangladesh; Benin; Bolivia; Bosnia and Herzegovina; Botswana; Brazil; Bulgaria; Burkina Faso; Burundi; Cameroon; Central African Republic; Chad; Chile; China; Colombia; Congo, Dem. Rep.; Congo, Rep.; Costa Rica; Cote d'Ivoire; Czech Republic; Dominican Republic; Ecuador; Egypt, Arab Rep.; El Salvador; Ethiopia; Gabon; Gambia, The; Ghana; Guatemala; Guinea; Guinea-Bissau; Haiti; Honduras; Hungary; India; Indonesia; Iran, Islamic Rep.; Jamaica; Jordan; Kazakhstan; Kenya; Korea, Rep.; Kyrgyz Republic; Lebanon; Lesotho; Madagascar; Malawi; Malaysia; Mali; Mexico; Mongolia; Morocco; Mozambique; Myanmar; Namibia; Nepal; Nicaragua; Niger; Nigeria; Oman; Pakistan; Panama; Papua New Guinea; Paraguay; Peru; Philippines; Poland; Romania; Russian Federation; Rwanda; Saudi Arabia; Senegal; Sierra Leone; Singapore; Slovak Republic; South Africa; Sri Lanka; Sudan; Tanzania; Thailand; Togo; Trinidad and Tobago; Tunisia; Turkey; Uganda; Uruguay; Venezuela, RB; Vietnam; Zambia; Zimbabwe.

was logarithmically transformed using a technique to retain negative values used in Busse and Hefeker (2007).

$$DV_{tj} = \ln(FDIflow_{tj} + \sqrt{(FDIflow_{tj}^2 + 1)})$$

The data for the dimensions of the institutional change process is drawn from the World Governance Indicators (WGI) database, which was already used in time-series analyses before, testifying to its adequacy in portraying intra- and inter-country comparisons. The WGI also covers both *de jure* and *de facto* information on institutions by combining objective measures with expert survey data. Secondary databases like the WGI have the advantage that they draw from a variety of data sources, arguably averaging out some of the individual errors of the primary collection methods. Nevertheless, the quantitative measuring of institutions remains difficult (Voigt, 2013, 2018) and some concerns have been raised about the validity of the data (for an overview, see Thomas, M. A., 2010). Even if these problems of data validity and accuracy are critical, there is currently no feasible remedy to these shortcomings. The careful choice of data and the formulation of tentative conclusions seems to be the only way to address these issues at present.

Conceptually, I decomposed institutional change into the dimensions of intensity, volatility and persistency. The *intensity* of institutional change is proxied by the absolute change of an institutional indicator from one time period to the next (Variable: INT_CHANGE). I use the subcomponents of regulatory quality, voice and accountability, rule of law and government efficiency to reflect the formal institutional or regulative environment. The components control of corruption and political violence are excluded as they do not refer to structural institutional conditions.

$$INT_CHANGE = |wgi_qual_t - wgi_qual_{t-1}|$$

where

$$wgi_qual_t = \frac{(regulatory\ quality + voice\ and\ accountability + rule\ of\ law + government\ efficiency)}{4}$$

To measure the *volatility* of institutional change, the simplest way would be to take the standard deviation. However, the variation around a mean would disregard the prevalence of reform reversal, i.e., a change of direction of the institutional indicator. Moreover, as the standard deviation must be calculated over a period of

observations, it cannot be accessed in the context of year-on-year panel-regression. Therefore, I generate a variable that represents the sum of sign-changes of the institutional indicator over a time period (Variable: VOL_CHANGE). For example, if regulatory quality improves over five years, there will be no volatility in the process. If, instead, regulatory quality improves two years, then worsens for two years and again improves for the last year, two sign changes will be reported as a time-variant dummy variable. There are more sophisticated ways to explore the variability of time-series data, e.g., by use of autoregressive moving average models and uncertainty measures in the style of information entropy. However, exploring these lies out of the scope of this paper and the limited time series makes it difficult to justify the usage of some of these methods.

Persistency cannot be captured directly in the form of an indicator. In order to see if intense and volatile institutional change has an impact on the long-term distribution of FDI between countries, I will use a cross-section regression that averages both independent and dependent variables over the time dimension (between-estimator). *Figure 3.5* plots this average of the INT_CHANGE variable over the observation period against the average FDI inflows. The size of rectangles reflects the institutional quality index based on the WGI data. While *Figure 3.5* seems to support the relevance of the proposed *intensity* measure, the variance around the trend is very high. This is not surprising in the context of cross-country comparisons using secondary institutional data, but also reminds us to interpret the results with caution. Moreover, institutional quality and the intensity of institutional change seem to be only slightly correlated in the long-run, again suggesting that the intensity of institutional change is an independent factor.

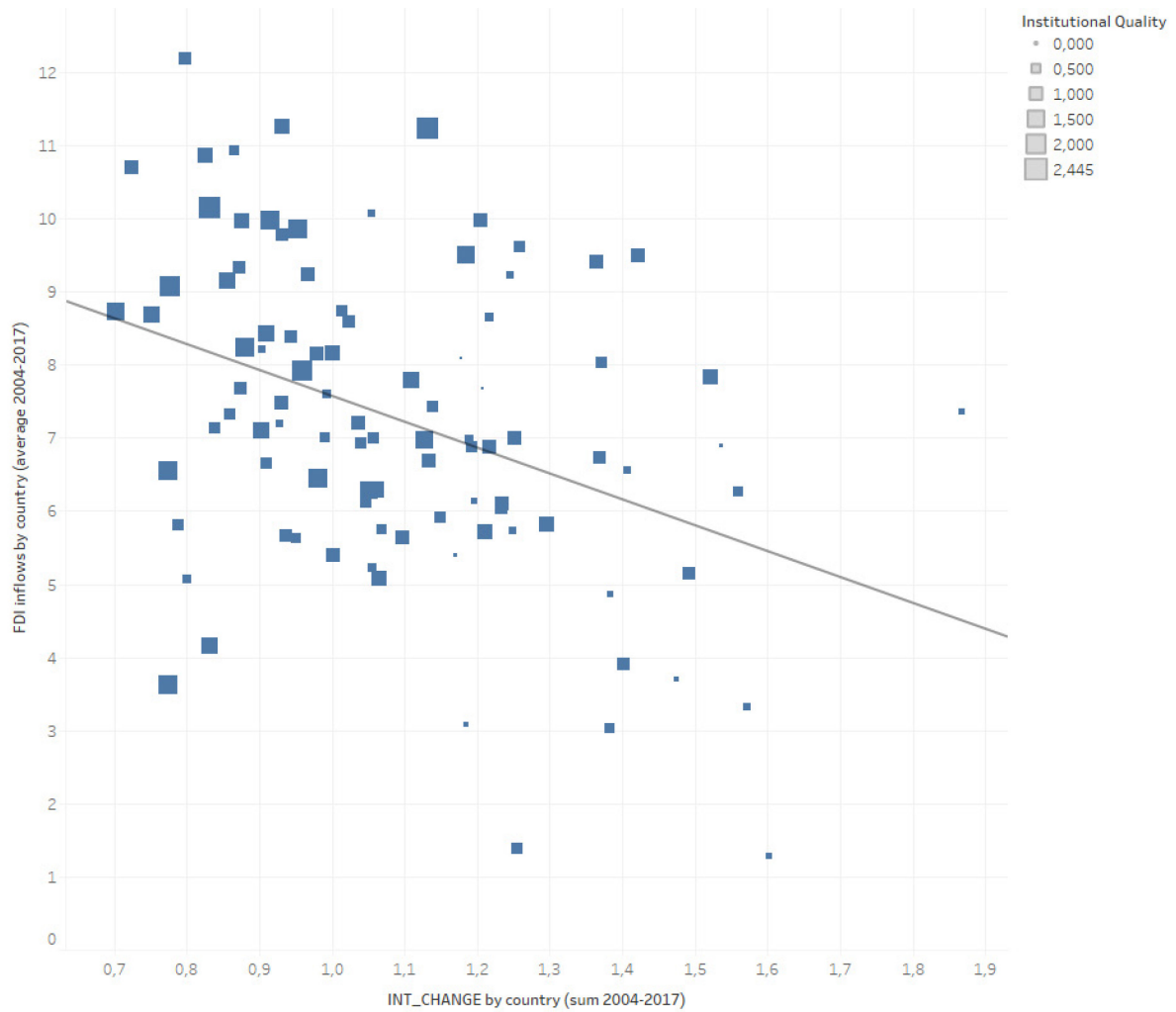


Figure 3.5: INT_CHANGE on the X-axis and FDI inflows averaged over country in 2004-2017 on the Y-axis. Line is a linear trend. The size of the rectangles represents a measure of institutional quality taken from the same WGI data.

The regressions control for several economic and socio-political factors. Market size is generally found to be a significant predictor of FDI. As market size is both a function of general economic development and the purchasing power of citizens, I use Gross Domestic Product per Capita in constant \$US (Variable: gdp_pc). As a proxy for macroeconomic uncertainty, I use the change of inflation rate based on the GDP deflator (Variable: inf_change). Other studies have used the nominal inflation rate, which may cause two issues⁵⁰. First, both extreme levels of inflation and moderate levels of deflation can be a serious problem for economic activity. Second, it is the volatility of the inflation rate which is of interest for foreign investors as it is the second-moment and not the first-moment that generates

⁵⁰ For instance, Busse and Hefeker (2007) had trouble finding significant results for the inflation rate predictor.

uncertainty on future price levels. For the structural model, the standard deviation of the inflation rate is used as a proxy for its volatility (Variable: *inf_vola*), which is not available in the panel model.

In terms of socio-political factors, I added a WGI index score as a control for institutional quality (Variable: *wgi_qual*), which is evidently important to assure that there are no spurious correlations between our institutional change variables and the dependent variable explained by other institutional effects. To avoid correlations with *INT_CHANGE*, the institutional quality index is based on the WGI rank data and the full six WGI dimensions are used. I also include an index capturing the static component of institutional constraints as it was used in previous studies to represent non-market uncertainty. This variable is taken from the Polity IV database and represents the strength of political veto players in a country (Variable: *pol_con*). Further individual country effects are captured by the fixed-effects regression. Control variables were chosen beforehand and the specification is kept parsimonious to avoid unnecessary assumptions (Aguinis, Ramani & Alabduljader, 2018).

The correlation matrix in *Table 3.2* shows no worryingly high values for the independent variables. The strongest correlation is found between GDP per capita and institutional quality, suggesting that these two variables may be collinear. However, the correlation is not above 0.6 and the sample used here is large enough to compensate for this. Using the cross-section of this data, the variance inflation factor scores stay below 2.8, which is not indicative of problematic multicollinearity.

Table 3.2: Correlation Matrix (Essay 2).

	Mean	SD	1	2	3	4	5	6
<i>FDI inflow</i>	7.26	3.03	1					
<i>INT_CHANGE</i>	2.31	0.60	-0.17	1				
<i>VOL_CHANGE</i>	3.63	2.36	0.07	-0.19	1			
<i>gdp_pc</i>	7.87	1.25	0.38	-0.13	0.11	1		
<i>inf_change</i>	-0.04	2.08	-0.02	0.02	-0.08	-0.02	1	
<i>pol_con</i>	0.24	0.15	0.04	-0.09	0.04	0.01	-0.03	1
<i>wgi_qual</i>	3.46	0.65	0.25	-0.15	0.03	0.58	0.02	0.26

All correlation coefficients >0.06 are significant at the 1% level.

3.2.5 Methods

I evaluate the hypotheses using two regression models. Following the theoretical discussion, hypothesis 1 and 2 are referring to the effect of a change in the intensity or volatility of institutional change on the attractiveness of FDI in time. The variation of interest is, thus, within countries. As pooled OLS is biased in this case, I will use a fixed-effects model based on the outcome of a Hausman test. The fixed-effects estimator is the most fitting method as it controls for country-specific heterogeneity. I have tested for stationarity and underlying trends even if this is not likely to be a problem in a short panel⁵¹ (Kao, 1999). The resulting panel structure is unbalanced.

Hypothesis 2 concerns the effect of intense and volatile institutional change as a predictor for average FDI inflow between countries. I follow Busse and Hefeker (2007) as well as Godoy and Stiglitz (2006) by applying an OLS model with average values for each country over the full observation period. This estimator retains the country separation but has several downsides as described in Busse and Hefeker (2007), the most relevant of which being that it eliminates the time component of the analysis. However, as the fixed-effects model excludes between-country variation, it is not suited to detect structural differences, which is why I present the OLS with the caveat that the estimates should only be viewed in connection with the previously conducted fixed-effects regression. I decided to use standard errors

⁵¹ The Im-Pesaran-Shin test was used on the unbalanced panel data, indicating stationarity.

robust to both heteroskedasticity and autocorrelation for both models (Arellano, 1987).

3.2.6 Results and Discussion

Regression 1 tests H1 and H2. There are three separate estimations with year and country fixed-effects (unreported). *Table 3.3* shows the baseline model (1), the model including the INT_CHANGE variable (2) and the full model with the added VOL_CHANGE variable (3).

Table 3.3: Estimation results for fixed-effects regression (Essay 2)

	(1) Baseline	(2) H1	(3) H2
INT_CHANGE		-0.338*** (0.115)	-0.333*** (0.117)
VOL_CHANGE			-0.087 (0.178)
gdp_pc	1.510 (0.969)	1.610* (0.935)	0.730*** (0.177)
inf_change	-0.016 (0.026)	-0.013 (0.026)	-0.015 (0.027)
pol_con	0.451 (0.822)	0.446 (0.794)	0.451 (0.716)
wgi_qual	1.192** (0.547)	1.160** (0.576)	0.648** (0.311)
Constant	-9.084 (6.863)	-10.515 (6.689)	-1.199 (1.324)
Year Dummies	Yes	Yes	Yes
Observations	1,244	1,244	1,244
Cluster	96	96	96
Adj. R-squared	+0.0152	+0.0179	-0.01

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

The year and country fixed-effects explain 46.5% (adjusted R-squared) of the variation with the baseline model improving adjusted R-squared by 1.52%. For comparison, the FDI model in Büthe & Milner (2008) explains 39.2% of the variance in FDI with fixed-effects and the baseline model added 2.3%. The limited model fit is often observed in panel regressions and, especially, using country samples. All signs of the control variables are as expected so I assume no fundamental specification errors. Institutional quality (wgi_qual) is positive and significant at the p<0.05 level. The market size control, gdp_pc, is significant at the p<0.1 level except

in the baseline model. The *inf_change* estimate is not significant but shows a negative sign. The *pol_con* variable representing political constraints remains also insignificant.

Regression 2 is a cross-section regression, which is why all year dummies are dropped. As the *VOL_CHANGE* estimate was insignificant in the fixed-effects model, I exclude it from further analysis. I progress sequentially as above and include another model that excludes the *gdp_pc* control. This was done as a response to a surprising result for the *wgi_qual* estimate, as discussed in the following. Moreover, I replace the *inf_change* with the *inf_vola* variable, which is the standard deviation of the inflation rate. The results are presented in Table 3.4.

Table 3.4: Cross-section regression (Essay 2).

	(1) Baseline	(2) H2	(3) H2 (<i>gdp_pc</i>)
<i>INT_CHANGE</i>		-2.910** (1.164)	-3.423*** (1.271)
<i>gdp_pc</i>	1.140*** (0.229)	1.056*** (0.208)	
<i>inf_vola</i>	-1.049*** (0.339)	-1.040*** (0.332)	-0.707* (0.369)
<i>pol_con</i>	-0.525 (1.892)	-1.321 (1.938)	-2.960 (2.091)
<i>wgi_qual</i>	-0.645 (0.567)	-0.895 (0.558)	0.788* (0.437)
Constant	-0.747 (2.107)	-7.943** (3.353)	-0.338 (3.410)
Observations	96	96	97
R-squared	0.376	0.431	0.237

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

In terms of the controls, model (2) suggests that average institutional quality is an insignificant predictor for average FDI inflows in the comparison between countries over time. This is a very unintuitive result. However, given the correlation between *gdp_pc* and *wgi_qual*, it is likely that their structural effects are strongly correlated and, thus, lead to collinearity issues. Model (3) drops the *gdp_pc* variable and the *wgi_qual* estimate turns significant, which confirms that the negative insignificant estimate of *wgi_qual* in model (2) is a statistical distortion and no substantive finding. The volatility of the inflation rate is highly significant with the expected sign

and `gdp_pc` is also highly significant in model (2), retaining its positive sign. Finally, the `pol_con` coefficient remains insignificant.

Robustness of results. As a first robustness test, I ran bivariate regressions with the independent variables. This was done to ensure that there are no problematic interactions between the variables used. The results remained qualitatively unchanged. In a second step, I ran all regressions with an alternative measure of institutional quality derived from the data provided by the Fraser Institute, as well as with a crisis dummy for 2007 and 2008 respectively. Both had no qualitative effect on the estimate. Third, I generated a similar institutional change index from the Fraser Institute data and compared it to the `INT_CHANGE` variable. The results are displayed in Appendix A. Evidently, there is a large margin of error, which raises some concerns in relation to the accuracy of the `INT_CHANGE` variable. The correlation between the institutional quality indices of these two databases is high (>0.8), while the correlation of the absolute changes over time is far lower (0.41)⁵². Running regression 1 with this alternative measure of institutional change results in the same sign but an insignificant estimate. Hence, I must further stress the potential inaccuracies of the estimations provided in this paper.

Using the original variables, I also tried to split the sample to see if this influences the results. There are no qualitative changes to the independent variable when using the original sample of Busse and Hefeker (2007). In addition, I ran regressions by region and income class (as determined by the World Bank). The limited observations per sample, specifically for the more fine-grained region samples, give no reliable results. By dropping the year fixed-effects, using non-corrected standard errors and the coarser income group sampling, the degrees of freedom improve enough to get interpretable estimate. However, the actions taken strongly decrease their reliability. From these additional regressions in Appendix A, I carefully conclude that there are no qualitative differences in terms of the `INT_CHANGE` variable. As could be expected, the variable is insignificant for those developing countries classified as high income. These results also show that the sign of the

⁵² The correlation coefficient is 0.41 at $P < 0.01$. Spearman rank correlation is 0.44. The low correlation likely results from a combination of the different foci of the two measures and imprecisions due to measurement error as well as variation in subjective data.

VOL_CHANGE variable seems to be context dependent. Unfortunately, due to the limitations of regression analysis this contention cannot be further explored.

Discussion. The results presented here lend some support to the argument that the second-moment effects of institutional change are relevant for the location of FDIs alongside the first-moment effect of institutional quality. Hypothesis 1, which argued that a country with increasing intensity of institutional change receives lower FDI inflows was supported. Hypothesis 2 was rejected, which suggests that an increase in the volatility of the institutional change process does not influence FDI attractiveness. One likely explanation is that intensity is a necessary condition for disruptions to be strong enough to deter foreign investors by shifting the composition of uncertainty towards radical uncertainty.

In order to explore if there is a long-term impact of persistent and intense institutional change, I presented a cross-country comparison model. Hypothesis 3 was accepted, which supports the idea that the persistence of intense institutional change, i.e., a high average intensity over time, would have a negative effect on average FDI flows as compared to more stable countries. This finding further strengthens my theoretical argument that intensity is a crucial dimension necessary for the generation of radical uncertainties.

To summarize, the results are in line with the previously reviewed literature on the effect of uncertainty on FDI. The main additional insight provided by the empirical models is that the first- and second-moment effects of institutional change should be separated in order to complement existing empirical evidence, especially in the case of institutional location factors. The estimate for INT_CHANGE proved to be robust to changes in specification. At the same time, I discovered some critical limitations which are summarized in the conclusion.

3.2.7 Conclusion

Most extant FDI research that links uncertainty with institutions focuses on their nature as static constraints. Notwithstanding the valuable contributions that arose from this analytical perspective, the process of institutional change has been partly neglected. By reviewing relevant parts of the FDI-uncertainty literature, I suggested that extant research focused mainly on first-moment effects, even though a more dynamic perspective could hold important insights, e.g., in the context of deviating findings on the effect of democracy on FDI attractiveness. I structured this argument

into a two-by-two table and positioned this study in the lower right corner, reflecting my focus on the characteristics of the process of institutional change in relation to uncertainty.

In Section 3.2.3, I discussed the theoretical and conceptual implications resulting from a focus on the process of institutional change. Three arguments were developed here: First, separating theoretically between the different origins of uncertainty is important in order to highlight that social agents are unlikely to anticipate disruptions of institutional environments, possibly leading to stronger reactions. Second, the characteristics of the institutional change process is likely to affect the composition of uncertainty. In a world of ubiquitous uncertainty, it is not the existence of uncertainty *per se* but its form that matters. I argued that the degree of radical uncertainty is increased when institutional change is intense, volatile and, specifically, when these conditions persist through time. Considering that FDI is an investment representing a bundle of resources intended to generate long-term returns, the unpredictability generated by radical uncertainty may lead to a loss of confidence in expectations on behalf of foreign investors. Third, extant theory in the form of the EP can readily integrate these points. Nevertheless, the focus on the comparative statics of North (1990, 2005), who developed the institutional foundations of the EP, also stresses the need to explore alternative theories of institutions (Jackson & Deeg, 2008).

Section 3.2.3 also developed three hypotheses on the negative effect of the intensity, volatility and persistency of institutional change on FDI inflows explained by increasing uncertainty. These hypotheses were tested in Section 3.2.6. The results supported the overarching argument developed in this paper: the intensity and persistence of institutional changes has a negative effect on the FDI attractiveness of a location, and so the process of institutional change matters alongside its outcome. However, the volatility of institutional change was found to be irrelevant for FDI attractiveness. The regressions presented in this paper were set up to highlight the effect of the intensity of institutional change on a country's FDI inflows from two vantage points, one centered on the changes of intensity and volatility within countries and the other on the effect of intense and persistent institutional change on structural differences in FDI attractiveness between countries. The results indicated that an increasing intensity of institutional change of a host country relative to its average intensity of institutional change negatively influences the

attractiveness for FDI. In addition, countries with a higher average intensity of institutional change over the 13-year observation period attract lower average FDI inflows. This means that the intensity of institutional change, even if dynamic itself, could be a structural phenomenon when comparing countries. Indeed, there is evidence of institutional path-dependency as countries or regions tend to reproduce unstable institutional environments over time. Unfortunately, I was unable to explore this possibility due to data limitations.

The paper identifies some critical limitations of analyzing institutional change as a process. I want to briefly address two points. The first limitation concerns issues of data availability and representativeness. I have already mentioned that the available time span of the WGI data is not long enough to employ more sophisticated statistical techniques. Moreover, the limited sample size makes it difficult to apply any subsampling to explore, e.g., regional effects. By having constructed a second measure of the intensity of institutional change from a different data source, I found a positive but limited correlation between the two. This suggests that the representativeness of these institutional databases must not only be examined at a point in time, but according to their co-variation over time. Finally, there are measurement problems associated with using FDI data. Even if there is evidence that FDI approximates the productive economic activities of MNEs, it still comprises multiple flows (equity, reinvested earnings and intra-company loans) that may respond differently to institutional disruptions. The second limitation is that the methodology followed here does not allow for a more in-depth analysis of the proposed differences between the origins and composition of uncertainty. For example, I have argued that the intensity of institutional change is a necessary factor for uncertainty to arise, but I was not able to determine at which point a potential investor-specific effect would turn into a more general effect of radical uncertainty that depresses FDI regardless of the capabilities of investors. Here, further firm-level research with primary data collection will be necessary.

Given that the evidence on the theoretical argument developed here must be treated with caution, I refrain from any detailed policy suggestions. Nevertheless, there are some implications for policy-makers in developing countries that result from the theoretical discussion. It is well accepted that MNEs are often influential politically, be it through lobbying or indirectly through government dependency on FDI. In this context, the paper suggests a degree of contradiction between the political demands

of MNEs, especially in developing economies, and the resulting investment dynamics. Even if MNEs collectively push for munificent reforms, it may well be that they withhold further investments as a response to an increase in the intensity of institutional change. This could postpone the benefits expected on behalf of government officials. Being faced with seemingly unsatisfying results of the initial reform, politicians may be driven to commit to further institutional changes or to revert previous ones. The result is a vicious rather than virtuous spiral of reform programs.

Hence, being unprepared for the possibility that a reform is not likely to yield immediate benefits due to an initial shock on the expectations of foreign investors could contribute to chaotic reform processes as observed in parts of Latin America (Levitsky & Murillo, 2013b). Policy makers must be aware that institutional changes can often only be judged over longer time frames. This adds an important caveat to the adaptive efficiency idea (North, 2005), namely that governments must find the right balance between changes in some areas of the institutional environment and stability in others. Even if the intention behind full-fledged reforms might be a signal of change to foreign investors, this paper raises some doubts about such strategies.

This paper also contributes insights to existing conundrums in IB research. For example, in a firm-level study, Kafouros & Aliyev (2016) found that institutional development increased the profitability of domestic firms over that of foreign firms. The conundrum is that institutional reforms in these environments were often directly aimed at foreign investors and studies in other environments have found reforms to be more advantageous for foreign enterprises compared to domestic firms (Cuervo-Cazurra & Dau, 2009). With my results in mind, the intensity of institutional change could be a moderating force. However, to be able to assess such firm-level impacts there is need for further conceptual and empirical work.

In the context of future research, data exploration exercises are needed to determine how we can better measure processes of institutional change, and what other proxies may prove to be more useful than databases on institutional quality. Second, while it would be interesting to extend the macro-approach of this paper, firm-level studies are needed to assess the complexity of the relationships proposed here. For example, firm-level studies could explore the effect of institutional change on realized investments such as MNE subsidiaries. Here, more work needs to be done

in, e.g., examining the difference between ex-ante uncertainty effects and those related to ex-post (operational) adjustment costs (Santangelo & Meyer, 2011). Third, I discussed the possible contradiction between MNEs lobbying for institutional change and the effect on FDI. Here, a very interesting question could be whether MNEs that take part in the policy formation process are less prone to the second-moment effects I have identified.

3.2.8 References

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3.2.9 Appendix

The following tables contain an additional set of robustness checks for Essay 2 including a brief explanation for each.

Table 1: Additional panel regression output using untransformed values and a minimal specification. Results were qualitatively unchanged.

	(1)	(3)	(4)
INT_CHANGE	-9,473.321*** (2,798.698)	-4,421.480* (2,579.196)	-4,369.172* (2,586.857)
wgi_qal	3,816.979*** (1,025.952)		1,603.569 (1,001.133)
gdp_pc		2.360*** (0.270)	2.338*** (0.271)
Constant	7,686.309*** (511.163)	-6,814.822*** (1,520.555)	-6,066.188*** (1,630.320)
Observations	1,352	1,339	1,339
R-squared	0.71	0.79	0.79

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 2: Panel regression result from a robustness check using an alternative institutional indicator taken from the Fraser Institute Economic Freedom data (Regulation indicator: INT_CH_FI). As noted in the essay, the results were not reproducible for the panel dataset. The sample is smaller due to a slightly lower coverage of the source data.

Panel Estimator)	(FE
INT_CH_FI	-0.528 (1.148)
gdp_pc	2.516*** (0.966)
Inf_change	-0.007 (0.039)
wgi_qual	1.124** (0.517)
pol_con	0.647 (0.685)
Constant	-16.758** (7.179)
Observations	1,091
R-squared	0.535

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

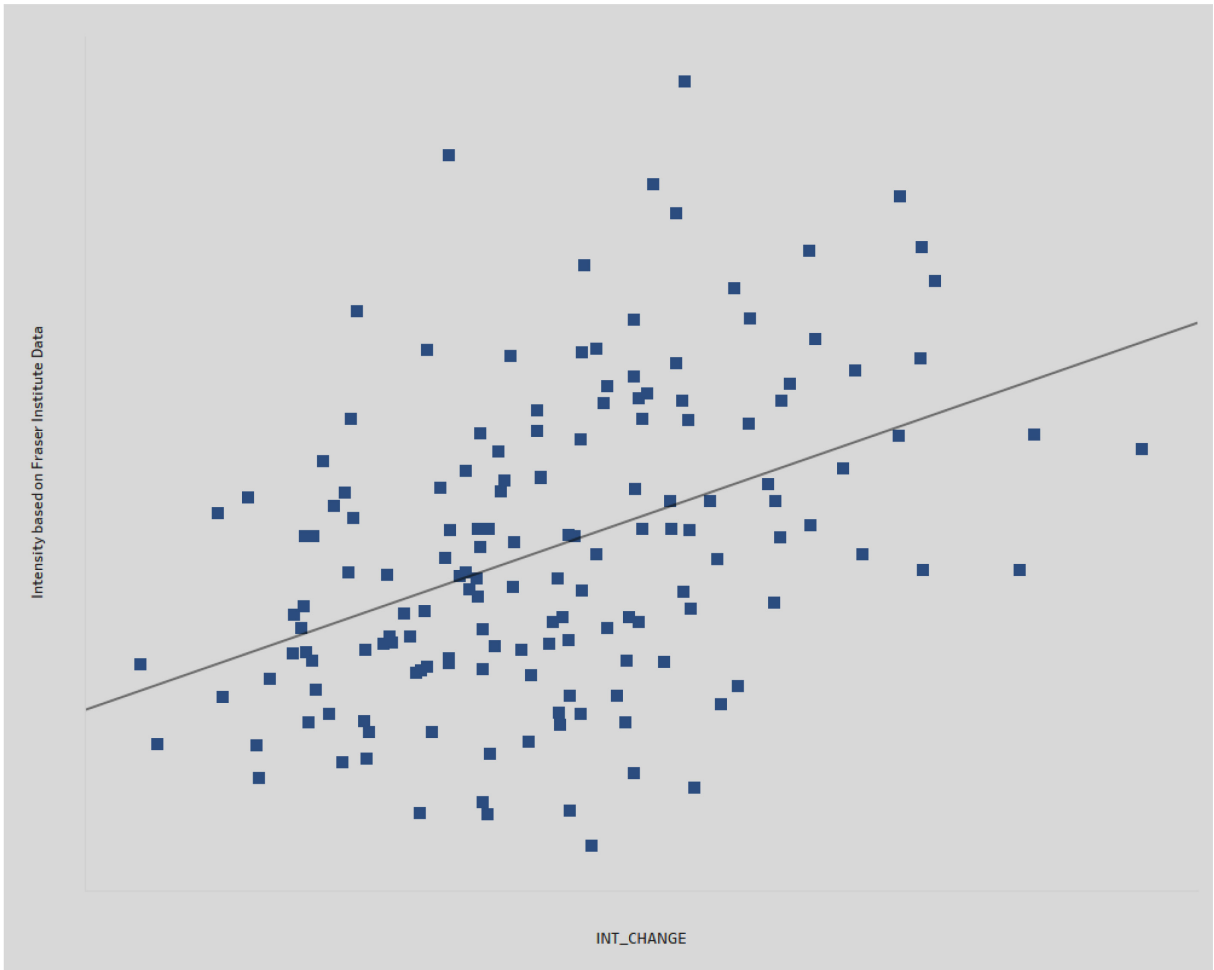
Table 3: The cross-section regression allowed a limited reproduction of the results with the alternative Fraser Institute data (INT_CH_FI). The limitation mainly stems from the large standard error of the coefficient which is speculated to be a result of the inaccuracies of the data and, in that context, a relatively small sample.

Cross-section	
INT_CH_FI	-2.585* (1.394)
wgi_qual	0.852** (0.395)
Inf_vola	-0.660* (0.383)
pol_con	-2.059 (2.167)
Constant	7.128*** (1.911)
Observations	96
R-squared	0.203

Robust standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

Table 4: Pairwise correlation matrix of the transformed dependent variable, the original independent variable INT_CHANGE, and the alternative measure from the Fraser Institute data.

	FDI_Flow	INT_CH_FI
FDI_Flow		
INT_CH_FI	-0.2686	
INT_CHANGE	-0.3453	0.4142



INT_CHANGE on the X-axis plotted against a similarly constructed index from the Fraser Institute data on the Y-axis.

Table 5: The following regression does not estimate year fixed-effects and uses untransformed standard errors. Thus, it should not be interpreted substantially, but only be used as a general test for the robustness of the results.

VARIABLES	(1) High Income	(2) Upper Middle Income	(3) Lower Middle Income	(4) Low Income
INT_CHANGE	-0.703 (0.622)	-0.334** (0.167)	-0.399** (0.175)	-0.447*** (0.165)
VOL_CHANGE	-0.543** (0.235)	-0.023 (0.072)	-0.003 (0.080)	0.180*** (0.065)
gdp_pc	-1.051 (5.010)	1.366 (1.071)	1.475 (1.172)	2.810** (1.120)
inf_change	0.129 (0.158)	0.073 (0.047)	-0.110** (0.047)	-0.042 (0.043)
pol_con	-2.395 (6.720)	1.674 (1.077)	-0.395 (1.042)	-0.189 (0.896)
wgi_qual	20.568** (8.091)	2.103* (1.091)	0.464 (0.698)	1.019* (0.529)
Constant	-67.844 (48.936)	-12.530 (9.002)	-6.267 (8.136)	-17.054*** (6.403)
Observations	154	388	403	299
Adj. R-squared	0.33	0.46	0.44	0.53
Number of Countries	12	30	31	23

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

3.3 Essay 3: Institutional Configurations of FDI Attraction in Post-Transition Economies: The Roles of Commonality, Diversity and Stability

Abstract

How can the Varieties of Capitalism (VoC) literature contribute to our understanding of FDI attraction in the post-transition context? This paper aims to show that the focus of transaction cost economics on the importance of universal core institutions, e.g., strong property rights, for FDI attraction can be complemented by the VoC scholars' take on institutional diversity. Drawing on prior research in the VoC tradition, I apply a fuzzy-set qualitative comparative analysis (QCA) to a dataset of post-transition economies and find evidence for both core institutions and diversity. Moreover, I present support for the VoC-based argument that institutional volatility undermines institutional complementarity and thus reduces FDI attraction. There are also some interesting findings on the interplay between welfare institutions and FDI, which are further discussed.

3.3.1 Introduction

The context of economic transition in Central Eastern Europe and the Baltics (CEEB), as well as in the commonwealth of independent states (CIS), has stimulated research in International Business (IB) and beyond (Meyer & Peng, 2005). One of the interesting peculiarities of this context was the radical restructuring of national institutional environments towards a liberal market economy (Martin, 2013). Now, almost 30 years after the first undertakings of transition, it seems appropriate to refer to a post-transition context. However, this paper argues that it is a mistake to assume that the end of transition has brought a halt to institutional changes. Instead, CEEB and CIS economies have recently drawn the attention of scholars due to the ongoing development of distinct institutional configurations of capitalism. The question asked here is whether these changes and the resulting systems of institutions continue to affect the foreign direct investment (FDI) attractiveness of post-transition countries.

This paper builds on two specific findings from the transition literature and explores them in the context of FDI attractiveness. The first finding is the forming of distinct varieties of capitalism in the CEEB and CIS countries (Bohle & Greskovits, 2012; Drahokoupil & Myant, 2015). Research on the varieties of capitalism (VoC) is gaining popularity in the field of IB, raising the question of whether the exploration of *institutional configurations* can complement extant studies focusing on *individual institutional effects* (Jackson, Gregory & Deeg, 2008; Pajunen, 2008; Allen, M. M. & Aldred, 2011; Witt & Jackson, 2016). The second finding concerns the empirical evidence that the speed and intensity of institutional transition had an effect on outcomes such as economic growth (Heybey & Murrell, 1999; Godoy & Stiglitz, 2007), foreign direct investment attraction (Brunetti, Kisunko & Weder, 1997) and organizational restructuring (Newman, 2000). In the post-transition context, this finding raises the question if unstable national institutional environments remain less attractive to FDI, and how this relates to the theory of the VoC.

These questions are of high significance as FDI is an integral part of the development strategies of post-transition economies (Dunning, 2004; Pavlínek, 2004). Governments in these economies have tried to attract FDI to benefit from linkages and potential spillovers such as the creation of employment or the transfer of new technologies (Javorcik, 2004). With the dawn of the post-transition stage, some of these countries even rely on FDI as their primary source for investment financing

(Nölke & Vliegenthart, 2009). For these reasons, the question of which institutional factors attract the activity of MNEs in the transition context remains relevant (Wright, Filatotchev, Hoskisson & Peng, 2005; Gelbuda, Meyer & Delios, 2008).

In IB, this question is usually approached by discussing the role of transaction or information costs. Building on North (1990) and Williamson (1975), efficient institutions are seen to reduce uncertainty in market interactions thus reducing the costs of economic exchange. IB theories integrate this basic concept into the theory of the MNE, highlighting that institutions affect external transaction costs, organization costs within the MNE and, thereby, the location of value-added activities (Dunning & Lundan, 2008). The consensus is that transaction-cost reducing institutions will increase the attractiveness of an investment location.

The transaction cost economics (TCE) strand sees institutions as independent enforcement mechanisms whose isolated presence or absence will universally affect FDI flows (Bevan, A., Estrin & Meyer, 2004; Daude & Stein, 2007). This also implies that there is a common ideal-type of institutions for achieving economic performance and, hence, countries should converge on institutions of good governance. Such a view contrasts with the prediction of persistent diversity of the VoC. Moreover, by studying institutional configurations in the context of FDI attractiveness, Pajunen (2008) argued that institutions are interrelated and, hence, the analysis of institutional efficiency should rather be based on systems of institutions or configurations. Pajunen (2008) was able to empirically support his position using Qualitative Comparative Analysis (QCA), a method that can display data patterns between an outcome and multiple configurations of explanatory conditions (see Ragin, 2009). This capacity makes the method particularly suitable for institutional theories that build on an interdependent view of institutions, such as the Varieties of Capitalism approach (Jackson, G. & Deeg, 2012; Witt & Jackson, 2016).

The first tentative⁵³ proposition of this paper is that the study of institutional configurations can help us to understand the interrelationship between TCE's focus on commonalities and VoC's focus on diversity. I draw significantly from the work

⁵³ The method used in this paper is of an inductive nature. Its strengths lie in the discovery of empirical patterns that may yield more detailed propositions for further research. Nevertheless, it is possible, and advisable, to have a previous theoretical conceptualization of the potential mechanisms involved. These tentative propositions are what Schneider, C. Q. & Wagemann (2012) call 'theory-based hunches'.

of Nölke & Vliegenthart (2009) who propose a specific form of post-transition capitalism, namely the dependent market economy (DME), that strongly builds on the attraction of FDI. The argument proposed here is that some of the institutions of the DME might act as common foundations for FDI attraction (core institutions), while others are related to the specific type of comparative advantage of a country and lead to diversity.

The second tentative proposition is that the identified institutional configurations generate positive institutional complementarities only when they remain relatively stable. In other words, the volatility of institutional configurations is theorized to have a negative impact on FDI attractiveness due to both uncertainties on behalf of investors and a possible worsening of institutional performance due to a loss of institutional complementarities.

The empirical part of the paper aims to support and extend these propositions using QCA which enables researchers to utilize quantitative data without prior assumptions of variable independence or linearity. It also opens up the possibility to uncover multiple equally relevant empirical combinations that are necessary and/or sufficient for the outcome. Thus, QCA is one of the few methods capable of acknowledging equifinality by allowing the presence or absence of an outcome to be explained by different models, whereas regression methodology is restricted to a single model at a time (Misangyi et al., 2017). The inductive approach of QCA and the possibility of multiple solutions makes it difficult, though not entirely impossible, to use QCA in hypothesis-testing (Schneider, C. Q. & Wagemann, 2012). In this paper, I treat my findings as empirical regularities rather than causalities, and discuss their implications for further research. Finally, a crucial step in the process of QCA is to support the algorithm with theoretically grounded expectations of the outcome-condition relationship. I formulate these expectations using the framework provided by Nölke and Vliegenthart (2009).

The paper proceeds in the following way. First, I will introduce the VoC approach, focusing on the interplay between institutional diversity and commonality. Second, I review VoC contributions in the (post-)transition context and focus on Nölke & Vliegenthart (2009) who introduced the institutional configuration of the Dependent Market Economy (DME). This configuration is argued to generate a comparative institutional advantage for the assembly of moderately complex

consumer goods by multinational enterprises (MNEs). In relation to this I explain the relevance of institutional dynamism. In the process, five expectations are formulated that guide the empirical analysis. Fourth, the method of QCA is introduced and I explore my tentative propositions by using data on FDI flows and institutions in the post-transition context from 2008 onwards. The paper ends with a short discussion including exemplary cases and a concluding section.

3.3.2 Varieties of Capitalism in (Post-)Transition Countries

The goal of the VoC literature is to explain the stability of systemic differences between political economies. Even if the field can be seen as a coherent body of institutional research, a number of different takes on the VOC can be identified (Hall & Soskice, 2001; Amable, 2003; Coates, 2005). Hall & Soskice (2001) provide the most parsimonious and popular alternative. The central argument of their theory is that the political economies of Western developed capitalism represent one of two distinct institutional configurations: The Liberal Market Economy (LME) and the Coordinated Market Economy (CME).

These two institutional configurations are argued to be stable over time. The reason for their equilibrium tendency is the institutional complementarity that arises between particular institutional manifestations (Amable, 2000). For example, the institutional support of radical innovation in LMEs is likely to generate synergies with more flexible labor markets and investments in switchable (multi-use) assets (Hall & Soskice, 2001). These synergies define the comparative institutional advantages of an economy. If an economy is close to one of the ideal types, its established comparative institutional advantages will generate a lock-in effect. Path-dependency is then supposed to assure that institutional change is reinforcing the existing institutional system.

One of the weaknesses of the VoC is its focus on developed economies, which makes the application of this framework difficult in the context of the global economy (see Witt et al., 2017). While the general opposition between market-liberalism and market-coordination remains a powerful dimension, it simply cannot account for all intricacies of the developing world (Witt & Redding, 2013). It is for this reason that several VoC scholars have set out to extend the established taxonomy to include non-Western and non-developed countries. The post-transition economies of CEEB

and CIS have been of particular interest (Lane, D. S. & Myant, 2007; Bohle & Greskovits, 2012; Martin, 2013).

In the transition context, Bohle & Greskovits (2012) identify three forms of capitalist institutional variety: a neoliberal type in the Baltics, an embedded neoliberal type in the Visegrád states and a neocorporatist type in Slovenia. The neoliberal variety refers to the implementation of pro-market reforms, low social compensation for the losers of such reforms and strict fiscal stability up to the point of austerity measures. Bohle & Greskovits (2007a) provide evidence that the Baltic countries represent the neoliberal model closer than the Visegrád countries. The latter economies are equally driven by free-market principles but established a comprehensive redistribution system and overall stronger welfare state. Slovenia is treated as a special case due to the prevalent labor-capital co-determination of economic and industrial policies which puts this economic model closer to the CME type (Bohle & Greskovits, 2007b).

In addition, Cernat (2006), in line with Bohle and Greskovits (2012), proposes the so-called 'cocktail capitalism' in reference to a mixture of the other three types for the case of Bulgaria and Romania. Focusing more on the role of FDI in transition economies, Nölke and Vliegenhart (2009) have proposed that the Visegrád countries command a comparative institutional advantage 'in the assembly and production of relatively complex and durable consumer goods' (p. 672). They call this variety dependent market economy (DME) and I shall return to it shortly.

In the light of this search for institutional diversity, it seems of relevance to explore how the VoC view relates to the perspective of TCE centered on institutional convergence. On the one hand, the VoC replaces TCE's focus on transaction costs with the relevance of non-market institutions, such as labor market regulations, and analyzes these from a systemic perspective. At the same time, the VoC view is not diametrically opposed to a notion of core institutions that act as crucial building blocks for global competitive economies.

For instance, Streeck (2011) argues that varieties of capitalism are really variegations of the underlying dynamics of capitalism. Thus, institutional environments of countries cannot be treated as independent trajectories in a globalized economy. For example, Streeck (2011) points out that two systems of capitalism can stay relatively diverse, but, at the same time, move in a common direction. This position resonates

with the research of Rodrik (1997, 2018) who argues that the increasing interconnectedness of the global economy generates common economic pressures that affect the political spheres of countries and their institutions in similar ways.

Paying attention to these tensions between diversity and commonality of institutional trajectories allows a closer integration of the TCE approach prevalent in IB and the VoC. The former views institutions as individual building blocks for an efficient market economy. For example, functioning property rights institutions or anti-corruption laws constrain individual behavior, i.e., opportunistically biased behavior, and, thereby, generate more efficient markets that stimulate economic activity (e.g., North, 1990). Hence, economic pressures should cause convergence of institutions across countries.⁵⁴ It should be noted, however, that this view came under criticism as it focuses too much on the lessons learned from already developed economies (Chang, 2011). For example, most of the institutions relevant to the TCE are related to market efficiency and preservation, but developing countries often require market-creating institutions (Rodrik, 2003).

I would argue that the two concepts of commonality and diversity need not be mutually exclusive. While the success of developing countries may not be attributed to a convergence to TCE-type institutions, and thus overall commonality, research has identified commonalities in the institutional environments of developmental states (Nölke, ten Brink, Claar & May, 2015). Therefore, leaving all other (significant) differences between the VoC and the TCE view aside (see, e.g., Allen, M., 2004), there is some common ground when acknowledging that the diversity identified by the VoC encapsulates significant institutional commonalities of interconnected local economies that may themselves differ according to broader contexts, such as the level of economic development.

⁵⁴ The VoC's concept of comparative institutional advantage could be seen as a response to the TCE view that there are institutions that confer an absolute institutional advantage in all cases (see, Hall and Soskice, 2001, p. 38).

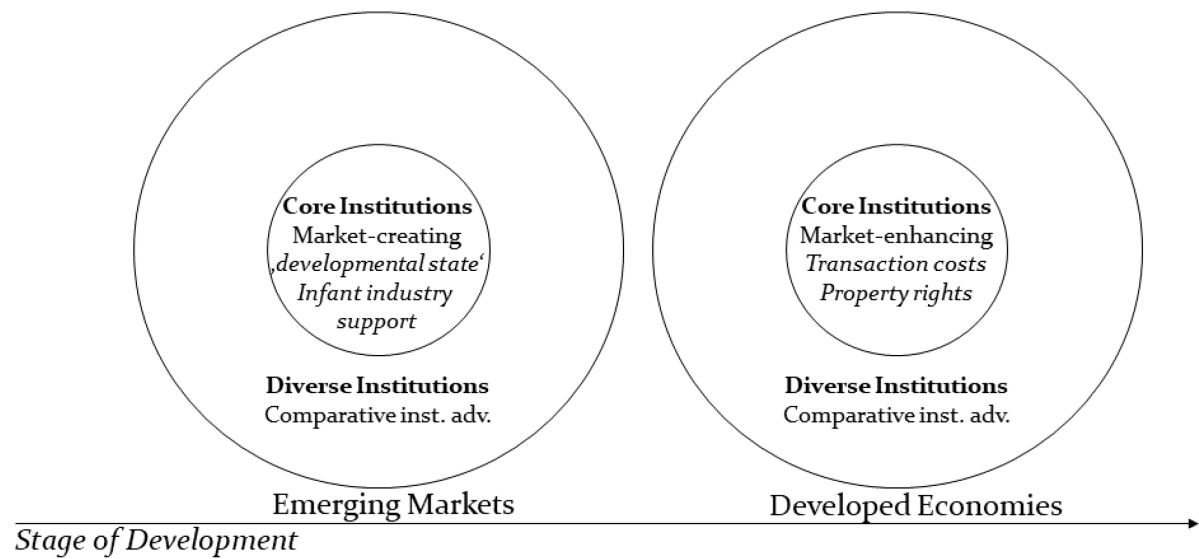


Figure 3.6: Commonalities and diversities in two overarching contexts.

Figure 3.6 illustrates the idea of core institutions that represent commonalities caused by isomorphic pressures of global capitalism on a set of countries where the set could be characterized by, e.g., the stage of economic development. These commonalities are encapsulated by institutional diversity of the type that enables a particular country to develop its comparative institutional advantages.

According to this, there is the possibility that the institutional configuration of the DME is a set of core institutions required for the attraction of FDI. In other words, FDI attractive countries in the post-transition context share this core set of institutions. Another option is that a subset of the DME-type institutions could be considered as core institutions to attract FDI, i.e., that a specific combination of some of the DME components increases the attractiveness for FDI. These possibilities will be explored in the QCA analysis.

3.3.3 DME – A Benchmark for FDI Attraction?

The following section will introduce the institutional configuration of the DME as a determinant for FDI attraction in relation to existing empirical evidence. Nölke & Vliegenthart (2009) outline the nature of the DME in relation to the typical categories of the VoC framework: corporate governance, industrial relations, training and education systems, research and development, as well as finance. The finance category is intertwined with the analytical outcome in this paper as DMEs strongly rely on foreign capital. Since Nölke & Vliegenthart (2009) do not explore the determinants of FDI, they include foreign capital inflows as an additional

characteristic of the DME. Here, I take the position that the institutional characteristics of the DME could themselves generate a comparative institutional advantage of attracting FDI in the first place. For this reason, I exclude the finance component from the explanatory conditions.

In order to adapt the DME framework into a set of determinants for FDI attraction, I will change the labeling of the original categories to better fit with the overall findings of the existing literature. For instance, according to Gauselmann, Knell & Stephan (2011), a central location factor to attract foreign investors in the transition context is the combination of low-cost and relatively skilled labor. As we shall see, the DME largely follows this assessment (see, also, Jackson, G. & Deeg, 2012) and extends it in the realm of transactional efficiency, which acts in support of transfers of knowledge, technology and managers.

Following this preliminary assessment, I put forward the following four institutional components: transactional efficiency, labor market institutions, welfare state, and the education system. In what follows, I will explain the choice of these conditions in some more detail and review some of the relevant empirical evidence. After each section, I will also propose a directional expectation for the condition regarding the outcome of FDI attractiveness.

3.3.3.1 Transactional Efficiency

In Nölke & Vliegenthart (2009) (henceforth N&V), two of the identified categories of the DME configuration implicitly describe the role of institutions in reducing transaction costs for foreign investors. The first is what N&V name corporate governance, referring to the integration of local firms in MNE structures and the adoption of the European Union corporate-governance standards. Their argument is that a large share of managers of large firms in DMEs operate within the confines of MNE networks and, hence, report to foreign officials. This interaction between foreign and local management results in relatively high degrees of integration and monitoring that requires specific institutional conditions for support.

The difficulties of integrating a foreign firm into an MNE network is partly a function of transaction, coordination and monitoring costs (Hennart, 2001). For example, the specifics of local environments may require MNEs to adapt their practices and routines, leading to an increase in the managerial burden and coordination costs (Brouthers, 2002). Transaction costs may be high in cases of a weak contract law and

in the absence of reliable business partners (Dunning, 2004), e.g., due to being excluded from local networks (Johanson & Vahlne, 2009). For both reasons, the costs of monitoring activities within and outside the MNE's organization are likely to be high as well.

Common regulations and complementary cultural values can enhance the efficiency of transactions and the effectiveness of monitoring, whereas differences could be expected to be a barrier to MNE activity (Meyer & Peng, 2005). For example, compared to the CEEB region, transition economies in the CIS region could be considered more distant from Western European countries, potentially increasing transaction costs. Considering that Western Europe is a significant source for FDI in Eastern Europe and some CIS countries, this could be an advantage for EU member states (Medve-Bálint, 2014).

The second category relating to the area of transactional efficiency is that of research and development (R&D). N&V point out a significant difference between the innovation systems in CME and LME countries on the one side and DME countries on the other. Unlike the former, DMEs have a low domestic innovation capacity and rely on the technological assets transferred by MNEs. According to Ban (2013), post-transition economies have seen an increase in their export complexity, suggesting that MNEs have increased their technological investments in local production processes. This comes with a high demand for institutions that secure and optimize the transfer of knowledge between foreign enterprises and their local subsidiaries (Javorcik, 2004). The New Institutional Economics tradition has long emphasized the importance of secure property rights as a pillar for such transfers, and for economic development in general (North, 1990).

Expectation: Transaction cost improving institutions enable closer integration between MNEs and local agents and the transfer of technology for local exploitation. Hence, institutions of transactional efficiency are likely to be associated with FDI attraction.

3.3.3.2 Labor Market Institutions

According to N&V, the DME relies on a flexible labor market. Empirical evidence shows that labor costs are an important determinant for MNE investments in transition economies (Bevan & Estrin, 2004). It is also recognized that the cost of labor is affected by labor market and welfare institutions, including the power of

labor unions and flexible employment schemes (Freeman, 2010; Western & Rosenfeld, 2011). Moreover, recent research has indicated a more general weakening of labor market institutions and dropping rates of union membership in Europe, even in the CME archetype of Germany (Streeck, 2009; Lane, C., 2015). This points at the potential relevance of flexible labor markets as a commonality or core institution driven by more general economic pressures of globalization. However, there are two qualifications to the relevance of labor market institutions for FDI attraction in the DME and post-transition context.

First, Leibrecht & Scharler (2009) find that indirect labor cost factors such as the flexibility of the labor market is not a good predictor for FDI. In their study, productivity effects or direct labor costs have a stronger impact. Dibben, Wood, Le & Williams (2011) equally find that there is no effect of labor regulation on investor attractiveness. Technically, it could be possible that the variation between labor regimes in the post-transition context is not sufficiently large to affect FDI decisions. However, the VoC classifications are partly based on this very variance. It is therefore of interest to explore the effect of labor market institutions in context, instead of in isolation.

Second, such policies require counter measures to avoid discontent and the resulting challenges to the institutional *status quo* on behalf of employees (see Glassner, 2013). Hypothetically, this could explain why MNEs tend to pay comparatively high wages in post-transition countries (Oberhofer, Stöckl & Winner, 2012). Another potential way to avoid broad discontent would be to invest in countries that have a comparatively moderate welfare state, providing a minimum of social security. The complete absence of social security for employees is likely to destabilize the prevalent labor institutions as it increases the likelihood of political engagement and strikes.

Expectation: Institutions that increase the flexibility of labor markets enable MNEs to reduce labor costs, making the presence of such institutions conducive to FDI attraction.

3.3.3.3 Welfare State and Taxation

The welfare state plays a particular role in the DME. While a strong welfare state might not support the flexibility of labor markets, the absence of any social compensation is likely to have destabilizing effects on social cohesion. Thus, the

DME combines flexible labor market institutions with a moderate welfare state. Finally, the condition of the welfare state is connected to the issues of taxation as a source of state funding. Here, empirical evidence indicates that low-tax regimes are an important location factor for FDI (Bellak & Leibrecht, 2009). This points towards an inherent tension between low statutory tax rates⁵⁵ and low government expenditure on the one side, and flexible labor institutions without social security on the other.

Expectation: Due to the potential tension between labor flexibility and low government spending, I do not make a directional expectation concerning the presence of absence of a weak welfare state.

3.3.3.4 Education System

The education system of the DME is focused on a strong secondary education (N&V). From the MNE perspective, there is no need for large amounts of very high-skilled personnel in the production of moderately complex goods, especially as these are likely to require additional wage premiums. However, since MNEs have over time increased the technological intensity of their activity in post-transition economies (e.g., Ban, 2013), there is a need for educated employees that are capable of operating within a high-technology context. Accordingly, existing research has found a positive impact of educational attainment on FDI in the transition economy context (Carstensen & Toubal, 2004).

Expectation: The educational attainment of a country's workforce is conducive to FDI inflows, especially in the DME context where MNEs require relatively skilled employees due to higher technological intensity.

3.3.3.5 Institutional Dynamism and Institutional Complementarity

The extension of the VoC to the context of transition economies gives us viable analytical tools and taxonomies to better understand the link between FDI and institutional configurations. However, one shortcoming of the VoC is its focus on stability as a direct consequence of institutional complementarity (Crouch, 2005). Several scholars have suggested that the VoC will have to embrace a more dynamic view on institutions and considerable theoretical work is aiming to incorporate different forms of institutional change. In a critique, Schneider, M. R. & Paunescu

⁵⁵ Another complication is that MNEs have a strong capacity to optimize their tax liabilities across borders, which is why statutory tax rates might not represent the real tax burden.

(2012) provided evidence that the stability of institutional varieties is merely a tendency as opposed to a necessity. The authors observe some movement of country institutions between the CME and LME types with a bias towards the latter configuration. This implies that it could be relevant to recognize the inverse of the complementarity-stability relationship, namely that a change in the subcomponents of an institutional configuration may reduce the performance that arose from the former positive externalities (see, e.g., Deeg, 2007).

The need to incorporate a more dynamic perspective on institutions is also formulated in the field of IB, for example by Jackson & Deeg (2008). In a commentary on this article, Lundan & Li (2019) outline the need to entangle the full complexity of institutions arising from their *diversity* and *dynamism*. The latter term reflects the possibility that volatile institutional changes (Brunetti & Weder, 1998; Chari & Banalieva, 2015) act as barriers to the operation of MNEs (see, e.g., Meyer & Peng, 2005, 2005). There are two main problems with volatile institutional environments from the MNE perspective. One is the need to adjust towards new conditions on the organizational level. For example, Meyer and Peng (2005) argue that the instability of regulatory institutions in transition economies is likely to force MNEs to adapt their organizational structures. This adaptation results in adjustment costs (Santangelo & Meyer, 2011) and learning costs caused by the need to cope with novel conditions (Casson, 1999; Fortwengel, 2017).

The second problem is that volatile institutional change causes institutions to lose their capacity of reducing uncertainty. This function is especially vital in environments with fluctuating markets and unstable macro-economic situations. Several countries in the post-transition context are still characterized by instabilities in their economic and market developments⁵⁶ (Bevan & Estrin, 2004). These market-driven uncertainties make stable social institutions even more relevant for reliable MNE operations.

Both problems are significant in the context of the DME that is characterized by 'skilled, but cheap, labor; the transfer of technological innovations within transnational enterprises; and the provision of capital via foreign direct investment (FDI)' (Nölke and Vliegenthart, 2009, p. 672). These conditions are maintained by a

⁵⁶ Poland is an interesting counterexample that overcame the financial crisis far better than many of its neighbors.

specific configuration of institutions that generates substantial links between MNE networks and local subsidiaries. Such links are based on organizational integration, which becomes difficult under volatile institutional change as explained above. Moreover, MNE routines cannot be adjusted to a local environment that is continuously in flux. While MNEs with strong dynamic capabilities might be able to deal with such situations (Henisz & Delios, 2015), it is unlikely that MNEs would take the significant expense of transferring such capabilities for the assembly of moderately complex goods in DMEs.

In addition, the uncertainty that is created by volatile institutional change strongly impacts the expectations of foreign investors in terms of labor costs and intellectual property rights protection. Even if labor costs in a country were relatively low, MNEs could still decide to invest elsewhere as they are uncertain whether the institutional environment preserves the current level of labor costs. The same principle applies to the security of property rights. Ongoing changes are likely to reduce the trust in local governments and increase the perceived danger of ineffectively secured property rights. The security of property is not a single institution but embedded in an arrangement of judicial and executive institutions. Overall stability of the institutional environment is a precondition to build trust in these specific institutional arrangements.

Expectation: The presence of volatile institutional change is likely to be associated with FDI unattractive countries.

3.3.4 Method

The following introduces the QCA method and outlines its differences to regression analysis for the sake of clarity. Afterwards, I describe the data set, the general procedure and the calibration of conditions.

3.3.5 Qualitative Comparative Analysis

Even if QCA is not a new methodology, its application has become more popular rather recently (see Misangyi et al., 2017), not least by providing a complementary quantitative approach to statistical regressions. Regression methods begin with a dependent variable and a set of independent variables that are thought to independently explain the former. QCA on the other hand begins with a similar distinction between an outcome and several conditions that are thought to explain the outcome. However, the outcome as well as conditions are formulated in set-

theoretic terms, i.e., they are membership indicators for a case to exhibit the outcome or condition (Ragin, 2009).

For example, if we were interested in the effect of the strength of a property rights regime on FDI attractiveness, QCA would allow us to see if the countries with a strong property rights system, i.e., members of the set of strong property rights, would also exhibit the outcome of being a member in the set of FDI attractive countries. However, this is still a gross simplification of QCA as its ontological position differs markedly from regression analysis. This is because QCA analyzes necessity and sufficiency of conditions for the outcome, whereas regression techniques only focus on simultaneously necessary and sufficient variables (Schneider, C. Q. & Wagemann, 2012).

If we would assume that a strong property rights regime is a necessary condition to be an FDI attractive country, no country without a strong property rights regime would be in the set of FDI attractive countries. In other words, if there are empirical cases where the condition is present, but the outcome is absent, we would reject a claim of necessity. Strong property rights as a sufficient condition for FDI attractiveness would mean that all countries with a strong property rights system would be in the set of FDI attractive countries, while there is no claim that countries without a strong property rights system could not also be in the set of FDI attractive countries. Here, empirical cases in which the outcome would be present but the condition absent would lead to a rejection of sufficiency. The fundamental difference to regression analysis can be visualized with three simple plots, emphasizing how regression techniques focus on one data pattern, while QCA focuses on another. This shows how both methods can be used in a complementary manner.

In the above, I have assumed that membership is binary which is referred to as a crisp-set QCA. In this paper, I apply fuzzy-set QCA (fsQCA) that differs in the type of membership indicators used. Since the binary coding of membership assumes a rather deterministic relation in the data, Ragin (2009) developed fsQCA that works with interval scaled membership scores between 0 and 1. This is a significant advancement especially for quantitative research. After all, any binary coding would strongly reduce the information content of continuous data, whereas a fuzzy-set

coding between 0 and 1 allows one to take as much information from the data as possible while retaining the possibility of theory-driven calibration.

Calibration is the process by which membership scores are assigned. Qualitative researchers would most likely set these scores manually by referring to theory and empirical evidence (see, e.g., Schneider, C. Q. & Wagemann, 2010). Quantitative researchers can use indirect calibration based on the transformation of raw data through a parameterized function made available by software packages (Duşa, 2018, Ch. 4). The advantage is that the researcher retains some control over the shape of the function by setting three parameter points: (1) the point at which cases are treated as fully out of a given set; (2) the point at which cases are neither more in nor more out of the set, i.e., the threshold point; (3) the point at which cases are fully in the set. Sometimes, theory may require altering these points from the otherwise received standard of setting (1), (2) and (3) to the 10th percentile, the median and the 90th percentile respectively.

Another difference between regression and fsQCA is the interdependence of conditions. Where independent variables are interpreted *ceteris paribus*, the conditions of a QCA can form more complex causal chains. This is the main purpose of the QCA, and will result in equifinality of the outcome (Misangyi et al., 2017). This means that the outcome can be associated with several combinations of the conditions. Such a solution is retrieved through a minimization algorithm, often of the Quine-McCluskey type, that yields interpretable combinations of conditions, so-called conjunctions, that can be the bases for further inquiry (Schneider, C. Q. & Wagemann, 2010). This is precisely why the method of fsQCA is useful for empirical work in the context of the VoC that builds significantly on interactive effects (institutional complementarity) arising from institutional configurations.

Finally, quantitative studies on country characteristics in the transition context often struggle with the issues of limited sample size. QCA is a method that supports a moderate sample size and, thus, bridges between individual case analysis and large-scale samples (Ragin, 2009). This is possible as QCA does not rely on an underlying probability distribution which also makes it robust to outliers (Fiss, 2011).

Through the minimization process, QCA can yield three solution forms (see Schneider, C. Q. & Wagemann, 2012). The first is called the conservative solution and portrays all logical conjunctions based on the empirical evidence. Such a

solution output can be rather extensive, which is why the solution is sometimes referred to as the complex solution. To reduce the number of solution terms and conjunctions within them, QCA can use logical remainders. These are counterfactuals that logically derive from the combination of available conditions, but which are not empirically observed. The parsimonious solution will freely use any logical remainders by treating them as though they were observed. In this way, the minimization process can often be continued to generate more parsimonious and interpretable solution terms.

The reader will notice that using counterfactuals can sometimes be problematic, for instance, when some of the counterfactuals are not observed because they are impossible to be observed. These untenable simplifying assumptions have to be excluded from the minimization in order to avoid wrong conclusions from the solution term (Schneider, C. Q. & Wagemann, 2010; Duşa, 2018). This process yields the intermediary solution which should stand at the center of interpretation. It is free of untenable assumptions and makes use of easy counterfactuals, i.e., those that are clearly supported by theory.

3.3.6 Data and Procedure

The dataset consists of five indices based on secondary data calculated from an underlying panel data set containing 22 transition economies⁵⁷ over the period 2008-2016. The focus of this paper is to test in how far the DME benchmark reflects a model for FDI attractiveness, which is why I have matched the previously presented institutional components with the institutional database of the Heritage Foundation (2018). This data has the advantage of a time series component and it can reflect most of the conditions identified earlier apart from education quality and an additional condition representing economic development and market size. The latter two were taken from the World Bank database. All indicators are described in Table 3.5. In order to assure that I capture the long-term effects of institutions and not fluctuations based on easily reversible conditions, I average the institutional data across the entire eight-years period. I would argue that this represents the relative positioning of institutional configurations from a cross-country perspective,

⁵⁷ Albania, Armenia, Bulgaria, Belarus, Croatia, Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyz Republic, Latvia, Lithuania, Moldova, Poland, Romania, Slovak Republic, Slovenia, Tajikistan, Ukraine, Macedonia, Uzbekistan.

while it avoids paying too much attention to short-term deviations, which are of interest in the exploration of institutional volatility.

I have also suggested that there may be core institutions that are shared across the post-transition context and take a predominant role in attracting FDI for post-transition economies. Here, I draw on Fiss (2011) who suggests a method to distinguish between core and peripheral conditions in a QCA by comparing the solution terms of the parsimonious and the intermediate solution. Fiss (2011) argues that those conditions present in both solutions can be treated as core conditions, i.e., conditions that are of particular importance to the outcome. This method is applied here to determine whether some institutional conditions can be identified as core institutions for FDI attraction (deterrence).

The DME configuration was identified as a system of institutions that reflects a specific type of institutional complementarity. In this context, institutions are often seen as stable or gradually changing. However, I argued that the post-transition context still faces institutional change at different rates and that volatile institutional fluctuations are likely to reduce the gains from established institutional complementarities. Hence, stable trajectories of change could present themselves as a crucial support for accumulating advantages of institutional complementarity, and volatile institutional change might thus deter FDI. To explore this proposition, I include a variable that represents the standard deviation of the institutional sub-components as a measure of volatility. The education variable (secondary school enrollment) is excluded as it is based on a proxy, secondary school enrollment, that displayed almost no volatility.

Finally, I include the condition 'income' represented by GDP per capita as a proxy for economic development and market potential. I considered using FDI as a percentage of GDP in order to take these economic factors into account. However, Li (2009) points out that FDI as a percentage of GDP is inferior to FDI inflows due to a lack of conceptual consistency of the former measure. Indeed, when plotting FDI/GDP in the present case, the result is a highly distorted view on FDI attractiveness, where Poland is in the lower quartile of FDI inflows. Thus, I take economic factors into account by including a condition that reflects an important economic attractor for FDI, namely GDP per capita. The data used is summarized in Table 3.5.

As the data used is quantitative, the calibration points are set by using the 10-50-90 percentile method. While I would agree with the potential criticism that a manual calibration can always improve on the 10-50-90 principle, especially in the light of substantive knowledge of cases, it seems equally or even more important to establish transparency in a first step.

Table 3.5: Data Sources and Measures (Essay 3)

	<i>Reflecting DME component</i>	<i>Source</i>	<i>Measure</i>
Outcome			
<i>FDI attractiveness</i>	~	World Bank Development Indicators: Foreign direct investment inflows in constant \$US (2010)	Average (2008-2016) by country.
Conditions (expectation)			
<i>Strong Property Rights (+)</i>	Transactional Efficiency	Heritage Foundation Economic Freedom Data: Property rights indicator.	Average (2008-2016) by country.
<i>Labor Market Flexibility (+)</i>	Labor Market Institutions	Heritage Foundation Economic Freedom Data: Labor flexibility indicator.	Average (2008-2016) by country.
<i>Education Quality (+)</i>	Welfare State and Taxation	World Bank Development Indicators: Gross Secondary School Enrollment.	Average (2008-2016) by country.
<i>Welfare State (~)</i>	Education System	Heritage Foundation Economic Freedom Data: Government Spending & Tax Burden indicator.	Average (2008-2016) by country.
<i>Institutional Volatility (-)</i>	Institutional dynamism	Indicators used above except education quality.	Sum of the standard deviation of individual indicators by country (2008-2016).
<i>Income (+)</i>	~	World Bank Development Indicators: Gross Domestic Product per Capita in constant \$US (2010)	Average (2008-2016) by country.

3.3.7 Results

The first analytical step of the QCA is to test for necessity relations in the data. For this, the threshold consistency level is set to the suggested 0.9 and the coverage threshold at 0.6. After testing for consistent necessary relations, I judge in how far they represent trivial conditions. The latter refers to conditions that are indeed necessary but trivially observed in virtually all observations⁵⁸. All solution terms are expressed by using the following notation: the star (“*”) represents a logical “and”, whereas the tilde (“~”) represents the absence of a condition.

3.3.7.1 Analysis of Necessary Conditions

The algorithm did not detect any single necessary conditions for FDI attraction. One of the conjunctions displays a relevance of necessity (RoN) value of above 0.6, indicating that it is the only non-trivial necessary condition to explain the outcome. The conjunction comprises a configuration of transactional efficiency and education quality and is presented in Table 3.6.

Table 3.6: Test of necessary conditions (Essay 3).

Test-Direction		Consist.	Cov.	RoN
FDI attraction	<i>Strong PR * Education Quality</i>	0.92	0.70	0.61
FDI deterrence	<i>Institutional Volatility * ~Education Quality</i>	0.93	0.70	0.65

This finding is in line with my directional expectations. Strong property rights and education quality are jointly necessary conditions to attract FDI in the post-transition context, suggesting that a considerable amount of FDI is now focused on value-added activities with higher technological and knowledge intensity. Besides this upgrading of the technological basis of production, we have also observed a shift towards services. For example, business service offshoring has become a prominent strategy for Western European MNEs (Sass & Fifekova, 2011). To assure the quality

⁵⁸ For example, the condition ‘presence of air’ would be a trivially necessary condition to explain the outcome ‘fire’.

of services, employees must often be fluent in a second language, requiring well-functioning secondary education.

There is also one conjunction of a relevant necessary condition for FDI deterrence, comprising institutional volatility and the absence of education quality. Again, the configuration is in line with my directional expectations. The absence of education quality as a necessary condition for FDI deterrence mirrors the necessity analysis for FDI attraction. Institutional volatility is the second necessary condition to deter FDI inflows, highlighting its potential relevance as an explanation for FDI allocation.

3.3.7.2 Sufficient Configurations for FDI Attractiveness

Table 3.7: Sufficiency analysis, FDI attraction (Essay 3).

	Solution				
	1	2	3	4	5
Strong PR			●	●	●
Welfare State	●	●	○	●	●
Flexible Labor Market	●			●	○
Education Quality	●	●			●
Institutional Volatility	○	○	○		
Income	●	○	●	●	
Consistency	0.95	0.94	0.88	0.93	0.78
Raw Coverage	0.33	0.35	0.27	0.37	0.35
Unique Coverage	0.08	0.08	0.02	0.08	0.06
Overall Solution Consistency		0.85			
Overall Solution Coverage		0.75			

In the following, the presence of a core condition is represented by “●” and the presence of a peripheral condition by “●”. The absence of a core condition is represented by “○” and the absence of a peripheral condition by “○”.

The intermediate solution reported in Table 3.7 is composed of a single disjunction (solution term) with five conjunctions of conditions. The logical remainders were

chosen so that they do not stand in contradiction with the analysis of necessity conducted before. In a first step, I will go through these configurations. In order to make this easier to follow, I will group those solution terms that are of specific interest due to the inclusion of the institutional volatility condition.

Solution-set 1: Three of the solution terms include the absence of the institutional volatility condition that this paper aims to explore specifically, and I will start to discuss these as solution set 1.

*Solution 1: Welfare State * Flexible Labor Market * Education Quality * ~Institutional Volatility * Income*

The combination of the presence of a strong welfare state, the presence of flexible labor markets, educational attainment and the stability of these institutional conditions through time is, together with the economic condition, identified as a sufficient configuration for FDI attractiveness. This configuration is consistent with prior research both in terms of the DME postulates and the quantitative evidence on the determinants of FDI attraction (see, e.g., Carstensen & Toubal, 2004). Given the irrelevance of strong property rights in this solution this configuration resembles closest the ‘assembly-line-type’ production regime emphasized by Nölke and Vliegenthart (2009), or other forms of FDI in which labor costs are critical but the security of property rights is not.

One of the cases identified with this solution is Bulgaria, which is characterized by a sectoral distribution of FDI flows skewed towards the manufacturing and retail sectors (National Statistical Institute, 2018). These make up 50% of FDI inflows and are mostly associated with production of low to moderate complexity. A second case illustrative of this solution is Kazakhstan, where FDI is clearly focused on the extractive sector (OECD, 2017). Resource oriented MNEs such as oil extractors may engage in significant technology transfer through such FDIs, but most of the technology is difficult to imitate or of limited use for smaller scale domestic firms so that the appropriation risk is limited. This solution also highlights that economies with different comparative advantages can be associated with similar institutional configurations.

Institutional stability is an important complement to the types of FDI discussed above. In the Bulgarian case, a considerable amount of FDI represents typical outsourcing (Marin, 2006) where foreign investors tend to make their decisions

according to their expectations of cost-reduction in the future based on experiences. High institutional dynamism is likely to reduce the confidence in their estimations. Moreover, MNEs that already are present in the area face organizational and strategic adjustment costs and will lose confidence in the government's capabilities. Stable institutional trajectories are supportive of resource investments that are often highly irreversible and prone to opportunistic government intervention.

*Solution 2: Welfare System * Education Quality * ~Institutional volatility * ~Income*

This configuration differs from the above by emphasizing the presence of a welfare state and, interestingly, the absence of the income condition as explanatory components. The illustrative cases here are Belarus and Ukraine, which are both somewhat peculiar. Ukraine has received considerable FDI inflows in the financial and insurance sectors (Kirchner, Kravchuk & Ries, 2015). These FDIs require more educated employees with language skills and, given the high profitability of finance activities, employee compensation may be less critical than in producing industry. In Belarus, most FDI focuses on trade and transport, which leads to a similar assessment. In both cases, the relatively strong welfare system could reflect the socialist heritage that is argued to be specifically strong in the case of Belarus where the state avoids unemployment by subsidizing otherwise unprofitable sectors of the economy (Danilovich & Croucher, 2015).

The absence of institutional volatility could be related to the relative persistence of this model over time. This may have been supported by their history of quasi-authoritarian governments fixated on a *status quo* throughout much of the observation period. Only recently has Ukraine been shaken up by armed conflict which, however, is contained in one region and is unlikely to influence the institutional conditions examined here. The absence of the income condition further underlines that the FDI attractiveness is not driven by the productive capacity or market size of the economy but by more sector-specific strategic motivations of finance and trade activities.

*Solution 3: Strong PR * ~Welfare State * ~Institutional Volatility* Income*

This configuration is a combination of strong transactional institutions, a weak welfare system, the absence of institutional volatility and the presence of the income condition. This solution contains the case of Romania. Prior literature has identified the Romanian institutional configuration as 'cocktail-capitalism', reflecting its

unclear political direction. At the same time, the economy realized significant FDI inflows largely in commodity-type manufacturing, but also increasingly in support services such as call-centers and accounting. The low complexity of the FDI in Romania makes it the prime example of a low-labor cost location with relatively well-secured property rights, access to the EU common market and low corporate taxes, which is reflected in the absence of the welfare state condition.

Solution-set 2: These two solution terms do not include the institutional volatility condition but share the presence of strong property rights and the presence of a welfare state.

*Solution 4: Strong PR * Welfare State * Flexible Labor Market * Income*

This solution bears a close resemblance to the DME-type benchmark outlined in Section 3. Accordingly, two of the illustrative cases are the Czech Republic and Hungary, which are both classified as DMEs by Nölke and Vliegenthart (2009). Another case belonging to this solution is the Slovak Republic which has become a hub for several global value chains, e.g., in the automobile, machine equipment and electronics industries (OECD, 2018). The combination of strong property rights and flexible labor markets allows foreign investors to integrate moderately complex assembly-type operations. Hence, the configuration seems to be conducive for industrial FDI which is moderately technology-intensive, still strongly dependent on low labor cost, but also in favor of some government expenditure to reduce labor-turnover and to meet infrastructural needs. This solution supports the argument of the welfare state as a compensation for flexible labor markets.

*Solution 5: Strong PR * Welfare State * ~Flexible Labor Market * Education Quality*

Finally, the last configuration is similar to the above but substitutes labor flexibility with education quality. While a similar analysis applies, this is more likely to refer to high tech FDIs or FDI in a more complex service industry such as finance. This is because wages are not the most crucial bottleneck in these industries and education seems paramount. Moreover, just like in technology-intensive manufacturing, the technology-intensive service sector often needs at least some long-term employees to develop its human capital. It also equally depends on infrastructure such as high-speed internet which requires funding from taxation and, thus, explains the presence of a strong welfare state.

One of the cases that highlights the tension between weak labor institutions and the need for a modicum of social security is that of Estonia which has seen rapid growth in the presence of strong inequality and social insecurity. In order to distribute the gains from growth more equitably, the Estonian welfare system was strengthened, giving the country an advantage in shouldering the 2008-9 crisis over its Baltic neighbors (Aidukaite, 2013). The resulting resilience of the labor market may be especially interesting for foreign investors in a strong service economy such as Estonia, with high relative importance of human capital development, low employee turnover and intellectual property protection.

3.3.7.3 Sufficient Configurations for the Absence of FDI Attractiveness

Table 3.8: Sufficiency analysis, FDI deterrence (Essay 3).

	Solution		
	1n	2n	3n
Strong PR	○		○
Welfare State	○	●	○
Flexible Labor Market		○	○
Education Quality	○	○	○
Institutional Volatility	●	●	
Income	○	○	○
Consistency	0.97	0.94	0.91
Raw Coverage	0.91	0.14	0.30
Unique Coverage	0.15	0.04	0.14
Overall Solution Consistency		0.91	
Overall Solution Coverage		0.62	

The following briefly presents the solutions for the FDI deterring effect. Not only are these solutions less informative (from a normative standpoint) than configurations that lead to FDI attractiveness, but they are also perfectly in line with expectations, which is why I do not discuss them extensively. An overall assessment of the role of FDI deterring institutional configurations is given in the discussion. In this case, the intermediate solution is composed of a single disjunction with three conjunctions of conditions. These three possible solutions are depicted in Table 3.8.

*Solution 1n: ~Strong PR * ~Welfare System * ~Education Quality * Institutional Volatility * ~Income*

The absence of transactional efficiency combined with the absence of a strong welfare system, an underperforming education system, low national income and institutional volatility is sufficient for a country to display the outcome of FDI unattractiveness. Strong property rights are indicated as a peripheral condition which is sensible considering that these are associated with economies that may not receive significant technology transfers from FDI, while being relatively unstable in their institutional configurations, e.g., the Kyrgyz Republic and Armenia.

*Solution 2n: ~Welfare System * ~Flexible Labor Market * ~Education Quality * ~Income * Institutional Volatility*

This solution only covers the case of Moldova, which is institutionally characterized by the absence of a welfare system, the absence of flexible labor markets, the absence of educational attainment and institutional volatility. In terms of the latter, Moldova can be characterized as a politically unstable country, with significant regime changes (Roper, 2008) and high political and party volatility (Lane, J.-E. & Ersson, 2007). Together with the overall weak performance of the economy of Moldova, the environment is highly unattractive for FDI.

*Solution 3n: ~Strong PR * ~Welfare System * ~Flexible Labor Market * ~Education Quality * ~Income*

The solution is similar to the first and includes the single peripheral condition of the absence of strong property rights. The exception here is that institutional volatility is not included in the solution term. Here, countries like Tajikistan and Uzbekistan are representative cases, both of which seemed to have failed to develop a clear comparative institutional advantage.

3.3.8 Discussion

This paper explored two tentative propositions in the context of post-transition economies. The first proposition was that a focus on institutional configurations can add to the existing literature that sees FDI as being primarily attracted by individual market institutions. I have argued that pressures for institutional commonality and diversity operate simultaneously. Hence, it is possible that a set of core institutions of FDI attraction is observed for a broad category of countries that are exposed to similar economic pressures. At the same time, the common core institutions can be encapsulated by institutional diversity that defines an individual country's comparative institutional advantage. The institutional configuration of the DME was identified as a set representing potential core institutions.

The QCA analysis enabled the identification of core institutions following the methodology proposed by Fiss (2012). This analysis has shown that configurations for attracting FDI display a high density of core institutions that are present in multiple solution terms. Thus, it can be argued (see, Fiss, 2012, p. 409) that there are considerable constraints to developing institutional diversity when focusing on the attraction of FDI in the post-transition context. The three most frequent core

institutions are represented in three solution terms respectively. These core institutions are strong property rights, the quality of education and the absence of institutional volatility. In addition, the flexibility of labor market institutions was part of two solution terms and is also considered a relevant core institution. At the same time, the analysis discovered some diversity around these core institutions.

For example, Solution 3, 4 and 5 all combined strong property rights with other institutional conditions conducive to their respective comparative institutional advantage. Locations attractive for the moderately complex activities of global value chains, such as the Czech Republic and Hungary, were identified with flexible labor markets. In contrast, for the more service intensive economy of Estonia, FDI was attracted by the core institution of property rights in combination with education quality. This suggests the presence of some core institutions which are quite in line with the DME-type structure. Hence, it is possible that governments will continue to strengthen these core institutions in order to secure further FDI. This would identify FDI attraction as a crucial isomorphic pressure, i.e., source of convergence to a form of 'liberal dependency' (King & Sznajder, 2006; Nölke & Vliegenthart, 2009).

In the case of configurations that deter FDI inflows, the findings show an even higher density of core conditions that reflect the absence of institutional conditions. This is in line with existing studies that have emphasized the problems MNEs face in contexts with institutional voids in several different areas of the institutional environment (Khanna & Palepu, 2010). While deficiencies in individual areas of the institutional system can be reduced through strategic agency (Cantwell, Dunning & Lundan, 2010), broader institutional voids make it difficult to justify investments due to increasing costs of coping with often unforeseen difficulties.

The second tentative proposition was that the volatility of an institutional configuration has a negative impact on institutional complementarity and, thus, reduces FDI attractiveness. This was argued to be especially crucial in the comparatively volatile markets of post-transition economies. The QCA analysis confirmed the relevance of institutional volatility. The absence of institutional volatility was found to be part of three sufficient configurations for FDI attraction. I argued that in the case of Ukraine and Belarus, the stability could be explainable by the status-quo interests of the government. Such an artificial stability might be

attractive to some forms of FDI (see Hecock & Jepsen, 2014). However, for the other two solutions, it is very possible that institutional complementarities have led to a stabilization of their trajectories.

Another interesting finding was discovered when exploring the negation of FDI attractiveness. Here, institutional volatility was found to be a necessary condition. Thus, institutional volatility alone may have a strong effect on the FDI unattractiveness of a country, acting as gatekeeper for FDI in countries that have not yet established sufficient institutional complementarities. This finding also highlights the advantage of QCA over regression methodologies as the latter could have not uncovered the asymmetric role of institutional volatility for FDI attractiveness and unattractiveness respectively.

In the context of these findings, it seems relevant to think about the sources of institutional volatility with reference to the empirical patterns discovered. In the analysis of sufficiency for not being an FDI attractive country, the condition of institutional volatility always appeared in conjunction with a weak welfare state. As mentioned before, it is possible that low-redistribution regimes result in considerable social tensions. Thus, a weak welfare and taxation system may be conducive for institutional volatility as it generates societal discontent with existing institutions. Rodrik (1998) has emphasized that the absence of social security is likely to enhance societal conflicts and struggle, and that this can reduce the resilience of countries to economic shocks. MNEs are less likely to invest in such shock-prone environments. The possibility of the welfare state as a balancing device between the economic and social pressures was also outlined by the analysis of sufficiency. Even though the absence of a strong welfare state was identified as a core institution, most solution terms showed the presence of a strong welfare state, and with it a higher degree of taxation. This further supports the idea that MNEs may expect that the absence of a welfare state could harm their operations in the long-term.

In summary, this paper presented evidence for the existence of core institutions in the post-transition context, as well as for the relevance of institutional volatility in determining FDI attractiveness. The core limitations of this study are the limited scope of the utilized institutional data and the inductive nature of the QCA method (Seawright, 2005). Future research could take a broader basis of institutional data

and combine the QCA method with regression methods for quantitative triangulation. Moreover, there is need for future research in two distinct directions. First, the possibility that FDI can act as an isomorphic pressure that guides institutional transformations in the post-transition context towards core institutions offers interesting research opportunities; these have not ceased to be relevant in the post-transition phase. Second, and in connection with the above, future studies are needed to evaluate the link between weak welfare systems and institutional volatility in relation to MNE activity. How much institutional volatility can MNEs tolerate? And are MNEs actively supporting the reproduction of social institutions for reasons of stability? These questions are of high interests for scholars and policy-makers alike.

3.3.9 References

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3.3.10 Appendix

This appendix provides some additional information on the data of essay 3.

Table 1: Transformed data.

	Trans. Eff.	Welf.	Flex. Lab.	Edu.	Vola.	Income	FDI
Albania	0.25	0.92	0.08	0.20	0.75	0.45	0.29
Armenia	0.16	0.96	0.79	0.37	0.98	0.12	0.03
Bulgaria	0.21	0.62	0.91	0.65	0.06	0.54	0.52
Belarus	0.03	0.21	0.90	1.00	0.50	0.28	0.38
Croatia	0.50	0.05	0.02	0.91	0.63	0.02	0.52
Czech R.	0.98	0.14	0.90	0.90	0.16	0.71	0.91
Estonia	1.00	0.35	0.16	1.00	0.22	0.70	0.18
Georgia	0.53	0.84	0.98	0.62	0.10	0.65	0.43
Hungary	0.95	0.02	0.65	0.95	0.17	0.58	1.00
Kazakhstan	0.22	0.97	0.97	1.00	0.09	0.88	0.96
Kyrgyz R.	0.06	0.85	0.95	0.13	0.85	0.08	0.15
Latvia	0.86	0.41	0.52	0.99	0.86	0.74	0.21
Lithuania	0.93	0.65	0.37	0.99	0.71	0.96	0.24
Moldova	0.56	0.33	0.02	0.05	0.96	0.17	0.02
Poland	0.91	0.09	0.41	0.97	0.80	0.99	0.99
Romania	0.51	0.67	0.48	0.41	0.05	0.61	0.80
Slovak R.	0.84	0.38	0.52	0.20	0.95	0.97	0.67
Slovenia	0.94	0.01	0.05	0.99	0.86	0.00	0.33
Tajikistan	0.06	0.95	0.13	0.02	0.05	0.11	0.03
Ukraine	0.12	0.06	0.09	0.62	0.06	0.01	0.61
Macedonia	0.37	0.83	0.82	0.00	0.50	0.37	0.11
Uzbekistan	0.02	0.84	0.43	0.16	0.04	0.32	0.02

Table 2: Truth table.

Trans . Eff.	Welf.	Flex. Lab.	Edu.	Vola.	Inco me	OUT	n	incl	PRI
0	0	0	1	0	0	1	1	0.9	0.777
0	0	1	1	0	0	1	1	0.908	0.691
0	1	0	0	0	0	0	2	0.438	0.167
0	1	0	0	1	0	0	1	0.571	0.036
0	1	1	0	1	0	0	3	0.336	0.016
0	1	1	1	0	1	1	2	0.934	0.878
1	0	0	0	1	0	0	1	0.539	0.131
1	0	0	1	0	1	1	1	0.817	0.643
1	0	0	1	1	0	1	2	0.819	0.489
1	0	0	1	1	1	1	1	0.892	0.755
1	0	1	0	1	1	1	1	0.902	0.778
1	0	1	1	0	1	1	2	0.975	0.956
1	0	1	1	1	1	1	1	0.887	0.725
1	1	0	0	0	1	1	1	0.9	0.766
1	1	0	1	1	1	0	1	0.78	0.295
1	1	1	1	0	1	1	1	0.97	0.917

4 Thesis Conclusion

The following section shortly sums up the contents of the thesis, develops some implications for theory and policy, and spells out possible areas for future research. Since the thesis is cumulative, the following summary does not reflect the full answers to the research questions, as these are embodied in the essays.

Question 1: Can the interrelationship between institutional change, uncertainty and FDI be conceptualized based on the existing theory of the MNE?

The goal of this thesis was to explore the relationship between institutional changes, specifically in a radical form, and FDI as a strategic investment of MNEs. In a first step, the **Framework Chapter** confronted the question of how the relationship between institutional change, FDI and uncertainty can be approached by drawing from the existing theory of the MNE. Based on the IB literature, I argued that two paradigmatic approaches, the 'exchange' and the 'value-added' view, have different explanations for FDI and that their implications for the role of institutional change is different as well. By reviewing the underpinnings of the theories, and particularly the common underpinning of institutional theory in form of the NIE, I agreed with Jackson and Deeg (2008) that current IB theory has a narrow perspective on the role of institutions in the economic activity of the MNE.

In an effort to broaden the discussion, I introduced some of Jackson and Deeg's (2008) propositions that followed in the tradition of the Comparative Capitalism literature, arguing that a redefinition of strategic fit as strategic agency under uncertainty emphasizes the role of institutions as cognitive resources for strategic agents, which are the basis for developing confidence in their expectations. Radical institutional changes would undermine these mechanisms, increasing the likelihood of delaying or aborting investment decisions. This basic framework was then related back to the MNE. Instead of delaying and aborting investments, MNEs have the capacity to relocate their investments to a different institutional environment, which is impossible for national enterprises. However, despite this advantage I drew the attention to the MNE as a foreigner, which is unfamiliar with its environment. This view elevates the importance of foreign institutional environments as cognitive resources. The resulting main argument of this thesis is to suggest that the FDI attractiveness of a location is not only determined by the institutional structure at a point in time, but also by the consistency of this structure through time.

Question 2: How does a dynamic view on the economic and social environment of the MNE affect current theory building in International Business?

Essay 1 took up the most general and important aspect of the conceptual framework, namely its attention to temporal dynamics and the resulting uncertainty. By drawing extensively from Penrose (1995), I criticized the attempt of Contractor (2007) to propose a positive relationship between the multinationality and performance of an MNE as a theoretical alternative to the TCI view. While I agreed with some of Contractor's points, I also suggested that his views were not much more evolutionary than those of the TCI. To underline the explanatory potential of the dynamic perspective on the MNE inherited from Chapter 2, I discussed the observable increase in the popularity of the global value chain from this perspective.

Question 3: How can we measure degrees institutional change and what is the relationship between radical institutional change and the FDI attractiveness of a country?

Essay 2 took up the first empirical question of how we can measure radical institutional change and developed a set of hypotheses of the relationship between institutional change and FDI. Using secondary data and a regression approach, the Essay found a negative relationship between the intensity of institutional change and FDI inflows to a country over time, as well as between the average intensity of institutional change and the average FDI inflows relative to other countries. This supported two of my hypotheses and provided some evidence for the main thesis of this work. However, some critical limitations were discovered, most of which were related to data insufficiencies.

Question 4: How is the concept of institutional complementarity affected by varying degrees of institutional instability?

Essay 3 developed another idea derived from the conceptual framework, namely that it is not only individual institutions that act as determinants for FDI attraction but also the institutional system as such. Moreover, institutional volatility was proposed to be a factor that opposes the development of institutional complementarities and, thus, could be a critical barrier to FDI. Using Qualitative Comparative Analysis, I was able to generate some support for these propositions. Specifically, I found data patterns that confirmed the importance of institutional volatility as a critical deterrent for FDI attraction.

I must stress that the empirical results have to be treated as tentative. Both data and resource limitations played critical roles here. Therefore, a lot of attention was given to

the conceptual and theoretical aspects of this work, and the practical implications discussed should not be read as prescriptions. However, in accordance with my critical realist stance, I support an explanatory instead of predictive view of social science. From such a perspective, this thesis contributed substantially by disentangling the theoretical relationship between varying degrees of institutional change and FDI, while providing some empirical support for its most basic propositions. It is my hope that the results of this thesis can be the starting point for future research in directions that may have remained underexplored in the past.

4.1 Contributions to Theory

[F]actors [factor endowments] are used to produce goods or services (that is, they are used for transformational activities), whereas institutions are used for the exchange of inputs and outputs with other firms (that is, for transactional activities).

(Wan & Hoskisson, 2003, p. 28)

The above quotation sums up the position of a significant part of IB theory towards institutions. One of the conceptual contributions of this thesis was to explain why such a perspective is not universally supportable and could be considered as narrow. By defining institutions as cognitive devices that enable strategic investments instead of exclusively focusing on their role as mediators of exchange, we can significantly advance our knowledge of how institutional environments might affect productive investments. For example, Ietto-Gillies (2007) has criticized that the TCI is unable to explain how MNEs could benefit from FDI into countries with more flexible employment regimes than in their home country (see, also, Bas & Carluccio, 2010). Seeing FDI as a strategic investment elevates labor institutions, as well as other social institutions, into the analytical focus. This blurs the artificial distinction between exchange, where institutions take the role of regulating transaction costs, and issues of production, where institutions take on a broader role from providing predictable means-end relationships to directly affecting the relative profitability of investment options.

Another contribution to the existing theory, specifically the TCI, is the dynamic view on both social and environmental factors. In the case of institutional dynamics, it was proposed that the TCI view has difficulties to acknowledge continuous social change, not least because of its focus on transaction costs and the associated equilibrium conditions. For example, the TCI cannot argue that the global value chain is a response to institutional instabilities in its periphery as well as dynamic competition without the assumption of a

parallel decrease in transaction costs. I would argue that the implicit link between institutions, transaction costs and an optimal size of the firm is problematic. Take for example the work of Kumar, Rajan & Zingales (1999), who found that developed institutional environments, i.e., those characterized by the lowest transaction costs, have larger firms than less developed institutional environments. What leads to such an outcome if transaction costs were the only force at work here? Is it not equally possible that the stability of highly developed institutional environments contributes to the accumulation of capital, i.e., supports Hymer's law of increasing firm size? These questions go beyond the present work but are very relevant for future theorists to pose.

Alongside institutional change I introduced the dynamics of the economic sphere of the MNE in order to argue that uncertainty is endogenously generated. Unlike TCI's focus on equilibrium, I introduced alternative perspectives that can explain why the stability of the social environment is likely to be of such importance for MNEs. In imperfect competition approaches, the uncertain reality of business operations is often forgotten as entry barriers stabilize market dynamics (Bain, 1956). However, this should be treated as a special and not as the paradigmatic case, which stresses the stabilizing properties of institutions and further develops the ideas of Knight (1921) who saw the institution of the firm as a reaction to radical uncertainty. This thesis contributes by stimulating theoretical work in the direction of a dynamic Eclectic Paradigm that is grounded in the process of MNE expansion and competition, avoiding Coase's (1937) notion of seeing markets and institutions (firms) as substitutes.

While the Coasian heritage was critiqued from many different angles in the past (Pitelis, 1998; Dunning, 2003; Lazonick, 2015), this thesis focused on the argument that institutional systems serve a purpose that is qualitatively different from economic systems, as they generate structure, path-dependency and degrees of predictability. By contrast, economic systems generate uncertainty by constantly offsetting the status quo. This dualistic framework allows one to identify synergies and dependencies, instead of mere substitutability, between the two spheres. For an example of dependency, Streeck (2011) stresses how social institutions provide the necessary social cohesion to support economic institutions that tend to spread the uncertainty of the market. For an example of synergy, Dunning & Lundan (2010) argued that the stable institutional structures of firms paradoxically allow for flexible experimentation and learning.

Finally, the thesis contributed by reviewing the relationship between institutional commonalities and diversity, suggesting that theory needs to take both into account

simultaneously. Essay 3 argued that these two views are not necessarily in contradiction. By using Qualitative Comparative Analysis, I contributed a way to use the method that is capable of distinguishing between core and peripheral conditions, which could be a powerful tool to advance the research on institutional diversity and commonality.

4.2 Contributions to Policy Perspectives

The rate of [institutional] change is often of no less importance than the direction of the change itself; but while the latter frequently does not depend upon our volition, it is the rate at which we allow change to take place which may well depend upon us.

Polanyi (1944, pp. 36-37)

I want to begin this brief discussion by returning to the opening quote by Karl Polanyi. He wrote these words in a section referring to the enclosure movement in Britain and how state legislation aimed to slow down the disruptive effects of this social change. Here, he took up a progressive view of the state and suggested that '[a] belief in spontaneous progress makes us blind to the role of government in economic life. This role consists often in altering the rate of change, speeding it up or slowing it down as the case may be' (ibid., p. 37). Therefore, the natural realm of policy is not only to control, or attempt to control, the direction of institutional change, but also to decide on the way of progressing to a new state.

In this context, Essay 2 argued that policy implications derived from the NIE position on institutions only prescribe a direction and implicitly suggest that a fast adjustment is the most efficient way of social change. However, this thesis aimed to show that this is not a universal truth. While the effects of radical institutional changes have been explored in the context of domestic investments and growth, I presented some evidence that it can equally serve as a barrier to FDI attraction. Thus, governments must be aware that the very goals of why reform programs are implemented are affected by the nature of the implementation process. Ignoring the potential effect of an initial worsening could lead to a vicious cycle of policy changes as seen in some parts of Latin America.

In Essay 3, I discussed the role of the welfare state in relation to institutional instabilities. Again, I can refer to the ideas of Polanyi, as does Rodrik (1997), in suggesting that social stability might be a precondition for institutional stability. Governments that are interested in FDI attraction must acknowledge that a shift towards higher value-added

activities may require the establishment of institutional complementarities which rely on a degree of stability. Assuring this stability might be associated with a reform of social institutions alongside economic institutions. Here, I would make the case for a more pronounced role of societal progress alongside economic developments. While these are not exactly novel ideas, they are important contributions to the discussion of policy implications in IB, which, through its focus on economic institutions (Buckley, 2018), may have tended to see other institutions as confined to some artificial notion of ‘civil society’. This thesis thus contributes more credibility to the position that policy makers should not dismiss the indirect economic impacts of strengthening societal institutions outside of the realm of transaction-cost reduction.

4.3 Future Research

There are two general paths for future research that have been opened by this thesis, namely one focused on the MNE as an organization and another on theory development. The latter has already been covered above, so that I will focus on the organizational level here. Organizational issues could be approached with the general framework outlined in Section 2.4, which has several promising points of contact for organization-based research. For example, we still know little about which MNEs may be more resilient when faced with institutional change and uncertainty. Can some firms develop capabilities to cope with such issues (Lundan & Li, 2018)? Moreover, the potential processes of restructuring firm-internal institutions as a response to institutional change and an exploration of the associated adjustment costs will be vital to better understand the underlying micro-processes. This also reminds us that the MNE is a network organization and it should be interesting to test whether simultaneous radical institutional change in multiple host countries of an MNE has a compounding effect. Finally, there is a pressing need to explore the possibility that MNEs act as strategic agents and either stabilize otherwise volatile institutional environments or destabilize existing institutional environments through their strategic actions, as is described by Beckert (1996).

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