

**Transnational organisational fields and revealed comparative
advantage: Conceptualising distance as a field**

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ABSTRACT

Understanding distance and how it functions is critical for international business research. Anchored on the theoretical work arguing that business should be conceptualised as taking place in institutional fields, this study contributes to the distance debate which seeks to extend the conceptualisation of distance beyond the dyadic view. I argue that the dyadic conceptualisation of distance is inadequate to explain organisational outcomes in transnational organisational fields. The field theory suggests that actors exist within a field or social space, where they are oriented towards one another over a common issue or goal. Therefore, this study broadens the conceptualisation of distance from the prevalent dyadic view towards a field perspective. To test and explain the conceptualisation of distance in a field perspective, I developed a novel construct, called the '*transnational distance field*'. The proposed construct is anchored on the CAGE distance framework and the field theory.

The usefulness of the transnational distance field construct was tested at the national level by looking at country performance in a global value chain, namely for the food and beverage sector. In each country's food and beverage global value chain, all the CAGE distance dimensions were determined for all its customer and supplier countries. Their relationship with the revealed comparative advantage (RCA) of the country in that sector was then tested. The outcome of the study provided evidence that distance indeed functions as a field. Particularly relationships with customers are sensitive to distance indicators: The evidence showed that the cultural distance diversity of customer countries is positively correlated and their economic distance diversity in terms of income level groups negatively correlated to RCA. Both these relationships were also shown to be moderated by the administrative membership of customer countries to regional trade blocs. The only supported supplier related hypothesis was of the positive relationship between administrative membership of supplier countries to regional trade blocs and RCA. In summary, the field conceptualisation was shown to function counter-intuitively in that greater diversity is positive and not negative.

The results of this study justified the argument for the need to broaden our conceptualisation of distance in international business from a dyadic view to a field perspective. This outcome agrees with a recent study that proposed the use of a diversity framework as an alternative approach to studying distance phenomena involving more than two entities. This study will assist firms and policy makers to formulate optimised strategic responses to various distance diversities in transnational fields.

Key Words: Distance, Transnational Organisational Field, Neo-institutional Theory, Field Theory, Transnational Distance Field, Revealed Comparative Advantage

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1 INTRODUCTION

1.1 BACKGROUND

The economic and social activities of organisations are increasingly becoming transnational, making it difficult to separate the effects of what happens within and across national boundaries (Djelic & Quack, 2008). This shift has necessitated the conceptualisation of the organisational field to extend beyond geographical limitations and towards a transnational perspective (Djelic & Quack, 2008; Wooten & Hoffman, 2016). Originally defined by DiMaggio and Powell (1983, p. 148) as “those organisations that, in the aggregate, constitute a recognized area of institutional life”, researchers have argued that the organisational field needs to be reconceptualised as a social order aggregated at a much higher level such as the national or the transnational level (Djelic & Quack, 2008).

Therefore, it has been shown that organisational fields can emerge “both within and across geographic contexts” (Manning, Boons, von Hagen, & Reinecke, 2012, p. 200). In other words, an organisational field can be constituted of actors spread across multiple countries (Morgan, 2006), and whose “mental and action maps” evolve from their diverse national contexts (Djelic & Quack, 2008, p. 15). Such an organisational field, which spans multiple countries, is referred to as a ‘transnational organisational field’ (Marano & Kostova, 2016).

In these transnational organisational fields, actors are subjected to multiple institutional demands carrying the national characteristics of countries from which they emanate (Djelic & Quack, 2008; Marano & Kostova, 2016). These multiple institutional demands can be compatible and mutually reinforcing (Raynard, 2016), but at times they can be conflicting, giving rise to institutional complexity (Greenwood et al., 2011; Marano & Kostova, 2016; Ocasio & Radoynovska, 2016). When combined with an environment of diverse countries such as in transnational organisational fields, these multiple institutional demands may prevent cohesion and shared patterns among organisations thereby resulting in them not being able or perhaps required to conform to all institutional demands (Kostova et al., 2008; Marano & Kostova, 2016).

That also creates the potential situation that having a very diverse set of countries in a field actually reduces the complexities faced by a focal actor. In order for organisations to maximise legitimacy in such cases, managers formulate strategic responses reflected in the combination of institutional demands to which they choose to commit (Ocasio & Radoynovska, 2016). Field theory from sociology suggests that actors exist within a field or social space, where they are oriented towards

one another over a common issue or goal (Kluttz & Fligstein, 2016). Therefore, while actors in the field formulate their strategic responses, they are often bound by the established rules, norms, and expectations that define that particular field. These guidelines shape the strategies and actions of actors operating within the field, especially concerning common issues or goals that are central to that field's purpose or mission.

This shift in the conceptualisation of the organisational field is expected to usher in distance complexities that will likely alter how actors behave in response to institutional demands. The impact of distance on organisational outcomes has long been a subject of interest in international business (Ambos & Håkanson, 2014), with some scholars referring to international business as essentially the management of distance (Zaheer et al., 2012). However, despite its centrality in international business, distance has remained a very contentious construct with no defined theory, and whose meaning can only be derived within the context of specific theoretical frameworks (Beugelsdijk et al., 2018).

Therefore, in line with the above argument by Beugelsdijk et al. (2018), this study conceptualises distance within the context of a transnational organisational field. I argue that in the context of a transnational organisational field, distance presents a somewhat different scenario, one which is more than just differences between two countries. A transnational organisational field changes our understanding of how we expect distance to function, and calls on us to conceptualise distance in a manner that accounts for the field perspective. The term 'field perspective' in this study refers to the view that actors exist within a field or social space (Kluttz & Fligstein, 2016), where they are oriented towards other actors located across different geographic spaces in at least two nation-states (Pries, 2001). This is in line with concerns raised by previous researchers who pointed out that differences may exist when a distance analysis is looking at dyadic differences between pairs of countries and configurations of countries (Ambos & Håkanson, 2014). Therefore, with a particular focus on the relationship between distance and performance within the context of transnational organisational fields, the researcher argues that the original conceptualisation of distance needs to be adapted to account for the field perspective.

Therefore, the researcher develops the 'Transnational Distance Field', a novel concept aimed at addressing the gap in understanding the dynamics of distance in transnational organisational fields. This proposed concept considers both geographical distances and cross-country differences among actors within the transnational organisational field, with a specific focus on influential actors like customers. Additionally, the concept incorporates factors that contribute to making countries more similar, such as membership in trade blocs or common economic agreements (Phillips et al., 2009).

Geographical distances between countries are important because they can impact interactions, relationships, and strategies of organizations operating across borders. In addition to geographical distances, cross-country differences in cultures, economies, and regulations among other country-specific factors is crucial in comprehending the complexities of transnational organisational interactions. This includes variations in business practices, legal frameworks, societal norms, and more. The proposed Transnational Distance Field concept acknowledges that some factors can make countries more similar. Mentioning membership in trade blocs suggests that economic and trade agreements between countries can reduce certain types of distance (e.g., economic distance) and facilitate transnational interactions.

The usefulness of the transnational distance field construct is examined by testing its effect on revealed comparative advantage in the food and beverage sector. Food and beverage is a primary sector found in countries of all levels of development, and food and beverage value chains have become global by spanning national boundaries (Manning et al., 2012; Storoy et al., 2013). Therefore, the food and beverage sector is particularly apt for this analysis given its ubiquitous presence across countries and the global nature of its value chains.

The selection of the outcome variable was challenging as I needed to consider a number of factors. One of the most important considerations was how to ensure that the selected measure captures a diversity of countries, but in a way that ensures comparability. I addressed this by firstly finding a relative measure that is regarded as a central concept in international business. I also needed to ascertain that the selected measure used the underlying dataset that was used in operationalising the independent variables to ensure that there is alignment across the independent and dependent variables.

I selected the Revealed comparative advantage (RCA), a measure regarded as a key concept in international trade (Stellian & Danna-Buitrago, 2019). RCA is widely used to measure a country's competitiveness or specialisation in the production and export of a particular product (Ahmad et al., 2017; Brakman & Van Marrewijk, 2017; Ferto, 2018; Laursen, 2015). I consider RCA as the most suitable outcome variable because its operationalisation is relative to a group of countries (Brakman & Van Marrewijk, 2017), in this case, those countries that make up the focal country's transnational organisational field. I also consider RCA as a valid measure of competitiveness because it captures exports, which are seen as evidence that a firm can compete internationally.

Additionally, to make sure that there is alignment across my measures, I used the EORA Multi-regional Input-Output tables as my source of data. This is the same source of data that I used with

the independent variables. Input-Output tables provide adequate data needed to measure RCA either based on gross trade flows or value-added trade flows (Brakman & Van Marrewijk, 2017). As explained in more detail in chapter 2, I chose to operationalise RCA using value-added trade flows because this approach is considered to be the most informative (Brakman & Van Marrewijk, 2017) and it also deals with the double accounting problem inherent in gross trade flows calculations (Greenville et al., 2017).

The research particularly hones in on scholarship on organisational fields and uses the neo-institutional theory as the theoretical lens. The neo-institutional theory posits that organisational behaviour is not necessarily driven by the desire to maximise efficiency and effectiveness but primarily by the need for organisational legitimacy (Liang et al., 2007; Mignerat & Rivard, 2009; Teo et al., 2003). Legitimacy is considered a core concept in neo-institutional theory and its attainment by an organisation is critical for the organisation's acceptance and long term survival within its organisational field (Mignerat & Rivard, 2009). An organisation is conferred legitimacy within its organisational field when its actions and values are congruent with those of the organisations constituting its organisational field (Son & Benbasat, 2007). Such fields have long been characterized in national terms, but scholars are increasingly recognising that organisational fields often operate across multiple boundaries (Jacob et al., 2022; Reinecke et al., 2012; Suddaby et al., 2007). Yet when there are multiple and potentially contradictory institutional demands, it may simply not be possible to comply with all demands – and paradoxically, create opportunities where focal actors are less encumbered by distance.

The researcher advances the transnational debate in organisational institutional studies and distance research. This research extends the notion of distance from its original context of expanding multinational companies in international business (Azar & Drogendijk, 2014; Evans et al., 2008; Evans & Mavondo, 2002; Magnusson et al., 2014; O'Grady & Lane, 1996) to a complex relationship between multiple actors in transnational organisational fields. This is expected to further our understanding of how distance plays out when influences cannot simply be conceptualised as dyadic. For example, it shows the influence institutional demands have on revealed comparative advantage in cases where the focal actor is simultaneously interacting with multiple actors located across different countries.

1.2 PROBLEM STATEMENT

The concept of the organisational field has evolved beyond geographical and industrial limitations towards a transnational perspective (Wooten & Hoffman, 2016). Despite this shift, Djelic and Quack

(2008) argued that most organisational field researchers neglect the effect of institutional processes that extend beyond national boundaries. They further argued that such a stance becomes more and more problematic as the economic and social activities of organisations are becoming increasingly transnational. Consequently, this increase in the interaction of actors located across multiple countries has led to the emergence of transnational organisational fields (Frishman, 2013; Manning et al., 2012).

Since transnational organisational fields span multiple countries with diverse cultures and regulations, new challenges emerge that organisational field actors need to deal with. Other scholars have highlighted gaps in our knowledge of how complex organisational fields are likely to shape organisational outcomes (Bunduchi et al., 2015), and a more recent study by Jacob et al. (2022), calls for the need for more organisational field research in international business. To answer this call, this study seeks to look at how distance plays out within the context of the organisational field.

Distance is one of the most important constructs in international business, hence some scholars have referred to international business as essentially the management of distance (Zaheer et al., 2012). So, since actors in transnational organisational fields are dispersed across multiple countries with diverse cultures and regulations, it becomes important to try and understand how various distances between these countries are likely to influence how field actors respond to institutional demands. The field theory argues that actors exist within a field, and that the established rules, norms, and expectations defining that particular field shapes the strategies and actions of the actors belonging to that field (Kluttz & Fligstein, 2016). Therefore, since the meaning of distance is derived within the context of a particular theoretical framework (Beugelsdijk et al., 2018), in transnational organisational fields, actors must view distance between themselves beyond dyadic relationships, but in a field perspective.

Existing distance measures derived from international business studies have mostly been used to address distance between two countries when businesses are internationalising (Azar & Drogendijk, 2014; Evans et al., 2008; Evans & Mavondo, 2002). These current measures, though very useful, can be argued to be inadequate to address distance in a field perspective, where actors are expected to simultaneously evaluate how distance between their organisation and each individual actor influences their response to the multiple institutional demands from all actors. Previous researchers have also argued that differences in distance effects may exist depending on whether distance is being analysed in a dyadic pair of countries or configurations of countries (Ambos & Håkanson, 2014). Therefore, as the field becomes more complex and diverse, a different approach to the conceptualisation of distance becomes necessary. Recent studies by Lumineau et al. (2021) and

Kostova and Beugelsdijk (2021) concur that distance in international business studies needs to be relooked using the diversity lens. In order to address this problem, a suitable new approach and measure is required.

1.3 PURPOSE STATEMENT

The purpose of this research is to develop the concept of a transnational distance field, and then to examine the relationship between the novel transnational distance field concept and revealed comparative advantage in transnational organisational fields.

1.4 RESEARCH QUESTION

This study asks the following research question:

What is the relationship between transnational distance field and revealed comparative advantage in transnational organisational fields?

1.5 SCOPE AND DEFINITIONS

1.5.1 Scope

This research was conducted on 189 countries listed on the EORA input output tables. The focus was put on the food and beverage global value chains.

1.5.2 Definition of terms

Neo-institutional theory posits that organisational behaviour is not necessarily driven by the desire to maximise efficiency and effectiveness but primarily by the need for organisational legitimacy (Liang et al., 2007; Mignerat & Rivard, 2009; Teo et al., 2003).

A **transnational organisational field** can be defined as a relational space where organisations located across different countries and whose activities span national borders interact with each other and converge on shared, though not necessarily consensual, issues of importance to them (Lacroix, 2011; Wooten & Hoffman, 2016).

The **transnational distance field** is defined as the degree to which the cultural, administrative, geographical, and economic attributes of actors located within a field or social space spanning at least two countries are different from one another.

Global value chains are defined as “fragmented and geographically dispersed production processes where different stages are located across different countries” (Casella, Bolwijn, Moran, & Kanemoto, 2019, p. 115). Because the outputs of the production processes of one stage are the inputs for the next stage, global value chains consist of a series of (globally dispersed) suppliers and customers.

Gross value added at basic prices is defined as output valued at basic prices less intermediate consumption valued at purchasers' prices (Aslam et al., 2017).

Revealed comparative advantage of a country for a particular sector is defined as the ratio of the sector's percentage share in the country's exports to its share in the world trade (De Oliveiraa et al., 2017; Laursen, 2015).

1.6 IMPORTANCE AND BENEFITS OF THE PROPOSED STUDY

1.6.1 Academic Contribution

Economic and social actions of organisations are increasingly becoming transnational (Djelic & Quack, 2008). This has driven organisational institutionalism scholars to extend the conceptualisation of the organisational field beyond industrial and geographic boundaries, towards a transnational perspective (Manning et al., 2012; Wooten & Hoffman, 2016). This means that organisations within the same organisational field can be distant from each other, culturally, administratively, geographically, and economically (Ghemawat, 2001), by virtue of being in different countries. However, the researcher argues that current dyadic conceptualisation of distance is inadequate to capture the distance complexity of a field perspective in transnational organisational fields.

In order to address this gap, this study makes its main academic contribution by developing the ‘transnational distance field’ concept. This shifts the notion of distance from its current dyadic conceptualisation in international business (Azar & Drogendijk, 2014; Evans et al., 2008; Evans & Mavondo, 2002; Magnusson et al., 2014; O’Grady & Lane, 1996) to a complex field conceptualisation

in transnational organisational fields using the diversity lens (Kostova & Beugelsdijk, 2021; Lumineau et al., 2021). It shows that complexity paradoxically does not increase the challenges experienced by focal actors, and presents some explanations why.

1.6.2 Practical Contribution

This research has practical implications for senior managers whose organisations trade with multiple businesses located across diverse countries. These managers are responsible for making the organisation's key decisions regarding the strategic actions an organisation should take when responding to transnational institutional demands.

The outcome of this research is expected to enhance the managers' understanding of which actors, whether customers or suppliers etc., are the most influential within their field, and how the distance field between them and these multiple actors is likely to affect their strategic choices. This understanding is expected to assist managers in their evaluation and selection of the best combination of institutional demands to conform to (Ocasio & Radoynovska, 2016) and those to ignore in order to achieve the best outcomes for their organisations.

Counterintuitively, the outcome of this study suggests that greater diversity within the organisational field produces positive outcomes. Therefore, instead of managers viewing greater diversity as a hinderance, they need to understand ways of taking advantage of the differences for the benefit of their organisations.

1.7 DOCUMENT CONTENTS

The contents of this document are as follows: Chapter one introduces the background to this study, followed by the problem and purpose statements leading to the research question. The scope of the research is discussed and the chapter is concluded with the discussion of the importance and benefits of the proposed study. Chapter two gives a comprehensive review of the literature that is relevant to this study, closing with the formulation of hypothesis and the proposed research model. Chapter three highlights the context while chapter four presents the research design and methodology. The last four chapters (5, 6, 7, and 8) are the results, discussion, conclusion and the list of references respectively. Also contained in this document are the appendices which are presented right at the end of the document.

2 LITERATURE REVIEW

2.1 INTRODUCTION

This study seeks to explore the transnationality of the organisational field by capturing the cross-country differences and geographical distances that exist within transnational organisational fields. This study also goes further to try and understand how these multiple cross-country differences and geographical distances influence outcomes such as the revealed comparative advantage.

Drawing on neo-institutional theory, this literature review starts by discussing transnational organisational fields followed by the effects of distance in a transnational organisational field. This leads to the development of the 'Transnational distance field' concept by the researcher. This is followed by discussing the concepts of value added and revealed comparative advantage. The usefulness of the transnational distance field construct is examined by looking at its role in influencing revealed comparative advantage. Hypotheses are developed and the chapter closes with the proposed research model.

2.2 TRANSNATIONAL ORGANISATIONAL FIELDS

This section will first discuss organisational fields as relational spaces centred around important issues that bring together different organisations. This discussion of organisational fields as relational spaces will extend our view of the organisational fields, in particular how they have broadened beyond the view that they built around the physical proximity of actors or common industries. It will be explained how extending the perspective of the organisational field leads us to what is now known as the transnational organisational field. I will go on further to discuss the implications of the transnational organisational field at the country level.

2.2.1 Organisational Fields

The organisational field is regarded as a central concept in neo-institutional theory (Wooten & Hoffman, 2016), and it is considered as a 'centre of interaction' for organisations converging on shared, though not necessarily consensual, issues of importance to them (Wooten & Hoffman, 2016). Accordingly, an organisational field is considered to be more than just a collection of influential organisations; rather it is formed around important issues that bring together different organisations whose reasons for existence are not necessarily the same (Hoffman, 1999).

These issues are defined by Lamertz, Martens, and Heugens (2003) as, “socially constructed disruptions of an institutional order that structures [*sic*] purposeful exchanges between actors” (p. 82). So important are such issues that organisations cannot successfully disregard them (Hoffman, 1999), but instead they pressure organisations to alter aspects of their behaviour (Litrico & David, 2017). Consequently, the firm’s actions can be seen as not resulting from choices driven by internal arrangements, but rather as a choice among limited ‘legitimate’ options defined by the actors constituting the firm’s organisational field (Scott, 1991). It can therefore be argued that, “issues define what the field is, making links that may not have previously been present” (Hoffman, 1999, p. 352).

Therefore organisational fields are characterised as relational spaces that bring together disparate organisations to engage each other on particular issues consequential to them (Wooten & Hoffman, 2016). These relational spaces are not necessarily geographically bound; instead, they can link up actors located anywhere in the world. This focus on relational spaces and issues as the foundation of an organisational field has led scholars to broaden their conceptualisation of organisational fields. Now, organisational fields can be conceptualised away from the view that they are built around the physical proximity of actors (Wooten & Hoffman, 2016) or common industries (Hoffman, 1999) towards a transnational perspective (Djelic & Quack, 2008; Frishman, 2013; Manning et al., 2012; Marano & Kostova, 2016; Wooten & Hoffman, 2016).

2.2.2 Transnational Organisational Fields

The implications of the above arguments is that organisational fields can emerge, “both within and across geographic contexts ... through the increased interaction between organizations, resulting in shared practices, rules and norms” (Manning et al., 2012, p. 200). This shift of the organisational field towards a transnational perspective has also come as an answer to previous researchers who called for more attention to the openness of organisational fields (Greenwood & Hinings, 1996). As the conceptualisation of the organisational field has broadened beyond geographical boundaries (Djelic & Quack, 2008; Manning et al., 2012; Wooten & Hoffman, 2016), the term transnational organisational field (Frishman, 2013; Marano & Kostova, 2016) is used to describe an organisational field which spans multiple countries. Compared with localised organisational fields, transnational organisational fields interconnect diverse actors located across different countries (Morgan, 2006).

A study by Manning et al. (2012) presents an example of a transnational organisational field which emerged around the issue of sustainability standards development and adoption in global coffee value chains. The field was made up of producers, roasters, standards organizations, consumers,

and non-governmental organisations. Producers consisting of small producers, cooperatives, and farmers owning large plantations were located in countries such as Ethiopia, Côte d'Ivoire, Uganda, India, Colombia, Brazil, Vietnam, Indonesia, Peru, Honduras, Mexico and Nicaragua. On the other hand, non-governmental organisations, major coffee consumers and roasters came from developed countries such as the USA, Germany, Italy, Netherlands, and UK. Coffee sustainability standards were shown to originate from countries such as Netherlands, Mexico, Germany, and the USA. Their findings showed that most global standards are initially developed within particular national contexts, and that regional origins of field actors influence the nature of the standards and the strategic choices made by adopting organisations. This is consistent with Djelic and Quack's (2008, p. 15) argument that transnational organisational field actors, "extend their national contextual rationalities into the international sphere where they interact, confront and negotiate with each other". A graphical representation of linkages between actors located across multiple countries in the above example of a transnational organisational field is shown in Figure 1. The dotted lines represent the interaction between actors.

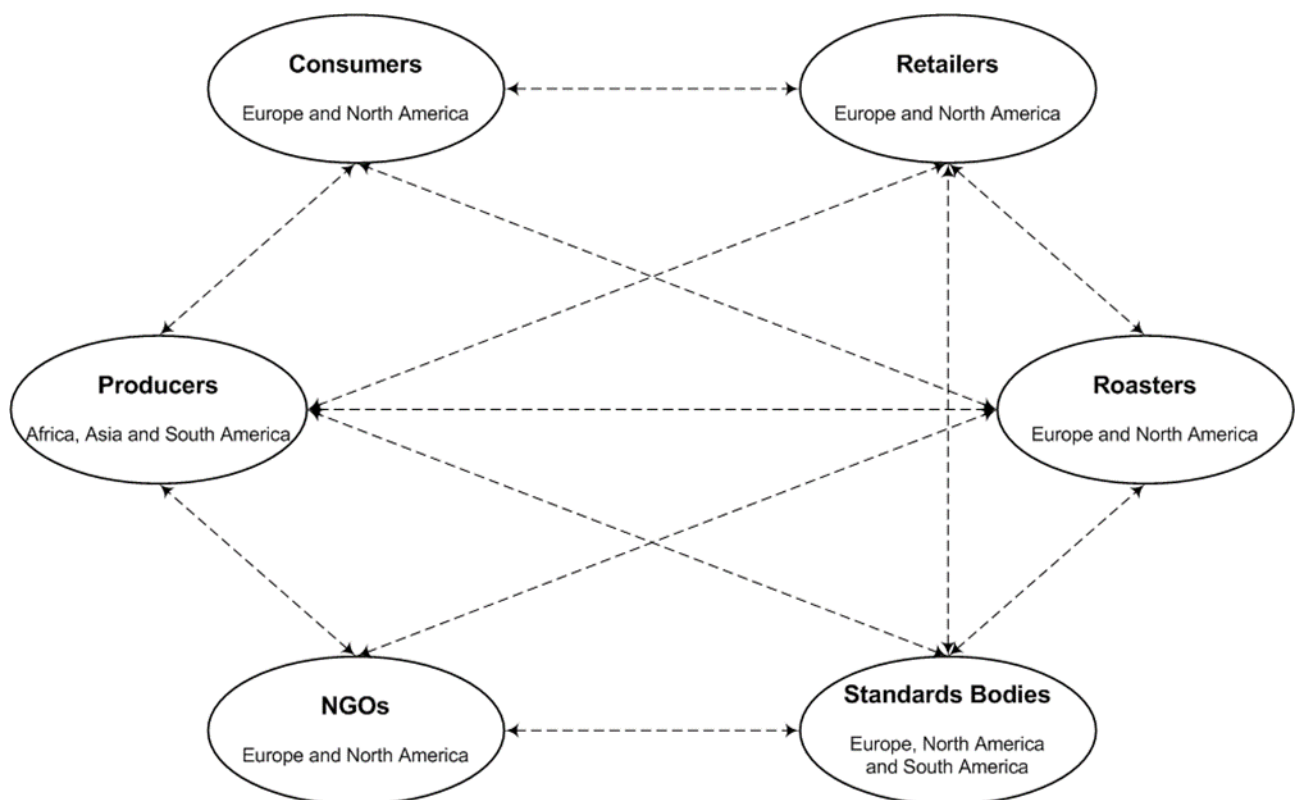


Figure 1. Graphical representation of coffee global value chain transnational organisational field (Manning et al., 2012)

Other researchers have also contributed to this transnational organisational field discussion. Drawing on the notion of organisational fields as spaces of strategic action (Fligstein & McAdam, 2011), a study by Marano and Kostova (2016) explained why institutional demands in a transnational organisational field vary in their significance to the firm adopting corporate social responsibility practices. Their study showed that institutional pressures are more salient when they emanate from countries leading in the issue defining the transnational organisational field, in their case, countries in the forefront of adopting corporate social responsibility practices. They also showed that more homogeneous transnational organisational fields where the majority of member countries converge in their attitudes towards corporate social responsibility practices tend to have stronger pressures compared to more heterogeneous fields. In addition, it was also shown that a firm's economic dependence on a particular country strengthens the institutional pressures originating from that particular country.

Another study focusing on transnational judicial dialogue argued that a transnational organisational field of the courts was emerging as a result of an increase in the interaction of courts domiciled across different countries (Frishman, 2013). The paper concluded with very interesting questions which sought to explore how differences between sites of governance play out in the transnational organisational field of the courts. Frishman (2013) encouraged future researchers to explore if courts from other trade blocs such as the BRICS countries (Brazil, Russia, India, China and South Africa) can be considered by the EU to be legitimate players in the transnational judicial field as well as to determine if EU courts are willing to consider ideas from other regions outside of the EU. These two questions agree with the point that was raised by Ramachandran and Pant (2010) regarding the role of distance in the conferment of legitimacy across national borders.

The recommendation for future research in the above study on whether courts from other trade blocs such as the BRICS can be considered by the EU to be legitimate players in the transnational judicial field introduces an interesting aspect of legitimation. Ordinarily, legitimation in organisational fields is viewed from the organisation's level of analysis. However, when we factor in the liability of origin, the negative perceptions of an actor's country of origin in the host country may deprive the firm of legitimacy regardless of whether or not the actor meets the host country's institutional demands (Ramachandran & Pant, 2010). One of the implications for this is that the conceptualisation of legitimacy can be lifted above the organisational level of analysis to the national or supranational level of analysis. This will be discussed in detail in section 2.2.3.

The above studies agree that transnational organisational fields interconnect diverse actors located across various national boundaries (Morgan, 2006), and whose mental and action maps evolve from

their diverse national contexts (Djelic & Quack, 2008). This diversity of countries constituting a transnational organisational field exposes the field actors to multiple institutional spheres where they are expected to comply with multiple institutional demands. These multiple institutional demands can be compatible and mutually reinforcing (Raynard, 2016), but at times they can be misaligned, and conflicting, resulting in increased institutional complexity (Greenwood et al., 2011; Marano & Kostova, 2016; Ocasio & Radoynovska, 2016). Combining multiple cross-country differences and geographic distances with the multiple, and at times conflicting institutional demands can prevent cohesion and shared patterns among field actors, thereby hindering actors from conforming to all institutional demands (Marano & Kostova, 2016). These pressures play out in the various organisations inside a country, e.g., the example of the BRICS courts. Thus, the demands from different (national) institutions are likely to shape how the different organisations inside a given country make sense of their world, and also how they determine legitimacy.

2.2.3 Legitimation in Transnational Organisational Fields

Institutional complexity can result in failure to conform to all institutional demands thereby enhancing the issue of active agency, whereby managers evaluate and select which institutional demands to prioritise (Kraatz & Block, 2008; Marano & Kostova, 2016). Therefore, in order for an organisation to attain legitimacy within its transnational organisational field, firms are compelled to make strategic choices that enable them to accommodate as many institutional demands as they can (Marano & Kostova, 2016; Ocasio & Radoynovska, 2016), especially those which are deemed critical to the firm's survival.

It is important to note that the legitimating process in these complex institutional environments is aided by the efforts of both the organisation and the legitimating environment in trying to understand more about each other (Kostova & Zaheer, 1999; Marano & Kostova, 2016). The organisation makes an effort to understand the legitimacy requirements of its foreign environment and then crafts creative ways of how to attain legitimacy or influence those requirements, while at the same time the environment tries to gain more knowledge of the organisation so that it can better judge it (Kostova & Zaheer, 1999). This process is complex and dynamic as both the firm and the foreign environment have limited information about each other, therefore they continue to learn about each other through their interactions and make necessary adjustments (Baum & Oliver, 1991). Since actors exist in a field comprised of many field actors, this therefore raises the question about what happens when there are so many actors of approximately equal importance that it becomes virtually impossible to understand all of them.

It is also worth noting that legitimacy across national borders as is the case with transnational organisational fields is further complicated by distance and therefore much more difficult to attain (Xu & Shenkar, 2002). When firms are seeking legitimation across national borders they also have to contend with liabilities of foreignness and liabilities of origin (Kostova & Zaheer, 1999; Pant & Ramachandran, 2012; Ramachandran & Pant, 2010). Zaheer and Mosakowski (1997, p. 461) asserted that “There is an implicit, dynamic relationship between the liability of foreignness and the legitimacy of foreign firms in different cultural and institutional settings”. The liability of foreignness is borne by all foreign firms in the host country, however the liability of origin is selective as it has been shown to affect mostly firms from developing countries when entering developed country markets (Pant & Ramachandran, 2012).

Therefore, in some cases even though a firm from a developing country meets the host country’s institutional demands, the negative perceptions of its country of origin in the host country may deprive the firm of legitimacy (Ramachandran & Pant, 2010). Also, efforts needed to overcome the liability of foreignness and the liability of origin are somewhat different. Overcoming the liability of foreignness requires mostly the firm’s initiatives to conform to the host country’s institutional demands and attain legitimacy. However, overcoming the liability of origin is not only dependant on the firm’s initiatives, its country of origin’s involvement is necessary because the negative perceptions of the country of origin in host countries play a major role in the legitimation of its firms in these foreign countries (Ramachandran & Pant, 2010).

It has been shown above that a foreign firm can be deprived of legitimacy in the host country because of adverse images of its country of origin in the host country. It was further discussed that in such cases the country of origin needs to get involved in helping its organisations to overcome the legitimacy deficits in foreign markets (Ramachandran & Pant, 2010). Successful trade with a foreign country is of benefit to both the firm and the state, therefore the state, for example, may need to improve the efficiency of its institutions in order to enhance its image and boost its exports. It can therefore be argued that in the face of host country actors, the legitimacy of a foreign firm is intertwined to the perceptions the host country actors have on the foreign firm’s country of origin. Also, it can be argued that attaining legitimacy in the face of the liability of origin is a joint responsibility between the firm and its country of origin. For that reason, I propose that the conceptualisation of legitimacy in transnational organisational fields should not be limited to the organisational level, but rather that it must be extended to the country level. It should also be noted that according to the field theorists, actors are not limited to individuals and organisations, they also include states (Kluttz & Fligstein, 2016). To be more specific, this study conceptualises legitimation at the country level food and beverage sector.

2.3 THE TRANSNATIONAL DISTANCE FIELD

As discussed in the previous section, cross-country differences and geographic distances between actors in transnational organisational fields are expected to introduce distance complexities which are likely to complicate the functioning of the organisational field. This section will first discuss the dyadic conceptualisation of distance in international business and the value of also adding an additional field perspective. This will finally be followed by the development of the 'transnational distance field' concept.

Distance has been proven to be a very important analytical tool in international business despite ongoing debates around its conceptualisation and measurement (Lumineau et al., 2021; Zaheer et al., 2012). However, the existing distance constructs such as cultural distance (Hofstede, 1983), institutional distance (Dong et al., 2017; Kostova, 1999; Yang et al., 2012), psychic distance (Azar & Drogendijk, 2014; Evans & Mavondo, 2002; Johanson & Vahlne, 1977; Magnusson et al., 2014; O'Grady & Lane, 1996; Sousa & Bradley, 2005) and the CAGE distance framework (Ghemawat, 2001) all tend to view distance in a dyadic manner (Lumineau et al., 2021), i.e. between the home country and the host country. Though this dyadic conceptualisation has proven its usefulness, it has limitations when one wants to broaden the scope of analysis to relationships that involve more than two parties. To address this limitation, Lumineau et al. (2021) proposed the reconceptualisation of distance towards a diversity framework. In their argument, they state that distance relationships involving more than two parties better depict "an increasing range of managerial phenomena, such as multi-cultural teams, multi-partner alliances, and networks" (p. 1662). Also the previous work on added cultural distance by Hutzschenreuter and Voll (2008), has shown in a subtle manner, an approach to measure the level of added cultural distance per unit of time in a non-dyadic perspective.

Encored on the field theory, this study extends Lumineau et al.'s (2021) argument on the limitations of the dyadic conceptualisation of distance. I argue that the dyadic conceptualisation of distance is inadequate to capture distance in a field perspective. Field theorists perceive actors as "located in a social space (the field), which is a socially constructed arena in which actors are oriented toward one another over a common practice, institution, issue, or goal" (Kluttz & Fligstein, 2016, p. 186). The field constrains the actions of the field actors because actors are expected to think and act in accordance to the rules and expectations of the field. However, field actors are also involved in active agency (Kraatz & Block, 2008; Marano & Kostova, 2016), whereby they can evaluate and select the institutional demands to prioritise in order to gain resources such as legitimacy and other forms of capital (Kluttz & Fligstein, 2016). It should be noted that according to the field theorists, actors are not limited to individuals and organisations, they also include states.

Therefore, since the actions of a field actor are determined by its fellow field actors, it can be argued that in transnational organisational fields a manager must balance the demands of multiple actors located across different countries, whom they perceive to represent not only different organisational, but also different national perspectives. Since the field actors represent different national perspectives, the focal actor needs to take into account the cross-country differences and geographic distances in their decision making. In other words, and in line with the field theory as explained by Kluttz and Fligstein (2016), actors can be perceived as existing within a 'field of distances, whereby their actions are influenced by the multiple distances they must contend with. Therefore, this study seeks to extend the conceptualisation of distance to a field perspective by developing what I term, the 'transnational distance field' concept.

Previous research has shown that dimensions of national culture have been extensively used as the main dimension for measuring distance. However, other researchers have argued that the focus on cultural differences only is inadequate, and have emphasised the need to also capture political, economic and geographic diversities when assessing cross border transactions (Antunes et al., 2019; Evans & Mavondo, 2002; Ghemawat, 2001). In alignment with that body of work, this study uses Ghemawat's (2001) CAGE distance framework as a basis for developing the transnational distance field. The CAGE distance framework is preferred because its four dimensions: namely, cultural, administrative, geographic and economic, provide a comprehensive view and additional explanatory power to empirically assess diversity between countries (Antunes et al., 2019; Miloloza, 2015).

Therefore, in line with the field theory (Kluttz & Fligstein, 2016) and the CAGE distance framework (Ghemawat, 2001), I define the transnational distance field as the degree to which the cultural, administrative, geographical, and economic attributes of actors located within a field or social space spanning at least two countries are different from one another. The following section discusses the CAGE distance framework in more detail.

2.3.1 CAGE Distance Framework

The Cultural, Administrative, Geographic, and Economic (CAGE) distance framework was developed by Ghemawat (2001) to help managers to identify and assess the impact of different dimensions of distance when crafting international strategies. These four dimensions of distance have been shown to influence different businesses in different ways and these are discussed in more detail in the following sections.

2.3.1.1 Cultural Distance

Culture has been long recognised as a very important subject in international business, and measures such as Hofstede's (1983) cultural dimensions and the GLOBE project as well as Kogut and Singh's (1988) widely cited study on 'the effect of national culture on the choice of entry mode' are testimony to that.

It has been shown that cultural attributes of a country play a pivotal role in explaining the interaction between individuals, companies and institutions (Ghemawat, 2001; Miloloza, 2015). These attributes may include religious beliefs, racial differences, social norms, and language. Differences in these attributes between trading countries can create distance barriers that can significantly hinder business cooperation. Therefore, higher volumes of trade are expected between countries that share cultural attributes compared to those that have divergent cultural attributes.

2.3.1.2 Administrative Distance

Administrative distance is concerned with the differences in laws, policies and institutions that typically emerge from a political process (Antunes et al., 2019). Governments can create administrative barriers that increase distance to other countries through the enactment of trade barriers such as tariffs, trade quotas, and subsidies to domestic producers just to name a few (Miloloza, 2015). Also, countries can reduce the administrative distance between themselves and increase the ease of doing business through the creation of treaties, regional trade blocs and by even adopting a common currency. Colonial ties have also been shown to be an important factor that reduces administrative distance between countries (Antunes et al., 2019; Ghemawat, 2001).

2.3.1.3 Geographic Distance

Geographic distance matters for trade primarily because inputs and final goods need to be transported from sellers to buyers. As expected, geographic distance affects the cost of transportation. The further or the more inaccessible a place is, the more expensive it becomes to transport goods to and from that place. The type of product that is being traded also matters, for example, products with low value-to-weight ratios and those that are perishable or fragile incur particularly high costs with distance (Ghemawat, 2001). It should however be noted that geographic distance is not only limited to physical distance, it also embodies differences in time zones, climate, topology, the size of countries, and human attributes such as transportation and communication infrastructure (Antunes et al., 2019; Ghemawat, 2001; Miloloza, 2015).

2.3.1.4 Economic Distance

Differences in economic attributes such as the income of consumers, wealth distribution, and the relative purchasing power create distance between countries. These also play a significant role in determining business cooperation and the levels of trade between countries (Ghemawat, 2001; Miloloza, 2015). As the positive correlation between the GDP per capita and trade flows implies, economically stronger and more stable countries have been shown to engage more in cross border economic activity compared to poorer countries. Most of this trade, it has been shown, that it is amongst rich countries, however poor countries have also been shown to trade more with rich countries than amongst themselves (Ghemawat, 2001). Therefore, economic distance is very important in influencing the both levels of trade and the choice of business partners.

2.3.1.5 Usefulness of CAGE Framework

A central assumption of the CAGE Framework is that countries can be similar along some dimensions, but that differences in other dimensions may nonetheless introduce complications. For example, there is limited administrative distance between English-speaking African countries and their erstwhile colonial power, the United Kingdom (Antunes et al., 2019). However, differences in economic attributes such as the income of consumers, wealth distribution, and the relative purchasing power of those African countries and the UK nonetheless create distance between countries.

Therefore, while noting some arguments from previous research to reduce the CAGE framework to only two elements, namely geographic and contextual distance (Beugelsdijk et al., 2018), this study will uphold the four different elements of the CAGE framework. I do so because the individual dimensions of what is termed contextual distance within the CAGE framework, i.e., cultural, administrative, and economic distance, each have a different impact on the actor as explained above. The way they work together while differently impacting the field actors is what places an actor within a 'distance field'. Revisiting the field theory (Kluttz & Fligstein, 2016), I therefore extend the field theory argument and say; actors exist within a distance field which constrains their actions because actors are expected to think and act in accordance to the demands of the distance field. The distance field is explained in more detail in the following section.

Because this measure already seeks to introduce nuance into the concept of distance, it provides a useful basis for further extending distance scholarship, in this case from a dyadic 'line' type concept into a field concept. This study also contributes to the scholarly work by Lumineau et al. (2021). Their study proposed the reconceptualisation of distance from a dyadic view towards a diversity framework to cater for distance relationships involving more than two parties such as in multi-cultural teams, multi-partner alliances, and networks.

2.3.2 The concept of 'transnational distance field'

In the original conceptualisation of distance in international business studies, different forms of distance (psychic, institutional, cultural, CAGE) are concerned with differences between two countries when companies are internationalising (i.e., the home country and the foreign market) (Evans & Mavondo, 2002; Ghemawat, 2001; Kostova & Zaheer, 1999; Sousa & Bradley, 2005). This can be illustrated by a straight line between two countries as shown in Figure 2, where D denotes distance.

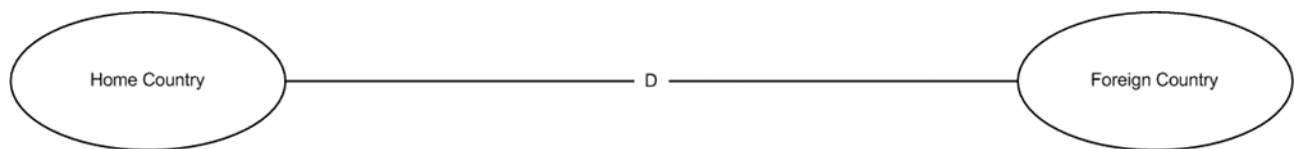


Figure 2. Distance between home and foreign countries.

However, dealing with distance in the context of a transnational organisational field is not a simple case between two countries; it is much more complicated. Field actors such as customers, suppliers, competitors, regulators as well as trade and professional associations are dispersed across multiple countries (Manning et al., 2012; Marano & Kostova, 2016). The national contexts of these actors are diverse (Manning et al., 2012; Morgan, 2006) and their national contextual rationalities inform their behaviour in the transnational organisational fields where they interact with each other (Djelic & Quack, 2008). This implies that a manager in a transnational organisational field is expected to concurrently engage with different countries having varying degrees of distances to the focal firm. Revisiting the study by Manning et al. (2012), it is possible to map the distance within the transnational organisational field which emerged on the issue of sustainability standards development and adoption in global coffee value chains (Figure 3).

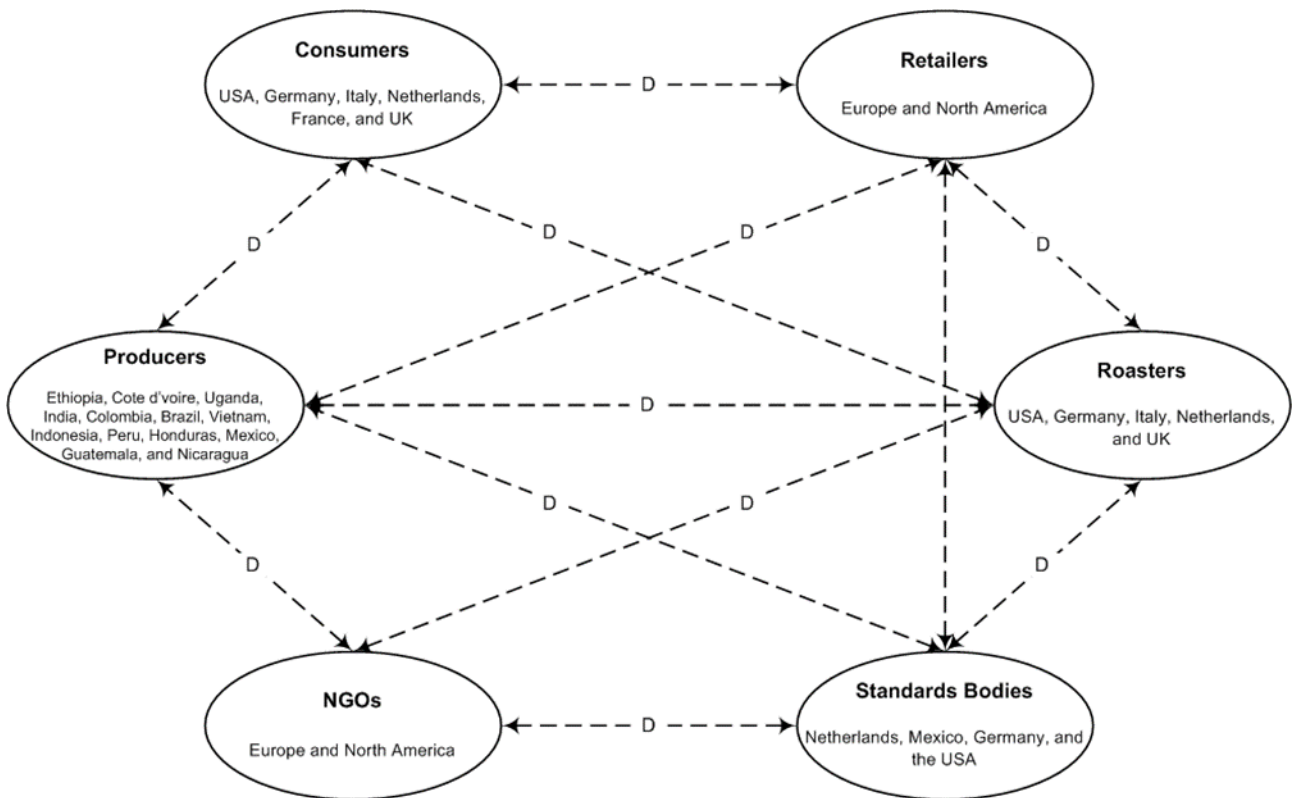


Figure 3. Graphical representation of distance in a transnational organisational field using Manning et al. (2012) study

As earlier discussed, the field theory states that actors exist within a field or social space, whereby they are oriented towards one another over a common issue or goal (Kluttz & Fligstein, 2016). Dotted lines in Figure 3 indicate the interaction between actors. It is noted that any particular field constituent class (i.e., consumers and producers) is comprised of actors located in different countries. Figure 3 shows that standards bodies are located in European, South American and North American countries. It therefore follows that the focal firm must account for distance between itself and these diverse actors as it strategically adopts standards from bodies located in different countries. The same applies to its selection of customers, suppliers, etc.

The managers of focal firms are likely not only concerned about the distance between their organisation and a particular actor in the field. Instead, managers need to simultaneously evaluate how distance between their organisation and each individual actor influences their response to the multiple institutional demands from all actors.

This is important because the managers' choices of which actor's institutional demands they comply with are expected to influence the behaviour of other actors. For example, an organisation's choice to comply with regulators from certain countries can influence which market they will serve as well

as the suppliers they will deal with (Manning et al., 2012). Also, seeking markets in certain countries is expected to influence the firm's choices of to which industry and professional associations to subscribe (Buchanan & Marques, 2018). This also applies to the choice of competitors an organisation chose to mimic. For example, if an organisation wants to sell its products to a country within the European Union, its managers are likely to mimic their seemingly successful competitors already serving that market. However, mimicking these competitors may influence the firm to adopt certain practices that may compromise its existing relationships with other clients located elsewhere.

I often draw on arguments that have been developed in the global value chain literature. Both transnational organisational fields and global value chains are characterised by the spatial (and indeed, global) distribution of activities (Casella et al., 2019), by the extensive interaction between entities (Scott, 1995) and by the fact that their interests can align, but are often also in conflict (Royston Greenwood et al., 2011; Marano & Kostova, 2016; Ocasio & Radoynovska, 2016; Raynard, 2016). There is thus ample reason for using argument across these two concepts.

An important difference is that the diversity of involved entities is greater for transnational organisational fields than for global value chains. Transnational organisational fields per definition include a symbolic dimension, which means that external parties like non-governmental actors would also be included in how they are conceptualised (Bunduchi et al., 2008; Dimaggio & Powell, 1983; Scott, 1991). In contrast, global value chains are more narrowly concerned with the (globally fragmented) production of goods.

When distance is conceptualised as a field, each additional entity introduces substantial complexity. According to the field theory, actors exist within a social space or field, whereby they are oriented towards one another over a common issue or goal (Kluttz & Fligstein, 2016). In the field, the strategies and actions of the actors are constrained by the established rules, norms, and expectations that define that particular field. Using Manning et al. (2012) study as an example, figure 3 above shows a graphical illustration of the interconnectedness of actors within a field.

This study seeks to establish the principle of a transnational distance field, and I therefore build much of my argument around two core actors in both (transnational) organisational fields and global value chains, namely suppliers and customers. The proposed dimensions of the transnational distance field follow the CAGE framework, and are further discussed in the following section.

2.3.3 The dimensions of the 'Transnational distance field'

As previously discussed, the theoretical interest of this study is distance, however, because I am trying to understand distance in a field perspective, I argue that the dyadic conceptualisation of distance in international business is inadequate to explain organisational outcomes in transnational organisational fields. Distance in a field perspective is different from the typical dyadic view, it is not an affair between only two actors. In a transnational organisational field, multiple actors are positioned in a social space, i.e., the field, whereby their actions are determined by the expectations of various field members. In other words, the actions of an actor within the field are constrained by the shared meanings, rules, and norms of the field (Kluttz & Fligstein, 2016).

Therefore, when considering the effects of distance in a field setup, I argue that one needs to take into consideration all the distances from the focal actor to all the other consequential field actors. Take for example: A Latin American country selling 90% of its produce to China is likely has to deal with fewer distance issues than a comparable country that sells equally to a neighbouring country, to the USA and to China, even though the overall distance (whether cultural, administrative or any other element) would be lower. For this reason, a different conceptualisation of distance is required, one that takes account of the field perspective. I propose that diversity not only across but specifically within the different elements becomes an essential conceptualisation to adopt. My proposal to use diversity as the measure of distance is consistent with the study by Lumineau et al. (2021) who argued that conceptualising distance as diversity allows the study of phenomena involving more than two parties.

In addressing the identified gap, the concept of the transnational distance field is proposed, drawing on insights from transnational organisational fields, field theory, distance, and diversity literature. The transnational distance field is conceptualized as a multidimensional construct encompassing two primary constituent elements: the diversity of customer countries and the diversity of supplier countries. The diversity of customer countries and supplier countries within the transnational distance field reflects the extent to which an organisation engages with a varied range of countries in its operations. This diversity encompasses differences in cultural, economic, political, and institutional contexts across countries. It recognizes that organizations interact with multiple countries, each presenting unique challenges and opportunities influenced by their respective contexts.

Literature on transnational organisational fields (Frishman, 2013; Manning et al., 2012; Marano & Kostova, 2016) highlights the importance of understanding organisational dynamics across borders, emphasising that organisations operate within transnational contexts that influence their behaviour

and strategies. On the other hand, the field theory as outlined by Kluttz and Fligstein (2016), underscores the interconnectedness and interdependence of actors within social spaces such as transnational organisation fields. The field constrains the actions of the actors because the field actors are expected to think and act in accordance to the rules and expectations of the field.

The CAGE framework (Ghemawat, 2001) is used as the basis for developing this transnational distance field construct. The CAGE distance elements are Cultural, Administrative, Geographic and Economic. To render the complexity of transnational organisational fields more manageable, I focus on two of the main groups in a transnational field, namely suppliers and customers. I develop dimensions for each of the two groups, suppliers and customers. This results in four sub-elements for the two main groups. These dimensions include the Cultural distance diversity of customer countries, Administrative membership of customer countries to trade blocs, Geographic distance diversity of customer countries and Economic distance diversity of customer income level groups. The same is found for the suppliers, namely; Cultural distance of supplier countries, Administrative membership of supplier countries to trade blocs, Geographic distance diversity of supplier countries, and Economic distance of supplier income level groups. The proposed dimensions for the transnational distance field are discussed in detail in the following passages. First, I discuss the elements of the diversity of customer countries.

2.3.3.1 Diversity of customer countries

In transnational organisational fields, extant literature shows that organisations prioritise institutional demands from countries that the focal organisation economically depends on the most (Manning et al., 2012; Marano & Kostova, 2016). This dependence can be in the form of resources (Durand & Jourdan, 2012) or economic activities such as foreign direct investment and trade (Marano & Kostova, 2016). Likewise, if anticipated economic gains from a particular country are low, it has also been shown that organisations tend to ignore demands from that particular country (Oliver, 1991).

Customers are a major economic player in organisational fields, and their role becomes even more consequential in 'buyer-driven' value chains, where they can coerce sellers to conform to their demands for economic survival (Manning et al., 2012). Since the degree of diversity among field actors influences the effect of the institutional demands and legitimacy (Marano & Kostova, 2016), this section discusses the dimensions of the diversity of customer countries.

Cultural distance diversity of customer countries is a proposed transnational field dimension which is an extension of Ghemawat's (2001) cultural distance dimension. Ghemawat (2001) defined cultural distance in terms of language, ethnicities, religion, and norms. But given the complexities

associated with what culture constitutes, I suggest that it is better to not reduce the cultural diversity to one or two particular elements, and to instead focus on the full diversity of countries with their unique cultures to which a focal country export.

Transnational organisational fields are 'relational spaces' (Wooten & Hoffman, 2016) that bring together different actors located across multiple countries (Morgan, 2006). On these transnational relational spaces, also described as centres of interaction, actors extend their national contextual rationalities, reflective of their national cultures, as they interact with each other (Djelic & Quack, 2008). Attaining and maintaining legitimacy requirements in such organisational fields where the actors' behaviours reflect their diverse national cultures can be challenging. Consequently, field actors resort to creative ways of attaining legitimacy either by creating alternative paths to legitimacy or by influencing the legitimacy requirements (Kostova & Zaheer, 1999).

Other studies have also shown that diversity in institutional requirements can have an influence in the strength of the institutional demands on the focal firm. For example, in their investigations of how institutional complexity influences the adoption of CSR practices in multinational enterprises, Marano and Kostova (2016), observed that institutional heterogeneity weakened institutional pressures, while institutional homogeneity strengthened institutional pressures. They argued that high degrees of diversity in the institutional demands caused divergence in institutional expectations leading to weakened CSR institutional pressures in the transnational organisational field. On the other hand, when levels of diversity were low, there was convergence of the institutional demands leading to strengthened CSR institutional pressures in the transnational organisational field.

Therefore, due to its influence on the organisation's response to institutional demands, 'cultural distance diversity of customer countries' is proposed to be a dimension of the transnational distance field construct.

Administrative membership of customer countries to regional trade blocs is the proposed transnational field dimension which is an extension of Ghemawat's (2001) administrative distance dimension. The multiplicity of countries in a transnational organisational field does not necessarily bring about diversity. This is because a transnational organisational field can be constituted by a high number of similar countries whose institutional demands are aligned. These similarities can result from former colonial ties such as with members of the British Commonwealth (Dow & Karunaratna, 2006; Håkanson et al., 2016) or from being part of a trade bloc such as the European Union (Phillips et al., 2009). This study focuses on trade blocs to capture administrative since trade blocs have been argued to foster the creation of common markets through homogenising

regulations, policies and business practices among its member countries (Korneliusson & Blasius, 2008).

It is argued that business and legal frameworks of the European Union member states have become more similar, leading to most organisations choosing to deal with the European Union as one region instead of separate countries (Phillips et al., 2009). Although the EU is perhaps the best-known trade bloc, a similar logic can be extended to other regional trade blocs. Therefore, a transnational organisational field comprised mostly of countries belonging to a single regional trade bloc exposes organisations to much less diversity, thereby reducing the effect of the multiplicity of strategic demands they face. Reduced strategic options strengthen the effect of institutional pressures on an organisation due to convergence of the institutional demands (Marano & Kostova, 2016). I therefore suggest 'administrative membership of customer countries to regional trade blocs' to be another dimension of the transnational distance field construct.

Geographic distance diversity of customer countries evaluates the diversity in geographic distance from the focal country to all the countries to which it exports. Similar to the two previous dimensions (cultural and administrative), this is not a dyadic relationship, but it is geographic distance between multiple countries, conceptualised in a field perspective. Since geographical distance has a direct effect on the costs of transporting products, an exporting country needs to balance economic gains to transportation costs as it decides on which customer countries to trade with.

As expected, customers located within the same or proximate geographical region are likely to be less costly to trade with compared to customers scattered across different regions and directions. In line with Ghemawat's (2001) distance framework, I therefore propose 'geographic distance diversity of customer countries' to be another dimension of the transnational distance field construct.

Economic distance diversity of customer countries income level groups looks at how diverse the transnational organisational field is with respect to income levels of the interacting countries. Ghemawat (2001) and Miloloza (2015) argued that differences in economic attributes such as the income of consumers, wealth distribution, and relative purchasing power between countries creates distance that influences the choice of business partners and the levels of trade between countries.

In another study, You, Salmi, and Kauppi (2018) argued that it is increasingly becoming important to understand the potential differences in buying behaviours of actors from countries at different income levels. You et al. (2018) went on further to argue that the current buying practices of high-income countries may slow down the opportunities of African suppliers to move up the value adding ladder.

Another study by Kowalski, Lopez, Ragoussis, and Ugarte (2015) showed that there is heterogeneity across income groups in the level of forward and backward engagement in global value chains. They also showed that developed countries are inclined to both buy and sell a higher share of their gross exports as intermediate goods.

It can therefore be argued that different configurations of the value networks in terms of the diversity of participating countries' income level groups is likely to influence the level of value adding by individual countries making up the value network. This means that by balancing the diverse demands from multiple countries making up the global value chain, managers may prioritise certain trading partners and potentially influence the position of their organisations and subsequently their countries on the value ladder. For that reason, I propose that Ghemawat's (2001) economic distance element must be conceptualised in terms of the diversity of the income level groups making up the transnational field.

2.3.3.2 Diversity of supplier countries

Suppliers are of particular importance in transnational organisational fields as they are the source of goods traded in global value chains. In understanding this dimension, it is important to keep in mind that a field could be buyer-driven or supplier-driven. If it is supplier-driven, suppliers are likely to coordinate and impose control on other field actors, whereas if it is buyer-driven, suppliers have less bargaining power and will likely acquiesce to the demands of their customers. The role of diversity in suppliers is therefore likely to change depending on the nature of the organisational field.

Where it is an important consideration, the diversity of supplier countries has similar dimensions as those of the diversity of customer countries discussed in the previous paragraphs. These dimensions are; cultural distance of supplier countries, administrative membership of supplier countries to trade blocs, geographic distance diversity of supplier countries, and economic distance of supplier income level groups. The logic for why these measures can be expected to operate in a particular way is also likely to be similar.

2.3.4 An integrative view

The above section suggests that the notion of transnational distance field consists of a number of dimensions that function together in quite a complex way. Two examples may highlight some of the implications. Compare a firm from Botswana that earns the bulk of its revenue from customers in the UK and China. This firm faces quite a diverse transnational organisational field in terms of national contexts and is likely to deal with conflicting demands. However, the firm is likely to strategically prioritise institutional demands from their UK and Chinese customers since they form the bulk of their sales. Because of the cultural and business differences between China and the UK, the firm will still need to deal with the diverse demands from these two countries. A compromise strategy in accommodating their demands is likely to be implemented (Oliver, 1991).

Another firm could be selling almost exclusively to customers operating in ten European countries. If the majority of these countries are members of the European Union (EU), most of their demands would most likely be aligned. A firm in this scenario faces minimal diversity since the EU can be regarded as a single region because its member states have developed strong and similar business and legal frameworks (Phillips et al., 2009). As a result, the firm's strategic choices are limited and it will most likely acquiesce to most demands from its customers. On the contrary, if the firm's customers are from European countries that are not EU member states, the situation will be somewhat different. In that case the firm will most likely need to accommodate as many diverse demands as it can.

These examples do not consider other entities in the transnational field, whether regulators and standards bodies or interest groups like industry associations, in terms of the complexity of the transnational organisational field, each firm has to deal with the challenge of how to prioritise institutional demands from multiple actors located across multiple different countries.

2.4 THE EFFECTS OF DISTANCE

This study makes a contribution by developing the idea of a transnational distance field as discussed in the previous sections. I go further and seek to operationalise and test the construct of the “transnational distance field”. I then investigate how it is related to the revealed comparative advantage of a country, i.e., the competitiveness of a country in a particular sector relative to other countries making up its transnational organisational field.

Measuring the effects of distance on performance is complex. Even though it is known that greater distance generally introduces complexities and thus lowers various types of performance (Johanson & Vahlne, 1977), the notion of the “psychic distance paradox” suggests that distance can also positively affect performance (O’Grady & Lane, 1996). It is also likely that firms differ in their ability to manage such diversity. In this thesis, I am not concerned with the effect of the transnational distance field on performance per se; I am focused on establishing the notion of a *field* rather than dyadic distance. I thus develop hypotheses for how the different elements of the transnational distance field are likely to differently affect performance.

I focused on the revealed comparative advantage of a country in a given sector. It is anticipated that the notion of the transnational distance field, once established, can be applied to measures at the firm level. For the purposes of establishing the concept, I focus on the national level.

The following section discusses the operationalisation of revealed comparative advantage in detail.

2.5 REVEALED COMPARATIVE ADVANTAGE

The comparative advantage of a country in a given sector is argued to be a dynamic concept because the country's ability to produce certain products can change over time, in response to both endogenous and exogenous factors (Obadi, 2017). First operationalised by Balassa (1965), the Revealed Comparative Advantage (RCA) has been widely used as an indicator to capture the competitiveness of a country in a given sector relative to other countries (De Oliveiraa et al., 2017; Ferto, 2018; Laursen, 2015). The RCA of a country for a particular sector is defined as the ratio of the sector's percentage share in the country's exports to its share in the world trade (De Oliveiraa et al., 2017; Laursen, 2015). When the percentage share of the particular sector in a given country is equal to the world average, RCA equals the value one. Where RCA has a value above one, the country is said to be specialised in that particular sector and where the RCA value is below one, the country is not specialised in that particular sector.

RCA can be conceptualised in either value added terms or in gross export terms. However gross exports have been criticised for overestimating the value of trade flows due to double accounting (Greenville et al., 2017). In line with the arguments put forward by Brakman and Van Marrewijk (2017), I adopt the value added approach as it takes care of the double accounting problem inherent in gross trade flows (Ferto, 2018), and is more consistent with how economies are structured under global value chains. Conceptualising RCA in value added terms helps us to accurately identify what fragment in the production network is internationally competitive in a particular country (Brakman & Van Marrewijk, 2017). To explain the importance of conceptualising RCA in value added terms, the following paragraphs briefly discusses value added and how it resolves the double accounting problem.

The global economy is increasingly structured in terms of global value chains. Those global value chains are fragmented across different countries, resulting in traditional trade statistics becoming less informative in elucidating production patterns and national income (Aichele & Heiland, 2018; Aslam et al., 2017). This production fragmentation means that goods can cross national borders multiple times at different production stages, at times passing through many countries more than once (Aslam et al., 2017). In such cases, where intermediate consumption is involved, it has been shown that conventional trade measures tend to overestimate the value of trade flows from individual countries (Greenville et al., 2017). In order to factor out this problem of double accounting implicit in gross trade flows, international trade has shifted its focus from goods meant for final consumption to intermediate goods which form inputs for further processing in other geographical areas (Ferto, 2018).

Let's consider the following example given by Greenville et al. (2017). Country A exports to country B, goods worth \$100 which are entirely produced within country A. These goods are intermediate inputs to country B. Country B further processes these goods for export to country C where they are finally consumed. Country B adds \$10 of value to the goods, hence the final value of goods exported to country C are worth \$110. Conventional trade measures show total global exports and imports of \$210 and that Country C has a trade deficit of \$110 with country B and no trade at all with country A, even though country A is the major beneficial of Country C's consumption. If we track trade flows in value added instead of gross exports, country C's trade deficit with country B drops to \$10 and its deficit with country A becomes \$100. See graphical presentation in figure 4 below.

As shown above, measuring trade flows in value added reveals the participation of countries as well as their interdependences in global value chains in a much more granular manner compared to traditional measures. Therefore, this research conceptualises revealed comparative advantage in value added terms as the ratio of the sector's percentage share in the country's value added to its share in the world trade.

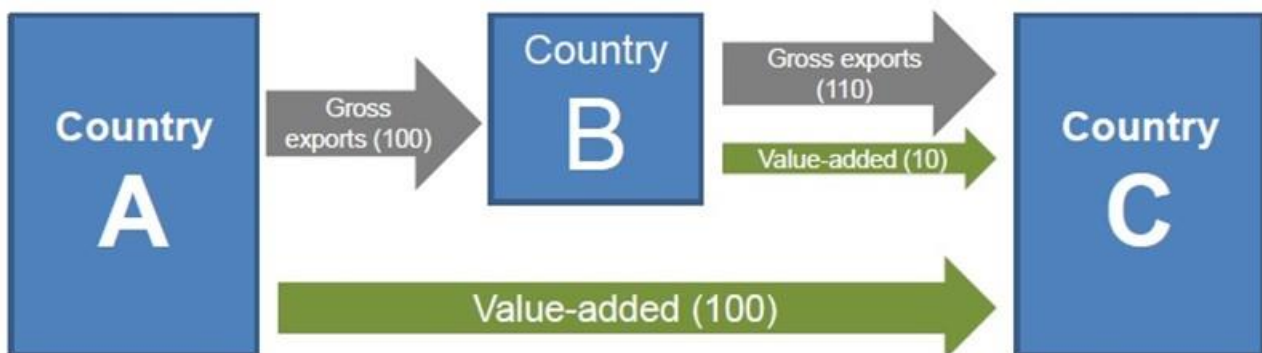


Figure 4. Measuring trade in value added (Greenville et al., 2017; OECD, 2013)

2.6 TRANSNATIONAL DISTANCE FIELD AND REVEALED COMPARATIVE ADVANTAGE

The literature review argues for the need to understand the effect of diversity among countries constituting a transnational organisational field on revealed comparative advantage. This section discusses the development of the hypothesis and the proposed research model.

2.6.1 Cultural distance diversity of countries and RCA

Transnational organisational fields are described as relational spaces (Wooten & Hoffman, 2016) where various actors from different countries come together (Morgan, 2006). These spaces serve as centres of interaction where various cultures are reflected through the behaviours of the actors involved (Djelic & Quack, 2008). As the degree of diversity among the constituent countries increases, the distance between the countries becomes more pronounced and so are the differences in their cultural and institutional expectations (Kostova & Zaheer, 1999). It therefore follows that high levels of diversity among countries constituting a transnational organisational field can introduce complexity and can make it difficult to establish a common understanding and acceptance of what is legitimate.

To address the challenges of legitimacy in transnational organisational fields, actors may resort to creative strategies. For example, actors might develop alternative ways to gain legitimacy that are different from conventional approaches. This could involve adopting new practices or creating unique narratives to justify their actions. Actors may also try to influence or shape the prevailing legitimacy requirements within the field. By doing so, they can redefine what is considered legitimate and align it with their own practices and objectives (Kostova & Zaheer, 1999).

Therefore, one can argue that diversity within a transnational organisational field does not only present legitimacy challenges; it can provide opportunities too. This is because the embeddedness of the actors in multiple institutional contexts increases their awareness of alternatives (Marano & Kostova, 2016). This heightened awareness encourages exploration of diverse paths to legitimacy within the transnational organisational field (Quirke, 2013).

In their efforts to navigate and respond to the complexity of legitimacy requirements (Kostova & Zaheer, 1999) within the transnational organisational field, actors often adapt and modify their business models (Kodeih & Greenwood, 2014). They may also embrace innovative business practices to align with the diverse cultural and institutional expectations. Adapting and modifying

business models, as well as adopting novel practices, can lead to enhanced competitiveness for the field actors (Meyer et al., 2011). By effectively incorporating elements from diverse institutional contexts, organizations can differentiate themselves, improve their offerings, and create added value for their products or services.

These strategic responses happen both when partners are customers with different expectations and when they are suppliers who can provide a diversity of offerings. I therefore hypothesise that:

Hypothesis 1: In transnational fields, the cultural distance diversity of customer countries is positively correlated to RCA.

Hypothesis 2: In transnational fields, the cultural distance diversity of supplier countries is positively correlated to RCA.

2.6.2 Geographic distance diversity of customer countries and RCA

As expected, geographic distance has a direct effect on the cost of transporting products and communications (Ghemawat, 2001; Tokas & Deb, 2020). The further or the more inaccessible a place is, the more expensive it becomes to transport goods to and from that place as well as manage and coordinate the whole logistical process (Antunes et al., 2019; Tokas & Deb, 2020). The geographic distance diversity of *supplier* countries is not likely to affect the relationship between the transnational distance field and RCA. This is because it is typically the responsibility of the supplier to take care of the transportation of goods.

However, geographic distance when *customers* are far away matters, and more so when they are in locations with diverse geographic distance configurations. This is because different customers are likely to require different modes of transport (e.g., both shipping and rail), which introduces further complexity. I therefore hypothesise that:

Hypothesis 3: In transnational fields, the geographic distance diversity of customer countries is negatively related to RCA.

2.6.3 Economic distance diversity of countries income level groups and RCA

It has been argued that organisations in transnational organisational fields often prioritise institutional demands emanating from countries whom they economically depend on the most (Marano & Kostova, 2016). Economic dependency creates a significant incentive to align with the institutional

expectations of key economic partners to attain legitimacy. In cases where organizations are suppliers from less developed economies, they often comply with institutional demands imposed by their economically dominant customers from more advanced economies. This acquiescence helps maintain business relationships and secure economic benefits (Manning et al., 2012).

It has already been determined that actors exist within a field where they are oriented towards one another. It was also discussed that the field constrains the actions of the constituent actors as they make effort to meet the field's legitimacy requirements (Kluttz & Fligstein, 2016). Therefore, how the field is structured in terms of the economic attributes of the constituent actors is expected to have an effect on the choices that actors make. For example, Marano and Kostova (2016) and Ocasio and Radoynovska (2016) suggest that institutional demands emanating from customers are most significant if the transnational organisational field is dominated by one economically powerful customer or is comprised of multiple customers with converging institutional demands. However, if the supplier's exports are equally distributed across the majority of their diverse customers, the supplier must contend with heterogeneous expectations from their diverse customers. In such cases, there is no dominant actor or convergence of institutional demands, meaning that the focal actor is faced with complexity and must explore alternative paths to legitimacy (Quirke, 2013).

It is also important to consider the role played by countries at different income level groups and the potential differences in their buying behaviours within the transnational organisational field (Antunes et al., 2019; You et al., 2018). This is important, because differences in economic attributes such as the income of consumers, wealth distribution, and relative purchasing power between countries are said to create distance that influences the choice of business partners and the levels of trade between countries (Ghemawat, 2001; Miloloza, 2015; Tokas & Deb, 2020).

It is virtually definitional that the participants of transnational organisational fields span different levels of economic diversity, e.g. the "smile" of value creation (Mudambi, 2008). As countries move to higher income levels they tend to transition towards increased value-added manufacturing and services (Vandenberg et al., 2015). But benefits accrue mainly to the high-income countries. They are likely to coerce their weaker trading partners who are economically dependent on them to conform to their demands (Manning et al., 2012). In a study on the integration of African firms into global value chains, You et al. (2018) argued that the current buying practices of high-income countries are likely to slow down the opportunities of low-income suppliers to move up the value adding ladder. Another study by Kowalski, Lopez, Ragoussis, and Ugarte (2015) showed that although there is heterogeneity across income groups in the level of forward and backward

engagement in global value chains, developed countries are inclined to both buy and sell a higher share of their gross exports as intermediate goods.

The fact that countries occupy a specific position in the global value chain is likely to structurally limit the extent to which they can benefit from the diversity of participating countries' income levels (whether buyers or suppliers). In other words, the heterogeneity of participants in global value chains is likely to translate into gains for only a few of them. For most of countries, the potential benefits of the diversity in the economic levels of their trading partners are outweighed by their relatively constricted role in the global value chain. I therefore hypothesise that:

Hypothesis 4: In transnational fields, the economic distance diversity of customer countries income level groups is negatively correlated to RCA.

Hypothesis 5: In transnational fields, the economic distance diversity of supplier countries income level groups is negatively correlated to RCA.

2.6.4 Administrative membership of countries to regional trade blocs and RCA

The multiplicity of countries constituting a transnational organisational field does bring a multiplicity of perspectives and associated opportunities, but that does also come with costs. It is hard to always make sense of all the different views. Thus, it is of benefit when there can be some homogenisation of especially administrative requirements.

Trade blocs play a critical role in homogenising regulations, policies and business practices among its member countries with an objective to create a common market (Antunes et al., 2019; Korneliussen & Blasius, 2008; Tokas & Deb, 2020). Through the alignment of their business practices and legal frameworks, member states of particular trade blocs become similar to one another resulting in businesses dealing with them as one region instead of separate countries (Phillips et al., 2009).

Because membership of regional trade blocs maintains the benefits of the distance field, but reduce the costs, a direct benefit of membership of regional trade blocs from both the perspective of the supplier and the customer countries can be expected. This leads to the following hypotheses:

Hypothesis 6: In transnational fields, the administrative membership of customer countries to regional trade blocs is positively correlated to RCA.

Hypothesis 7: In transnational fields, the administrative membership of supplier countries to regional trade blocs is positively correlated to RCA.

I suggest that this benefit is likely to also have a moderating effect, mitigating the challenges of working with customers from different cultures and different economy distances. The homogenisation offered by regional trade blocs means that the “rules of the game” (North, 1990) i.e. the institutional foundations from whence trade is conducted, is better understood. Thus, it means both that benefits are magnified (particularly with greater cultural diversity) and disadvantages are mitigated (especially around diversity in economic levels).

However, I suggest that this is the case only when dealing with customer countries. Whether or not supplier countries are part of a regional trade bloc is likely to not be relevant, because the moderation (the relevant increased benefits or reduced costs) affect them and their own sector and country’s RCA. It is therefore hypothesised that:

Hypothesis 8: In transnational fields, the administrative membership of customer countries to regional trade blocs moderates the relationship between cultural distance diversity of customer countries and RCA.

Hypothesis 9: In transnational fields, the administrative membership of customer countries to regional trade blocs moderates the relationship between economic distance diversity of customer countries and RCA.

Regional trade blocs can bring together countries with cultural and developmental similarities, but they do not address the issue of colonial links. Colonial ties between countries can cause a reduction in administrative distance by harmonising institutions, laws, property rights, etc., thereby minimising transaction costs associated with trade, making it economically advantageous for countries with colonial links to engage in trade with one another. (Antunes et al., 2019; Ghemawat, 2001; Tokas & Deb, 2020).

For example, there is limited administrative distance between members of the British commonwealth, a grouping of former British colonies and their erstwhile colonial power, the United Kingdom (Antunes et al., 2019). However, despite historical ties, economic differences such as income levels, wealth distribution, and purchasing power between members of the British commonwealth introduces a different dimension of distance between countries. These economic disparities can influence trade

patterns and the nature of trade relationships, highlighting that colonial ties must not be looked at in isolation but in view of the broader distance field.

This adds complexity. Take for example actors belonging to a common regional bloc such as SADC, it is expected that such membership will harmonise their institutions and thus reduce administrative distance. However, within the same regional bloc some countries may have colonial ties, e.g., Zimbabwe, Botswana, South Africa, and Zambia due to their colonial pasts with the UK. Therefore, by considering colonial ties, distance between these countries is further reduced. However, if one considers distance between say Zimbabwe and Angola, members of the same SADC bloc, we see a different story. The fact that Angola was colonised by the Portuguese while Zimbabwe was colonised by the British has created a long-lasting language, political and administrative barrier between these two countries. This adds complexity to the distance field.

Similar to previous studies that have shown a positive association between colonial ties and trade flows (Dow & Karunaratna, 2006; Miloloza, 2015), I expect a positive relationship between colonial ties and RCA from both the perspective of the supplier and the customer countries. It is therefore hypothesised that:

Hypothesis 10: In transnational fields, the distance diversity of customer countries with colonial ties is positively correlated to RCA.

Hypothesis 11: In transnational fields, the distance diversity of supplier countries with colonial ties is positively correlated to RCA

2.7 PROPOSED RESEARCH MODEL

The proposed model explains the effect of the proposed 'Transnational distance field' construct on RCA. Figure 5 shows the proposed research model.

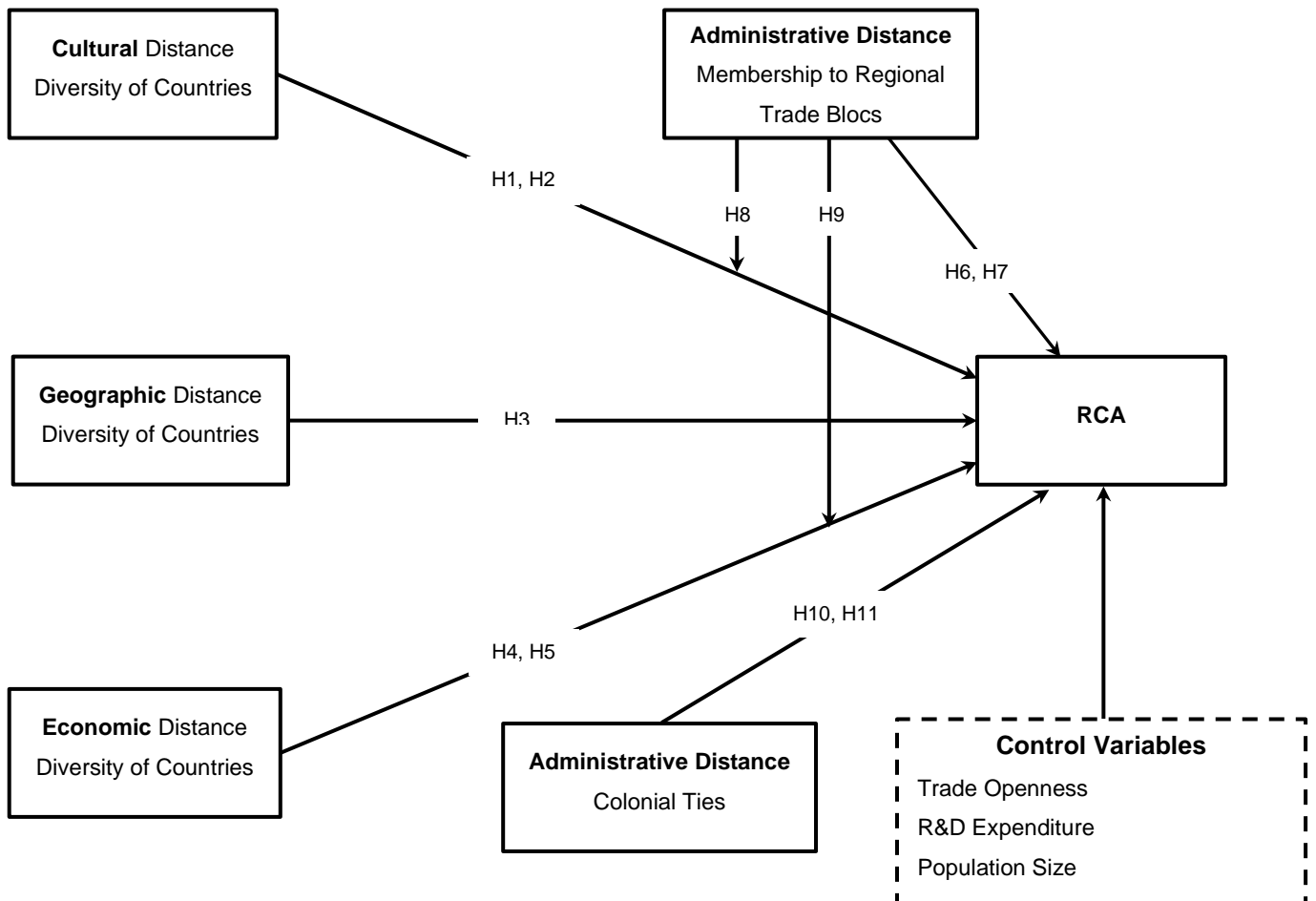


Figure 5. Research model for relationship between transnational distance field and revealed comparative advantage

2.8 LITERATURE CLOSING

By noting the complexity within the field introduced by the cultural distance diversity of countries, membership of countries to regional trade blocs, colonial ties, geographic distance diversity of customer countries, and the economic distance diversity of countries income level groups, I develop the transnational distance field construct. The usefulness of the transnational distance field construct is examined by hypothesising its effect on RCA.

It was noted that complexity is not bought about by just the multiplicity of actors and their diversity, but by the notion that actors exist within a field and that their actions a constrained by the field. Actors need to make sense of all expectations and field dynamics in order to decide the best action for attaining legitimacy.

3 CONTEXT

3.1 FOOD AND BEVERAGE GLOBAL VALUE CHAINS

Global value chains present a useful context to study the transnational distance field concept because they bring together diverse countries located across the world. Global value chains are defined as “fragmented and geographically dispersed production processes where different stages are located across different countries” (Casella et al., 2019, p. 115). This transnational mode of production brings uncertainty into the value chains as actors must contend with ingrained national contextual diversities among them.

This study focuses on food and beverage global value chains. The food and beverage value chain has generally been viewed as a three-level structure involving value addition at the agricultural production, industrial processing and wholesale or retail distribution levels. However, it has been shown that the food and beverage value chain is more complex than this three levelled depiction, as it also involves other value adding stages and links in the form of goods or services (Lianos, 2017).

Apart from the interaction among these value adding actors, the global food and beverage trade is of particular interest because it brings in other actors such as regulators, standards associations, industry associations and non-governmental organisations (NGOs), located in different jurisdictions, whose focus is on consumer protection, food safety and quality (Aung & Chang, 2014; Dabbene et al., 2014; Storoy et al., 2013; Thakur et al., 2011). This makes such transnational value chains even more complex, since trading cannot take place without the (often formally regulated) approval of diverse actors like diverse regulators and standard associations

It is useful to revisit again the study by Manning et al. (2012) discussed in chapter two, about the development and adoption of sustainability standards in global coffee value chains. The study showed that coffee value chains are made up of producers, roasters, standards organizations, consumers, and non-governmental organisations. Producers consisting of small producers, cooperatives, and farmers owning large plantations are mostly located in developing countries such as Ethiopia, Côte d'Ivoire, Uganda, India, Colombia, Brazil, Vietnam, Indonesia, Peru, Honduras, Mexico and Nicaragua. On the other hand, non-governmental organisations, major coffee consumers and roasters come from developed countries such as the USA, Germany, Italy, Netherlands, and UK. Their findings showed that most global standards are initially developed within particular national contexts, and that national origins of value chain actors influence the nature of the standards and the strategic choices made by adopting organisations. This is consistent with Djelic

and Quack's (2008, p. 15) argument that transnational organisational field actors, "extend their national contextual rationalities into the international sphere where they interact, confront and negotiate with each other".

This fragmentation of the production process means that goods can cross national borders multiple times at different production stages, at times passing through many countries more than once (Aslam et al., 2017). In all these cases, value is added at each production stage in the form of inputs such as labour, capital, locally produced intermediates, and intermediate inputs imported from other countries etc. Therefore, in order to estimate the value being added at each level, it becomes necessary that we unpack these various elements for any product being traded (Greenville et al., 2017). The estimation of value added is achieved through the use of input-output tables. Figure 6 below shows a basic presentation of an input-output table. The three key components of an input-output table intermediate goods, final demand and value added.

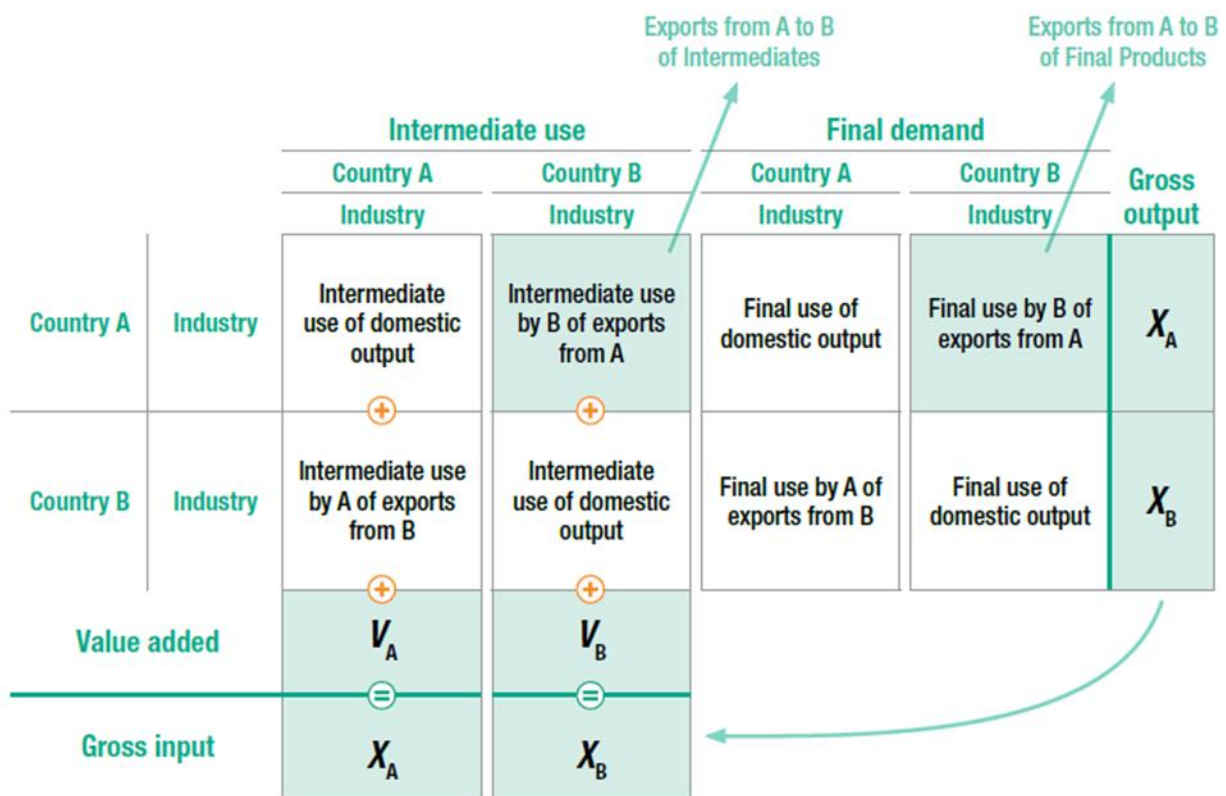


Figure 6. Structure of an Input-Output table (Casella et al., 2019)

Several input-output tables such as the Trade in Value Added (TiVA) dataset, Global Trade Analysis Project (GTAP), World Input-Output Database, and the EORA have been developed (Casella et al., 2019). These are discussed further in the following chapter.

4 PROPOSED RESEARCH DESIGN AND METHODOLOGY

4.1 INTRODUCTION

This research seeks to conceptualise distance not linearly, but as a field. I develop a distance field using the CAGE framework and then see how this field is related to countries' revealed comparative advantage in inter-country sectorial trade. To calculate the revealed comparative advantage, I used archival data from the EORA multi-region input-output (MRIO) tables. Multiple regression analysis was used to validate the measurement model and its hypothesis. The following sections discuss the research design and methodology in detail.

4.2 RESEARCH PARADIGM

I adopted positivism as the most appropriate research philosophy to answer this study's research question. By using highly structured data collection techniques, I remained independent and detached from this research and the data, thereby maintaining an objective stance (Wahyuni, 2012). Positivism assumes the generalisation of the research outcome, meaning that other researchers should be able to replicate the results of this study (Wahyuni, 2012). Previous studies have also shown positivism as the most dominant research philosophy among neo-institutional theory researchers (Weerakkody et al., 2009).

4.3 RESEARCH APPROACH

This study followed a deductive approach. I developed the conceptual framework using extant literature, and then tested it against empirical data (Montazemi et al., 2008).

4.4 UNIT OF ANALYSIS

The country level food and beverage sector is the unit of analysis for this study.

4.5 POPULATION AND SAMPLING

This research uses data from the EORA Multi-Region Input-Output (MRIO) database, looking at the food and beverage sector of countries. A census was conducted on all 189 countries available on the EORA dataset. Compared with other databases such as the Trade in Value Added (TiVA) dataset, Global Trade Analysis Project (GTAP) and World Input-Output Database, the EORA dataset provides the most extensive country coverage as well as a wide continuous time series (Casella et al., 2019). At this point, the EORA dataset covered 189 countries and 26 sectors with a continuous time series spanning from 1990 to 2015. Table 1 below shows the comparison of various input-output tables.

This extensive country coverage makes the EORA database the most suitable to analyse global value chain activity across countries of different developmental levels (Greenville et al., 2017), thereby providing me with the ability to test the research question on multiple countries with different income levels.

Table 1: Comparing EORA MRIO with other Input Output Tables (Casella et al., 2019)

Project	Institution	Data sources	Countries	Industries	Years	Comments
UNCTAD-Eora GVC Database	UNCTAD/Eora	National Supply-Use and I-O tables, and I-O tables from Eurostat, IDE-JETRO and OECD	189	26-500 depending on the country	1990–2015 (nowcast for 2016, 2017 and 2018)	Meta database drawing together many sources and interpolating missing points to provide broad, consistent coverage
Trade in Value Added (TiVA) dataset	OECD	National I-O tables	64	34	2005–2015 (projections 2016)	Information on all OECD countries, and 27 non-member economies (including all G20 countries)
World Input-Output Database (WIOD): 2016 Release	Consortium of 11 institutions, EU funded	National Supply-Use tables	43	56	2000–2014	Based on official national account statistics; uses end-use classification to allocate flows across partners and countries
Other multi-region input-output databases						
EXIOBASE	EU-based consortium, exioibase.eu	National supply-use tables	44+5	200	1995–2013	Covers 44 countries plus five rest-of-world regions
ADB Multi-Region Input-Output Database (ADB MRIO)	Asian Development Bank	An extension of WIOD which includes 5 additional Asian economies (Bangladesh, Malaysia, Philippines, Thailand and Viet Nam)	45	35	2000, 2005–2008, 2011	The information for the 5 additional Asian countries are estimates methodically produced to assist research and analysis, not official statistics
Global Trade Analysis Project (GTAP)	Purdue University	Contributions from individual researchers and organizations	121 countries plus 20 regions	65	2004, 2007, 2011, 2014	Includes data on areas such as energy volumes, land use, carbon dioxide emissions and international migration.
South American Input-Output table	ECLAC and Institute of Applied Economic Research (IPEA) from Brazil	National I-O tables	10	40	2005	Based on official information from National Accounts

4.6 DATA COLLECTION

Archival data from the EORA multi-region input-output tables are used in this research. The EORA database was selected instead of other input-output tables because of its broad country coverage and wide continuous time series, and in particular for its comprehensive analysis of developing countries' global value chain participation (Ahmad et al., 2017; Greenville et al., 2017; Kowalski et al., 2015). The EORA dataset is provided in two formats, the full EORA consisting of inter-sectoral transfers amongst 15,909 sectors as well as in a simplified format consisting of 26 sectors, both covering 190 countries and a time series from 1990 to 2015 (Eora, 2020).

In order to enable comparability across countries, the full EORA MRIO tables are aggregated into a common 26 sector harmonised classification. This simplified 26 sector format is called the Eora26. While providing sectorial consistency across countries, this simplification comes with some trade-offs in terms of the resolution and accuracy of the data (Eora, 2020). The inclusion of data-poor countries onto the EORA database is argued to reduce the level of statistical rigor, thereby raising concerns about the accuracy of the data (Ahmad et al., 2017).

Despite the above stated trade-offs, the extensive country coverage, sectorial consistency across countries, and the 25-year continuous time series of the Eora26 has made it a very useful dataset in the analysis of global value chains involving developing countries. The Eora26 input-output tables have been used to inform policy by prominent researcher entities such as the World Bank (World Bank, 2020), International Monetary Fund (Aslam et al., 2017; IMF, 2015, 2016), and the OECD (Ahmad et al., 2017; Greenville et al., 2017; Kowalski et al., 2015). Therefore, since this study needs to use data that are comparable across countries, Eora26 database was used.

Eora26 data are presented in a combined format for all 26 harmonised sectors. In order to analyse trade for the food and beverage sector only, the data were sorted to remove the other 25 sectors which are not the focus of this study. This sorting was done for intermediate and final demand as well as for the value-added parts of the dataset. The period of interest for this study is from 2011 to 2015.

The data selected are in basic prices, which is the preferred method in the System of National Accounts (SNA) for valuing accounting output data (United Nations, 2018).

4.7 MEASURES AND INSTRUMENT DEVELOPMENT

Extent literature is used to operationalise constructs used in this study. For greater reliability and validity, I prioritised existing validated measures, although modifications had to be made to some measures obtained from extant literature in order to make them suitable for the current study. These measures are discussed in detail in the following sections.

4.7.1 Dependent Variables

This section discusses the operationalisation of Revealed Comparative Advantage which is the dependent variable in this study.

4.7.1.1 Revealed Comparative Advantage (RCA)

In this study, revealed comparative advantage (RCA) was measured in value added terms instead of gross export terms in order to correct for double counting (Ahmad et al., 2017; Brakman & Van Marrewijk, 2017).

To operationalise RCA, I first calculated value added. Value added was measured in the accounting sense as the sum of the **compensation of employees; taxes on production; subsidies on production; net operating surplus; net mixed income**, and **consumption of fixed capital** (Aslam et al., 2017; European Commission et al., 2009; United Nations, 2018). Data for these six components of value added are provided in the VA matrix of the Eora26 multiregional input-output tables. Therefore, value added is an aggregate of these six components.

Finally, I calculated RCA for the food and beverage sector by dividing the country's food and beverage value added as a fraction of total national value added by all countries' food and beverage value added as a fraction of all countries' total value added. This is illustrated in the following equation.

$$RCA_{i,t}^j = \frac{X_{i,t}^j / X_{i,t}}{X_t^j / X_t}$$

$X_{i,t}^j$ is the value added for country i for sector j in period t , while $X_{i,t}$ is the total value added for country i for all sectors in period t . On the other hand, X_t^j is the total value added for all countries for sector j in period t , while X_t is the total value added for all countries and sectors in that period t .

4.7.2 Independent Variables

The following section discusses the operationalisation of the dimensions of the transnational distance field which are the independent variables in this study.

4.7.2.1 *Transnational distance field*

The notion that distance should be conceptualised as a field is the focus of this study. Thus, the transnational distance field is a novel and complex multi-item construct. To reduce the complexity inherent in transnational organisational fields (Manning et al., 2012), and to render the data more manageable, the study hones in on two main constituent elements, namely the diversity of suppliers and of customers.

I use the CAGE framework (Ghemawat, 2001) as the basis for developing the construct. The main CAGE elements are Culture, Administrative, Geographic and Economic. I develop measures for each of the two main groups, resulting in four sub-elements for the two main groups. Thus, the measures tested include the Cultural distance diversity of customer countries, Administrative membership of customer countries to trade blocs, Geographic distance diversity of customer countries and Economic distance diversity of customer income level groups. The same is found for the suppliers, namely Cultural distance of supplier countries, Administrative membership of supplier countries to trade blocs, Geographic distance diversity of customer countries and Economic distance of supplier income level groups.

Although my theoretical interest is in distance, because I am trying to understand a field, I argue that diversity is the most appropriate measure. To make it concrete: A Latin America country selling 90% of its produce to China likely has to deal with fewer distance issues than a comparable country that sells equally to a neighbouring country, to the USA and to China, even though the overall distance (whether cultural, administrative or any other element) would be lower. For this reason, the dimensions of the proposed Transnational distance field construct are generally operationalised in terms of diversity.

I discuss in the following passages, first, the customer elements and then followed by the supplier elements.

4.7.2.2 *Customers*

Cultural distance diversity of customer countries is a measure of the diversity of countries that make up the customers in the transnational distance field. Several measures of cultural diversity have been used in international business studies. Some of the notable measures of cultural distance include Hofstede's (1983) four cultural dimensions which were later increased to five, Kogut and Singh's (1988) composite index which they built on Hofstede's (1983) cultural dimensions, and Ghemawat's (2001) distance framework which measures cultural distance in terms of official language. Despite their extensive use and acceptance, most of these measures have attracted criticism. Hofstede's (1983) cultural dimensions have been criticised for being derived from a single firm study and also for being outdated, while Kogut and Singh's (1988) composite index has been criticised for its assumption of asymmetry in distance between two countries (Avloniti & Filippaios, 2014).

What can be concluded from prior scholarship is that culture is multi-dimensional and that all measures emphasise some elements at the expense of others. I therefore do not focus on any specific indicator of culture. Given that I am interested in the field per se, I focus on the diversity of countries to which a focal country export. My reasoning is that this more general measure captures in a holistic manner the unique and variegated culture of each country, and that a greater diversity of countries would require engagement with a greater variety of cultures.

To operationalise this variable, I first listed all the countries where the focal country's food and beverage exports go to. These are customer countries. Second, I determined the percentage demand of each customer country to the total exports from the focal country. Finally, using these data points, I calculated the diversity of the customer countries using the Theil index (Niebuhr, 2010; Twigg et al., 2010). The Theil index was selected because it is argued to be the most suitable measure of diversity as it reflects both the share and variety of a population within a particular group or region (Audretsch et al., 2010).

I did not use a measure that takes into consideration the size of the target market. This is not a problem because my interest in the current study is not in the size of the customer per se, but the distribution of the exports amongst the various customers. Regardless of how big or small the target customer is, what matters to the supplier with regards to the pressures from its customers is the share of its exports to that particular customer as a ratio of the total exports. This is important because according to the neo-institutional theory, firms tend to comply to the institutional demands of the customers whom they depend on the most. The same would apply to customers looking at their suppliers in supplier driven value chains.

The Theil index is defined as follows:

$$Div_c = \sum_{c=1}^C \pi_c \ln \frac{1}{\pi_c}$$

C is the number of customer countries in the transnational distance field and π_c is the exports share to customer country c . Maximum diversity occurs when the Theil index is $\ln(C)$, indicating that exports are evenly distributed across the C customer countries, i.e. $\pi_c = 1/C$. If all exports go to one customer country, the index takes the minimum value $\ln(1) = 0$, i.e. no diversity.

Administrative membership of customer countries to trade blocs is operationalised by calculating the percentage of exports to trade blocs. The argument for this approach is that trade blocs impose similar administrative requirements, and that once a country has developed experience and expertise in trading with one trade bloc (e.g., the European Union), it does not need to master the requirements of all the constituent countries.

This measure therefore represents the portion of exports that the focal country exports to countries that belong to the same regional trade blocs as the focal country.

To operationalise this variable, I first listed all the trade blocs that the focal country belongs to. Second, I listed all countries that are members of the listed trade blocs. Finally, I determined the percentage of the focal country's exports that go into its regional trade blocs.

Geographic distance diversity of customer countries within the transnational distance field is operationalised through the following steps.

1. I listed the distances between the focal country and all its customer countries
2. I then calculated the weighted distance by multiplying the distance between the focal country and each customer country by the percentage contribution of that respective customer country to the total exports from the focal country.
3. Finally, I determined the geographic distance diversity of customer countries by calculating the standard deviation of the weighted distances.

Economic distance diversity of customer income level groups within the transnational distance field represents the economic part of the CAGE framework. It is operationalised by measuring the diversity of the income groups for customer countries. This is relevant because countries at different income levels are expected to behave differently in their attitudes towards products. For example, high income countries tend to have stronger regulations compared to low income countries (Manning et al., 2012). This measure speaks to the Economic component of the CAGE framework.

This study adopts the classification developed by the World Bank, whereby economies are divided into four income groupings, namely: low (L), lower-middle (LM), upper-middle (UM), and high (H). The reason why I use these four categories rather than the actual income of the country is because I needed clearly defined income groupings for the purpose of determining diversity. The World Bank measures income using gross national income (GNI) per capita, in U.S. dollars. Currently the income ranges per grouping are **less than \$1025** for low income, **\$1026 to \$4035** for lower-middle income, **\$4036 to \$12,475** for upper-middle income, and **above \$12,475** for high income countries.

First, I measured diversity of income level groups for customer countries in the following the steps:

1. Grouped all customer countries according to their income level classifications.
2. Determined the total exports to each income level group from the focal country.
3. Determined the percentage contribution of each income level group to the total exports from the focal country.

I then calculate the diversity of income level groups for customer countries in the transnational distance field using the Theil index, defined as follows:

$$Div_b = \sum_{i=1}^I \pi_i \ln \frac{1}{\pi_i}$$

I is the number of income level groups for customer countries in the transnational distance field and π_i is the exports share to income level group i . Maximum diversity occurs when the Theil index is $\ln(I)$, indicating that exports are evenly distributed across the I income level groups, i.e., $\pi_i = 1/I$. If all exports go to one income level group, the index takes the minimum value $\ln(1) = 0$, i.e. no diversity.

Colonial linkages of customer countries within the transnational organisational field are the second dimension of administrative distance in this study. This dimension is important because countries that share some colonial history are expected to have some political and administrative similarities that are likely to make trade between them easier (Ghemawat, 2001; Miloloza, 2015).

To operationalise this variable, I followed the following steps.

1. First, I needed to identify a grouping of customer countries with past colonial linkages. I considered the British Commonwealth, France's franc zone of West Africa, and Spain's former colonies in Latin America. I decided to use the British Commonwealth because that is the largest grouping of former colonies meaning it would give me a reasonable sample to work with. Also the British Commonwealth has been widely used by other distance scholars (Dow & Karunaratna, 2006).
2. I calculated diversity of the commonwealth customer countries using the Eora Input Output data of trade amongst these countries only using the Theil index, defined as follows:

$$Div_c = \sum_{c=1}^C \pi_c \ln \frac{1}{\pi_c}$$

C is the number of commonwealth customer countries in the transnational distance field and π_c is the exports share to commonwealth customer country c . Maximum diversity occurs when the Theil index is $\ln(C)$, indicating that exports are evenly distributed across the C commonwealth customer countries, i.e. $\pi_c = 1/C$. If all exports go to one commonwealth customer country, the index takes the minimum value $\ln(1) = 0$, i.e. no diversity.

4.7.2.3 Suppliers

The measures for suppliers follow the same format. Although they function differently in the organisational field (Manning et al., 2012), I suggest that suppliers comprise an important component of the international distance field.

Cultural distance diversity of supplier countries is a measure of the diversity of countries that make up the suppliers in the transnational distance field.

To operationalise this variable, I first listed all the countries where the focal country's food and beverage imports come from. These are supplier countries. Second, I determined the percentage contribution of each supplier country to the total imports into the focal country. Finally, using these data points, I calculated the diversity of the supplier countries using the Theil index defined as follows:

$$Div_s = \sum_{s=1}^S \pi_s \ln \frac{1}{\pi_s}$$

S is the number of supplier countries in the transnational distance field and π_s is the imports share from supplier country s. Maximum diversity occurs when the Theil index is $\ln(S)$, indicating that imports are evenly distributed across the S supplier countries, i.e. $\pi_s = 1/S$. If all imports come from one supplier country, the index takes the minimum value $\ln(1) = 0$, i.e. no diversity.

Administrative membership of supplier countries to trade blocs is operationalised by calculating the percentage of imports from trade blocs. This represents the portion of imports that the focal country gets from countries that belong to the same regional trade blocs as the focal country. This measure is important, because if most of the focal country's imports come from countries that are in the same regional trade blocs as the focal country, then diversity between the focal country and its suppliers is reduced and the complexity of the field is reduced.

A single country can belong to one or more trade blocs. Therefore, to operationalise this variable, I first listed all the trade blocs that the focal country belongs to. Second, I listed all countries that are members of the listed trade blocs. Finally, I determined the percentage of the focal country's imports that come from its regional trade blocs.

Geographic distance diversity of supplier countries within the transnational distance field is operationalised through the following steps.

1. I listed the distances between the focal country and all its supplier countries
2. I then calculated the weighted distance by multiplying the distance between the focal country and each supplier country by the percentage contribution of that respective supplier country to the total imports to the focal country.
3. Finally, I determined the geographic distance diversity of supplier countries by calculating the standard deviation of the weighted distances.

Diversity of supplier income level groups within the transnational distance field is operationalised by measuring the diversity of income groups for supplier countries as follows:

First, I measured the diversity of income level groups for supplier countries in the following the steps:

1. Grouped all supplier countries according to their income level classifications.

2. Determined the total imports from each income level group into the focal country.
3. Determined the percentage contribution of each income level group to the total imports into the focal country.

I then calculated the diversity of income level groups for supplier countries in the transnational distance field using the Theil index, defined as follows:

$$Div_b = \sum_{i=1}^I \pi_i \ln \frac{1}{\pi_i}$$

I is the number of income level groups in the transnational distance field and π_i is the imports share from income level group i . Maximum diversity occurs when the Theil index is $\ln(I)$, indicating that imports are evenly distributed across the I income level groups, i.e., $\pi_i = 1/I$. If all imports come from one income level group, the index takes the minimum value $\ln(1) = 0$, i.e. no diversity.

Colonial linkages of supplier countries within the transnational organisational field represent the second dimension of administrative distance in this study.

Consistent with the colonial linkages of customer countries, I operationalised colonial linkages of supplier countries as follows:

1. First, I listed all the supplier countries within the British common wealth.
2. I then calculated diversity of the commonwealth supplier countries using the Eora Input Output data of trade amongst these countries only using the Theil index, defined as follows:

$$Div_c = \sum_{c=1}^C \pi_c \ln \frac{1}{\pi_c}$$

C is the number of commonwealth supplier countries in the transnational distance field and π_c is the exports share to commonwealth supplier country c . Maximum diversity occurs when the Theil index is $\ln(C)$, indicating that imports are evenly distributed across the C commonwealth supplier countries, i.e. $\pi_c = 1/C$. If all imports come from one commonwealth supplier country, the index takes the minimum value $\ln(1) = 0$, i.e. no diversity.

4.7.3 Control Variables

I followed the recommendations by Nielsen and Raswant (2018) in selecting control variables for this study. They argued that control variables are particularly important in studies that extend across multiple countries because they help in establishing boundaries of applicability thereby eliminating confounding explanations. Care was taken when controlling for regional contextual factors in order to avoid multicollinearity issues, since many of these factors tend to be highly correlated despite being theoretically distinct (Nielsen & Raswant, 2018).

Trade openness is defined by the World Bank as the “sum of exports and imports of goods and services measured as a share of gross domestic product”. Trade openness is an important control variable as it is argued to facilitate the transfer of knowledge (Fagerberg et al., 2018) and technology (Adhikary, 2011; IMF, 2015) from leading trade partners in a transnational distance field. The adoption of advanced manufacturing technologies and knowledge by a country is expected to increase the share of value added on the country’s products.

Trade openness data per country for the period of interest in the current study (2011 to 2015) is obtained from the World Bank ‘World Development Indicators’ dataset.

R&D Expenditure is used in this research as a proxy for technological innovation. Research and design is expected to translate into commercially viable innovations in cases where research institutions have links to the private sector (Vandenberg et al., 2015). Therefore, economies that make significant investments in research and design are expected to produce products that have more value added compared to their counterparts that invest less in research and design.

R&D expenditure is measured as a percentage of GDP. The time series data for this research are obtained from the World Bank ‘World Development Indicators’ dataset.

Population size is an important control variable because firms in highly populated countries tend to interact more with domestic customers and suppliers compared to those in smaller countries (Fagerberg et al., 2018). As a result, firms in larger countries are expected to be influenced less by their transnational trading partners.

4.8 DATA ANALYSIS

The analysis of the data was done in three separate parts. The first part was the linear multiple regression analysis of the main dataset including all the 189 countries on the EORA Input Output Tables. The second part was done specifically for countries with historical colonial ties, using the British commonwealth countries as the sample. This part was separated from the first one because diversity and RCA needed to be recalculated relative to the trade data between the commonwealth countries only.

The third part was to determine the existence of any curvilinear relationships between the independent variables and RCA. This was done for the complete dataset consisting of 189 countries and also for the dataset of the commonwealth countries. This analysis was done using curve estimation regression process on SPSS.

The following sections discuss these three stages in detail.

4.8.1 Main Dataset for 189 Countries

Multiple regression was used to analyse the relationship between the dimensions of the transnational distance field and RCA. In order to obtain a good regression model, a number of requirements and assumptions about the data must be fulfilled. One of these key requirements is on the sample size that is needed to achieve the generalisability of the results.

The number of recommended cases can be estimated using the formula $N > 50 + 8m$, where m is the number of independent variables (Pallant, 2016). The current study has 9 independent variables including control variables; therefore, the sample size must be at least 122 countries to obtain the generalisability of results. The Eora database provides trade data for 189 countries; therefore, this number of cases comfortably satisfies the sample size requirement for multiple regression.

Independent variables were also checked for multicollinearity, which if available can compromise the results of the regression analysis. Multicollinearity was checked by testing if tolerance values were above 0.1 and/or VIF (Variance inflation factor) values were below 10, indicating the absence of multicollinearity between the independent variables.

The test of the nature of moderation was conducted using the simple slopes analysis. This method analyses how the gradient of the two variables of interest (dependent and independent) changes as the moderating variable changes.

4.8.2 Dataset for Commonwealth Countries

A total of 44 countries that are members of the British Commonwealth were used as the sample. Diversity and RCA measures were recalculated based on trade data between the commonwealth countries only. A multiple regression analysis was then conducted to test the relationship between diversity of countries with colonial ties and relative comparative advantage. This was done for both customer and supplier countries.

4.8.3 Curvilinear Analysis

Since relationships are not always linear, it was important to also test for the existence of any curvilinear effects between the diversity and RCA. I used curve estimation regression process on SPSS to determine the curve plots. After the curve estimation regression, I repeated the curvilinear analysis, this time using linear regression with predictor variables squared to determine the coefficients so that I may compare with the initial linear multiple regression analysis. This was tested on the relationship between diversity and RCA for both customer countries and supplier countries.

4.9 QUALITY ASSURANCE AND ETHICS

4.9.1 Quality

“Validity and credibility of findings in a particular study depend to a great extent on the reliability of the data, the appropriate design of the study, the consistent variable operationalization and measurement, and the strong methodological and estimation techniques” (Erkan Ozkaya et al., 2013, p. 674). I prioritised the use of existing pretested and validated constructs to ensure the reliability and validity of the measures, for example of the RCA. Because of the focus of the study, I also developed some measures, using Ghemawat's (2001) CAGE framework as a guide.

4.9.2 Ethics

Ethical issues are important throughout the research process; therefore, I ensured that all ethical issues were considered at each research stage. Archival data were collected from the Eora database. Access to the Eora database is free for academic use at degree-granting academic institutions. I registered on the database as a student using the university provided email address. It was therefore declared through this process that the data were collected and would be used for academic research.

I sought to remain objective and ensure that the quality of the research is upheld, and also ensured that all data collected were safely stored.

4.10 RESEARCH DESIGN CLOSING

This section discusses the proposed research design and methodology for this study. It started with the research philosophy and concluded with a discussion on quality and ethics. To ensure that this research is reliable, existing research was referred to in the operationalisation and validation of the constructs.

5 RESULTS

5.1 INTRODUCTION

This chapter presents the results of the data analysis, starting with a review of the model to be tested. The data were first prepared by replacing all the missing values using multiple imputation, followed by mean centering the predictor variables for the interaction effect. Descriptive analysis was then conducted, and the hypothesis were tested using multiple linear regression analysis.

5.2 MODEL TESTED IN THIS STUDY

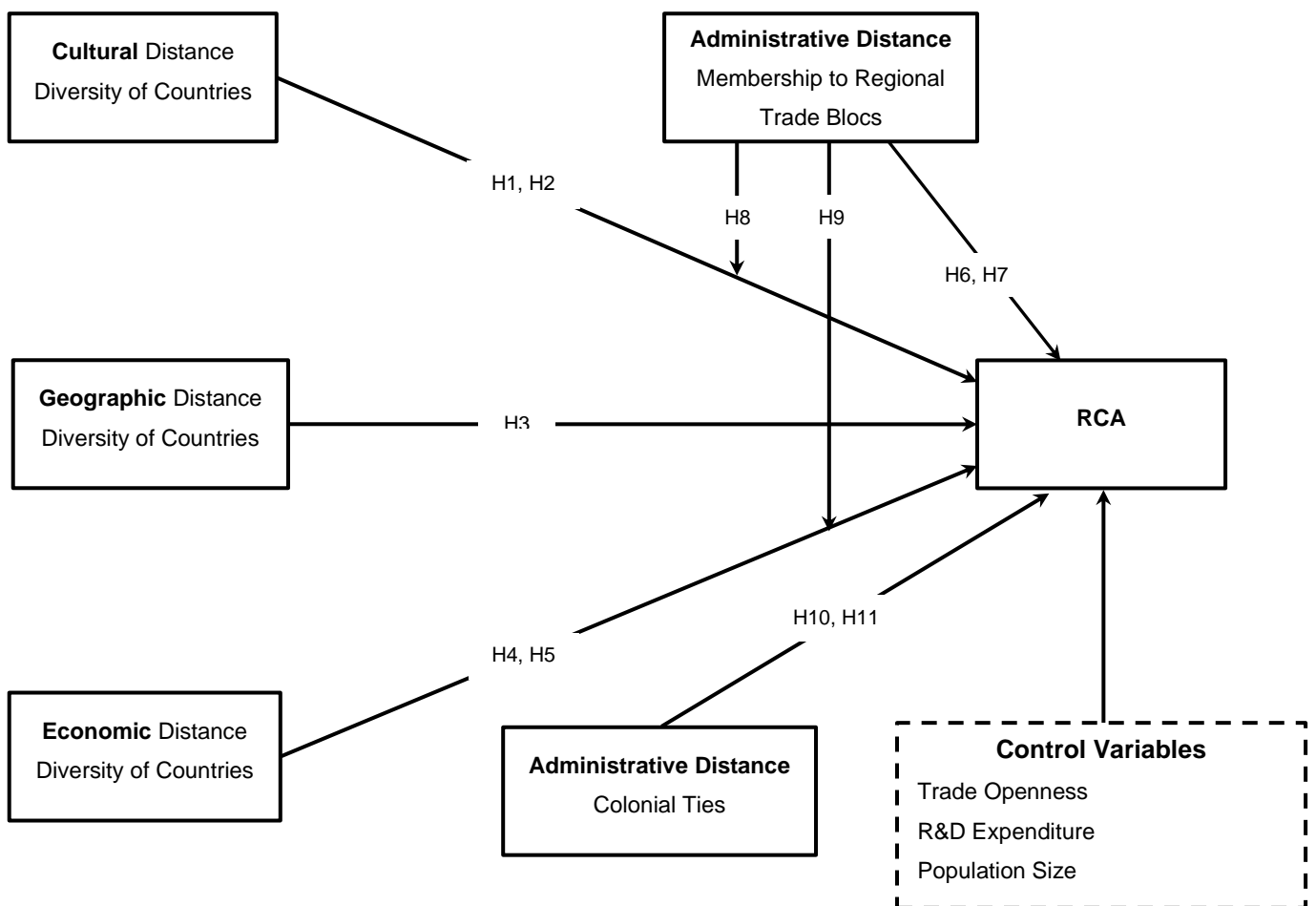


Figure 7. Research model for relationship between transnational distance field and revealed comparative advantage

5.3 DESCRIPTION OF STUDY DATASET

The datasets that were used in this study are the EORA Multi-Region Input-Output tables (Lenzen et al., 2012, 2013), the World Bank ‘World Development Indicators’ for the period 2011 to 2015, and the GioDist database for geographical elements and variables. A census was conducted on 189 countries. The EORA input-output tables were selected over other databases such as the TiVA, GTAP and World Input-Output Database, because of their extensive country coverage as well as a wide continuous time series (Casella et al., 2019). All the three control variables were obtained from the World Bank ‘World Development Indicators’ while the predictor and outcome variables were derived from the EORA tables as explained in the methodology section.

5.4 PREPARING DATA FOR ANALYSIS

Two steps were followed in the preparation of the data before analysing it. First, all the variables were evaluated for missing values. This was then followed by mean centering the independent and control variables for the purpose of evaluating the interaction effects. The following sections discuss these data preparation steps in detail.

5.4.1 Missing Data Analysis

A missing values analysis was carried out on all the variables to determine the extent and decide on the method of handling the missing values. The results of the analysis showing variables with missing data are shown in table 2 below for the period 2011 to 2015. As shown in table 2, the variables had up to 28% of the data missing. This is a large number of missing variables which made it impossible to delete the countries with the missing data without significantly reducing the sample size. Therefore, the missing values were replaced using the multiple imputation method. A total of ten imputations were done and the resultant imputed data file was aggregated into a single pooled dataset that was used for analysis.

Table 2: Missing Data Analysis Results

Variable Name	Missing Values									
	2011		2012		2013		2014		2015	
	N	%	N	%	N	%	N	%	N	%
High Tech Expenditure	53	28.0%	54	28.6%	48	25.4%	47	24.9%	49	25.9%
Trade openness	21	11.1%	22	11.6%	21	11.1%	22	11.6%	23	12.2%
% of imports from regional trade blocs	15	7.9%	15	7.9%	15	7.9%	15	7.9%	15	7.9%
% of exports to regional trade blocs	15	7.9%	15	7.9%	15	7.9%	15	7.9%	15	7.9%
Population	3	1.6%	4	2.1%	4	2.1%	4	2.1%	4	2.1%

Furthermore, the Eora MRIO website lists the following 15 countries as having insufficient data quality: Belarus, Benin, Burkina Faso, Congo, Eritrea, Ethiopia, Guinea, Guyana, Libya, Moldova, Serbia, Sudan, Yemen, Zimbabwe, Former USSR. Therefore, these countries were removed from the analysis, thereby reducing the dataset from 189 to 174.

5.4.2 Mean Centering Predictor Variables

The research model for this study contains moderator variables. Moderation is implemented through the interaction effect between the moderator variables and respective predictor variables. Before implementing the interaction effect, it is recommended to mean centre all the predictor variables. This is done by subtracting the mean of each variable from the respective values and the resultant values are the ones used for further analysis.

The above process was repeated in the preparation of data for the British commonwealth countries.

5.5 STATISTICAL OUTPUTS

This discusses the statistical outputs obtained. First, the descriptive statistics are discussed, followed by the correlational statistics, model summary and finally the coefficients for the year 2015. Similar statistical outputs for years 2011 to 2014 are shown in Appendix A.

5.5.1 Descriptive Statistics

The following tables 3 to 7 present the descriptive statistics for each of the variables in this study for the study period ranging from 2011 to 2015. The variables are arranged in the tables according to their types, starting with the predictor variables, followed by the control variables and finally by the outcome variable. Since all the missing values were replaced using the multiple imputation method as described in section 5.3.1 above, all variables have 174 values, which is equal to the total number of the countries in this study. The mean of the predictor and control variables are zero, except for the interaction variables across all the years because of the mean centering that was done on these variables. The maximums, minimums as well as the standard deviation for each variable are also shown in the descriptive statistics tables below.

Table 3: 2015 Descriptive Statistics

Predictor Variables	N	Min	Max	Mean	Std. Dev
Diversity of customer countries (C_Div)	173	-2.129	1.973	0.000	0.886
Diversity of supplier countries (S_Div)	173	-2.384	1.729	0.000	0.688
Diversity of customer income level groups (C_IncDiv)	173	-0.687	0.675	0.000	0.311
Diversity of supplier income level groups (S_IncDiv)	173	-0.684	0.567	0.000	0.266
% of exports to regional trade blocs (C_Bloc)	173	-0.363	0.631	0.000	0.303
% of imports from regional trade blocs (C_Bloc)	173	-0.376	0.611	0.000	0.301
C_Div Regional trade blocs moderation (C_Div_Bloc)	173	-1.187	0.679	-0.104	0.299
S_Div Regional trade blocs moderation (S_Div_Bloc)	173	-1.455	0.803	-0.071	0.266
C_IncDiv Regional trade blocs moderation (C_IncDiv_Bloc)	173	-0.433	0.218	-0.019	0.099
S_IncDiv Regional trade blocs moderation (S_IncDiv_Bloc)	173	-0.417	0.250	-0.033	0.089
Diversity of customer geographic distance (C_DistDiv)	173	-0.125	0.574	0.000	0.115
Diversity of supplier geographic distance (S_DistDiv)	173	-0.092	0.409	0.000	0.073
Control Variables					
Population (Pop)	173	-4.120	133.000	0.000	14.842
Trade openness (T_Open)	173	-0.648	3.222	0.000	0.601
High Tech Expenditure (HT_Exp)	173	-0.108	0.677	0.000	0.107
GDP Per Capita (GDP_PCap)	173	-1.766	14.953	0.000	2.616
Outcome Variable					
Realised Comparative Advantage	173	-0.848	4.446	0.812	0.665

5.5.2 Correlational Statistics

Tables 9 to 13 below show the correlational statistics for the study years 2011 through to 2015. The correlational strength between the independent and dependent variables ranges from 0.001 for Diversity of customer countries (C_Div) to 0.270 for % of exports to regional trade blocs (C_Bloc).

Table 4: 2015 Correlational Statistics

	RCA	C_Div	S_Div	C_IncDiv	S_IncDiv	C_Bloc	S_Bloc	C_DistDiv	S_DistDiv	Pop	T_Open	HT_Exp	GDP_PCap	C_Div_Bloc	S_Div_Bloc	C_IncDiv_Bloc	S_IncDiv_Bloc
RCA	1.000																
C_Div	0.028	1.000															
S_Div	0.043	0.323	1.000														
C_IncDiv	-0.108	0.651	0.261	1.000													
S_IncDiv	-0.030	0.202	0.535	0.431	1.000												
C_Bloc	0.161	-0.388	0.005	-0.198	-0.146	1.000											
S_Bloc	0.267	-0.022	-0.343	-0.062	-0.421	0.518	1.000										
C_DistDiv	-0.047	-0.216	-0.337	-0.249	-0.055	-0.333	-0.208	1.000									
S_DistDiv	-0.093	0.033	-0.104	0.107	0.198	-0.240	-0.322	0.628	1.000								
Pop	0.118	0.130	0.114	-0.002	0.197	-0.116	-0.045	-0.060	0.011	1.000							
T_Open	-0.036	0.032	-0.051	0.045	-0.200	0.181	0.215	-0.215	-0.100	-0.162	1.000						
HT_Exp	0.107	0.082	0.134	0.007	-0.057	0.086	0.150	-0.102	-0.097	0.092	0.152	1.000					
GDP_PCap	-0.118	0.204	0.179	-0.031	-0.183	0.065	0.099	-0.171	-0.112	-0.077	0.211	0.307	1.000				
C_Div_Bloc	0.017	0.065	-0.048	-0.110	-0.197	-0.427	-0.027	0.240	-0.008	-0.022	-0.006	-0.048	-0.051	1.000			
S_Div_Bloc	0.006	0.038	0.229	-0.018	0.035	-0.098	-0.287	-0.020	0.052	0.028	-0.048	-0.052	-0.079	0.283	1.000		
C_IncDiv_Bloc	0.088	-0.117	-0.052	-0.133	-0.047	-0.459	-0.276	0.312	0.072	0.040	-0.156	-0.164	-0.229	0.711	0.265	1.000	
S_IncDiv_Bloc	-0.058	-0.044	0.040	0.019	0.209	-0.334	-0.547	0.213	0.200	0.023	-0.287	-0.114	-0.174	0.154	0.593	0.394	1.000

5.5.3 Model Summary

This section presents the model summaries for the five years of interest in this study. As shown in table 8 below, all the models are statistically significant and the R square values range from 20.3% to 23.6%.

Table 5: 2011 Model Summaries for years 2011 to 2015

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig.
2011	0.497	0.247	0.170	0.633	3.204	0.000
2012	0.518	0.268	0.193	0.629	3.575	0.000
2013	0.499	0.249	0.172	0.637	3.240	0.000
2014	0.500	0.250	0.173	0.619	3.244	0.000
2015	0.494	0.245	0.167	0.607	3.156	0.000

5.5.4 Coefficients

The Coefficients tables 14 to 18 below reveal that all independent variables have Tolerance values above 0.1 and VIF (Variance inflation factor) values below 10, indicating the absence of multicollinearity between the independent variables. The Coefficients tables also show which variables are making statistically unique contributions to the prediction of the dependent variable. Only two variables show statistical significance, and these are Economic distance diversity of customer countries (C_IncDiv) for all five years from 2011 to 2015 and Economic distance diversity of supplier countries (S_IncDiv) for years 2011, 2012 and 2013.

The independent variables were also analysed at this stage to determine which variable was making the strongest unique contribution to explaining the dependent variable. The Beta value for each variable under Standardised Coefficients is the one used to evaluate the strength of each variable in predicting the dependent variable. The bigger the value regardless of the sign, the larger the contribution. The analysis results show the Economic distance diversity of customer countries (C_IncDiv) to be the major contributor in explaining the dependent variable across all the five years of this study.

Table 6: 2015 Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	0.823	0.054		15.133	0.000		
Cultural Distance Diversity of Customer Countries (C_Div)	0.239	0.093	0.319	2.573	0.011	0.315	3.173
Cultural Distance Diversity of Supplier Countries (S_Div)	0.164	0.113	0.170	1.448	0.149	0.352	2.842
Economic Distance Diversity of Customer Countries (C_IncDiv)	-0.697	0.239	-0.326	-2.916	0.004	0.389	2.573
Economic Distance Diversity of Supplier Countries (S_IncDiv)	0.158	0.275	0.063	0.575	0.566	0.402	2.486
Administrative Membership of Customer Countries to regional trade blocs (C_Bloc)	0.263	0.285	0.120	0.924	0.357	0.288	3.471
Administrative Membership of Supplier Countries to regional trade blocs (S_Bloc)	0.966	0.279	0.437	3.459	0.001	0.304	3.294
Geographic Distance Diversity of Customer Countries (C_DistDiv)	0.004	0.675	0.001	0.006	0.996	0.356	2.812
Geographic Distance Diversity of Supplier Countries (S_DistDiv)	0.440	0.954	0.048	0.461	0.645	0.444	2.253
Population (Pop)	0.001	0.003	0.028	0.368	0.713	0.837	1.195
Trade openness (T_Open)	-0.013	0.087	-0.012	-0.148	0.883	0.784	1.275
High Tech Expenditure (HT_Exp)	0.699	0.476	0.112	1.469	0.144	0.832	1.203
GDP Per Capita (GDP_Pcap)	-0.051	0.021	-0.201	-2.421	0.017	0.701	1.426
C_Div Regional trade blocs moderation	-0.522	0.268	-0.234	-1.950	0.053	0.335	2.985
S_Div Regional trade blocs moderation	-0.027	0.257	-0.011	-0.105	0.917	0.458	2.185
C_IncDiv Regional trade blocs moderation	2.505	0.813	0.373	3.081	0.002	0.331	3.024
S_IncDiv Regional trade blocs moderation	0.604	0.871	0.081	0.693	0.489	0.357	2.799

5.6 HYPOTHESIS RESULTS

This section discusses the test results for the hypothesis developed in chapter 2. In all the hypothesis, the researcher was evaluating the relationship between continuous variables. Therefore, the results of the multiple regression analysis shown below were used to explain the hypothesis.

5.6.1 Hypothesis 1: In transnational fields, the cultural distance diversity of customer countries is positively correlated to RCA

As shown in table 19 below, hypothesis 1 was supported for all the datasets from 2011 to 2015.

Table 7: Summary for Hypothesis 1

Hypothesis 1: Cultural distance diversity of customer countries & RCA	2011		2012		2013		2014		2015	
	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.
	0.268	0.043	0.283	0.026	0.296	0.022	0.272	0.034	0.319	0.011

5.6.2 Hypothesis 2: In transnational fields, the cultural distance diversity of supplier countries is positively correlated to RCA.

Hypothesis 2, evaluating the relationship between cultural distance diversity of supplier countries and revealed comparative advantage was not supported in all cases from 2011 to 2015 as shown in table 20 below.

Table 8: Summary for Hypothesis 2

Hypothesis 2: Cultural distance diversity of supplier countries & RCA	2011		2012		2013		2014		2015	
	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.
	0.214	0.079	0.193	0.108	0.182	0.127	0.210	0.073	0.170	0.149

5.6.3 Hypothesis 3: In transnational fields, the geographic distance diversity of customer countries is negatively related to RCA.

As shown in table 21 below, hypothesis 3 was not supported for all the cases from year 2011 to 2015, in all cases Sig. > 0.05.

Table 9: Summary for Hypothesis 3

Hypothesis 3: Geographic distance diversity of customer countries & RCA	2011		2012		2013		2014		2015	
	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.
	0.010	0.932	0.014	0.901	0.005	0.962	0.010	0.930	0.001	0.996

5.6.4 Hypothesis 4: In transnational organisational fields, economic distance diversity of customer countries income level groups is negatively correlated to RCA.

As shown on table 22 below, the relationship between economic distance diversity of customer countries income level groups and revealed comparative advantage (RCA) was statistically significant in all cases from 2011 to 2015.

Table 10: Summary for Hypothesis 4

Hypothesis 4: Economic distance diversity of customer countries income level groups & RCA	2011		2012		2013		2014		2015	
	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.
	-0.380	0.001	-0.398	0.001	-0.391	0.001	-0.362	0.002	-0.326	0.004

5.6.5 Hypothesis 5: In transnational fields, the economic distance diversity of supplier countries' income level groups is negatively correlated to RCA.

Hypothesis 5 which evaluates the relationship between economic distance diversity of supplier countries income level groups and revealed comparative advantage (RCA) was not statistically significant in all cases from year 2011 to 2015.

Table 11: Summary for Hypothesis 5

Hypothesis 5: Economic distance diversity of supplier countries' income level groups & RCA	2011		2012		2013		2014		2015	
	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.
	0.119	0.295	0.149	0.177	0.137	0.218	0.097	0.374	0.063	0.566

5.6.6 Hypothesis 6: In transnational fields, the administrative membership of customer countries to regional trade blocs is positively correlated to RCA.

As shown in table 24 below, hypothesis 6 which evaluates the relationship between administrative membership of customer countries to regional trade blocs and revealed comparative advantage (RCA) was not statistically significant in all cases from year 2011 to 2015.

Table 12: Summary for Hypothesis 6

Hypothesis 6: Administrative membership of customer countries to regional trade blocs & RCA	2011		2012		2013		2014		2015	
	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.
	0.039	0.771	0.063	0.624	0.081	0.537	0.060	0.651	0.120	0.357

5.6.7 Hypothesis 7: In transnational fields, the administrative membership of supplier countries to regional trade blocs is positively correlated to RCA.

Table 25 below shows analysis results of hypothesis 7 which evaluated the relationship between administrative membership of supplier countries to regional trade blocs and revealed comparative advantage (RCA). As shown, the hypothesis was supported on all cases from 2011 to 2015.

Table 13: Summary for Hypothesis 7

Hypothesis 7: Administrative membership of supplier countries to regional trade blocs & RCA	2011		2012		2013		2014		2015	
	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.
	0.506	0.000	0.471	0.000	0.436	0.001	0.471	0.000	0.437	0.001

5.6.8 Hypothesis 8: In transnational fields, the administrative membership of customer countries to regional trade blocs moderates the relationship between cultural distance diversity of customer countries and RCA.

The moderating role of administrative membership of customer countries to regional trade blocs to the relationship between cultural distance diversity of customer countries and RCA was only marginally supported, with the significant levels over the different years falling between 0.053 and 0.81.

Table 14: Summary for Hypothesis 8

Hypothesis 8: Administrative membership of customer countries to regional trade blocs moderates the relationship between cultural distance diversity of customer countries & RCA.	2011		2012		2013		2014		2015	
	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.
	-0.229	0.058	-0.203	0.067	-0.196	0.081	-0.199	0.071	-0.234	0.053

5.6.9 Hypothesis 9: In transnational fields, the administrative membership of customer countries to regional trade blocs moderates the relationship between economic distance diversity of customer countries and RCA.

The moderating role of administrative membership of customer countries to regional trade blocs to the relationship between economic distance diversity of customer countries and RCA was supported in all cases.

Table 15: Summary for Hypothesis 9

Hypothesis 9: Administrative membership of customer countries to regional trade blocs moderates the relationship between economic distance diversity of customer countries & RCA	2011		2012		2013		2014		2015	
	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.
	0.323	0.008	0.299	0.006	0.312	0.005	0.308	0.005	0.373	0.002

To determine the nature of the moderating effect of administrative membership of customer countries to regional trade blocs on the relationship between economic distance diversity of customer countries

and RCA, the following simple slopes analysis was done. First, the moderating variable, administrative membership of customer countries to regional trade blocs (C_Bloc) was divided into three categories in ascending order, i.e., Low, Medium and High. A variable group representing these three categories was created. These three categories give a simple data spread to show how the relationship between economic distance diversity of customer countries and RCA changes with changes in the moderating variable (C_Bloc). Second, a scatter plot was created with economic distance diversity of customer countries on the x-axis and RCA on the y-axis. The created group variable was set as the marker on the scatter plot. The outcome of the scatter plot is shown on figure 8 below.

As seen from the scatter plot below, the R Squared value for C_Bloc_Low was 0.050, giving a correlation value of 0.224, while the R Squared value for C_Bloc_Med was 0.018, giving a correlation equals to 0.134. Finally, the R Squared value for C_Bloc_High was 0.003, equating to a correlation of 0.055. This means that as the values of C_Bloc increases, i.e., the portion of exports that the focal country exports to customer countries that belong to the same regional trade blocs as itself increases, the negative correlation between economic distance diversity of customer countries and RCA decreases.

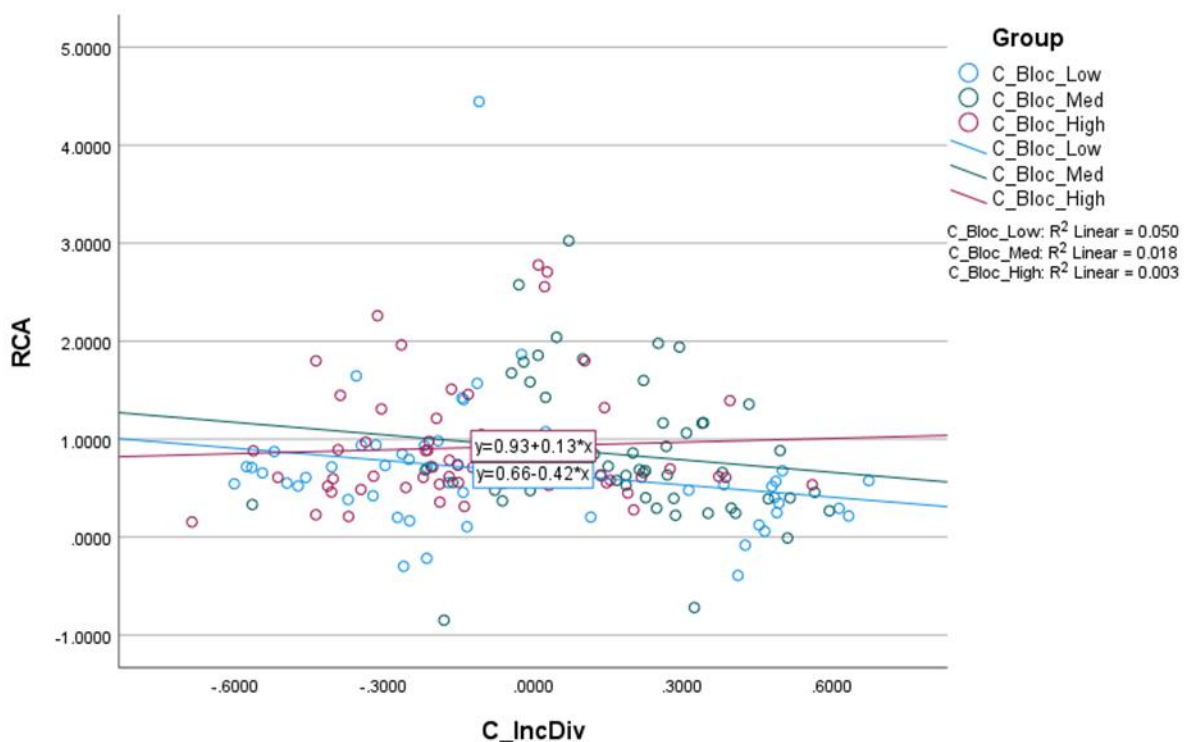


Figure 8. Moderating effect of administrative membership of customer countries to regional trade blocs scatter plot.

5.6.10 Hypothesis 10: In transnational fields, the distance diversity of customer countries with colonial ties is positively correlated to RCA.

Table 16 below shows analysis results of hypothesis 10 which evaluated the relationship between the distance diversity of customer countries with colonial ties and revealed comparative advantage (RCA). As shown, the hypothesis was not supported on all cases from 2011 to 2015.

Table 16: Summary for Hypothesis 10

Hypothesis 10: In transnational fields, the distance diversity of customer countries with colonial ties is positively correlated to RCA	2011		2012		2013		2014		2015	
	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.
	0.119	0.491	0.108	0.535	0.105	0.544	0.074	0.672	0.066	0.705

5.6.11 Hypothesis 11: In transnational fields, the distance diversity of supplier countries with colonial ties is positively correlated to RCA.

Table 17 below shows analysis results of hypothesis 11 which evaluated the relationship between the distance diversity of supplier countries with colonial ties and revealed comparative advantage (RCA). As shown, the hypothesis was not supported on all cases from 2011 to 2015.

Table 17: Summary for Hypothesis 11

Hypothesis 11: In transnational fields, the distance diversity of supplier countries with colonial ties is positively correlated to RCA	2011		2012		2013		2014		2015	
	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.
	-0.014	0.936	-0.038	0.826	-0.048	0.783	-0.052	0.764	-0.022	0.900

5.7 CURVILINER ANALYSIS RESULTS

The following figures show the curvilinear analysis results for Cultural Distance Diversity of Customer and Supplier Countries, Economic Distance Diversity of Customer and Supplier Countries, Geographic Distance Diversity of Customer and Supplier Countries, Cultural Distance Diversity of Customer Countries with Colonial Ties, and finally Distance Diversity of Supplier Countries with Colonial Ties. Given that the outcomes of all previous analyses were the same for all the years, this analysis was done for 2015 data only.

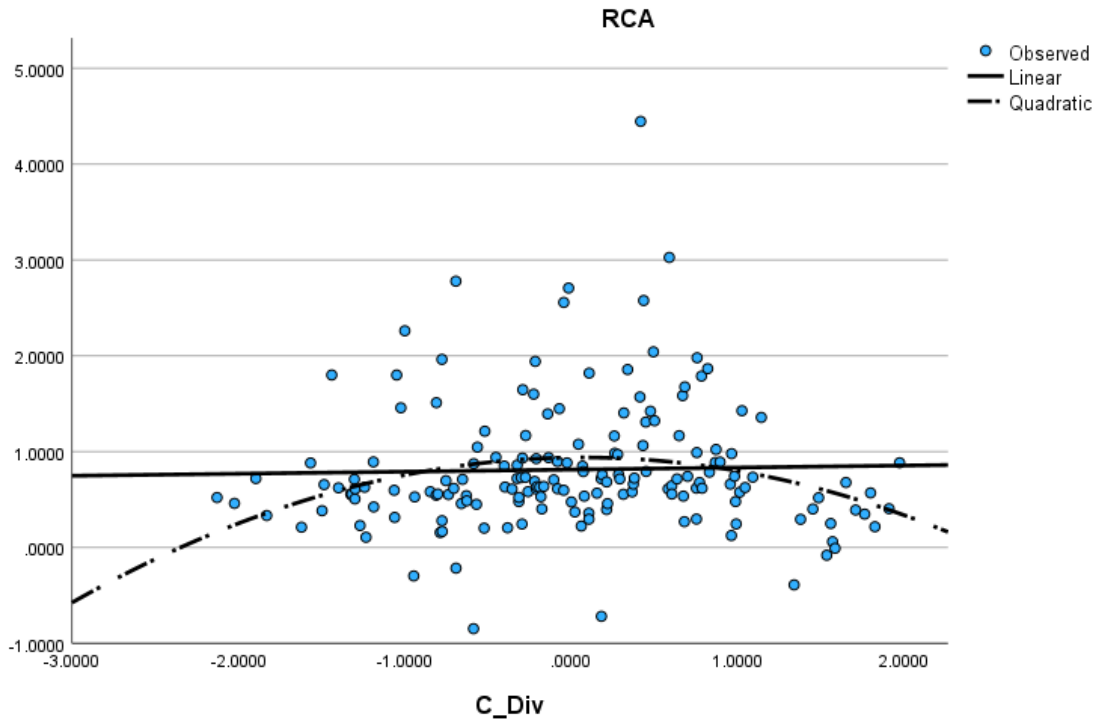


Figure 9. Curvilinear analysis results for the relationship between Cultural Distance Diversity of Customer Countries and RCA

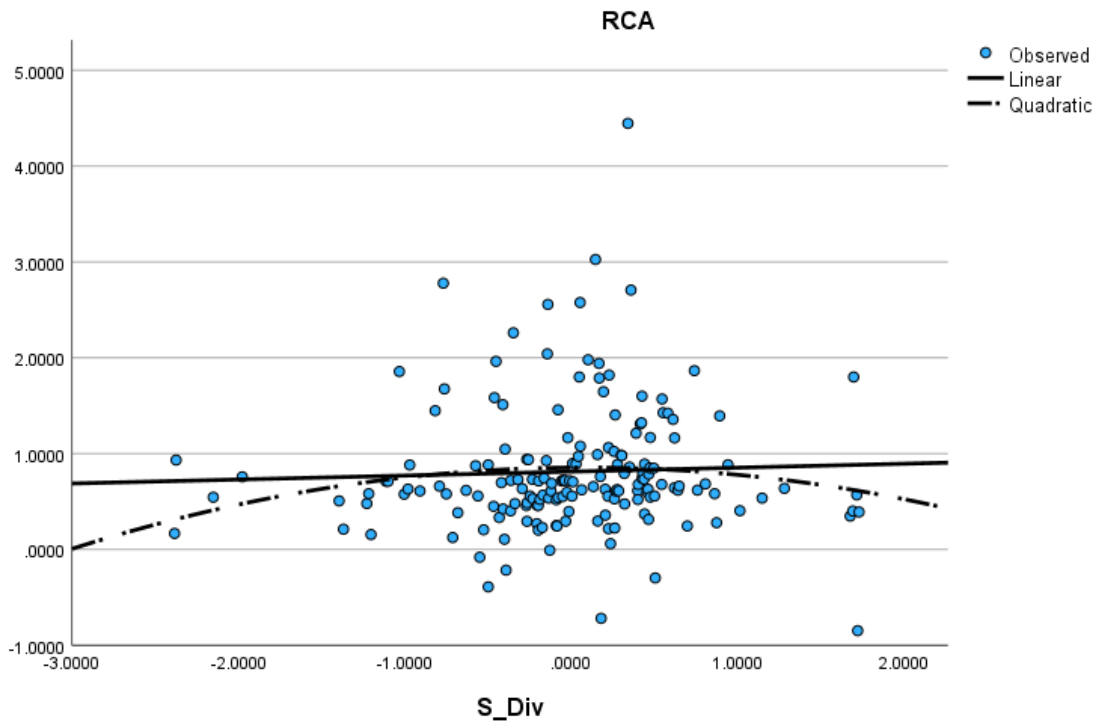


Figure 10. Curvilinear analysis results for the relationship between Cultural Distance Diversity of Supplier Countries and RCA

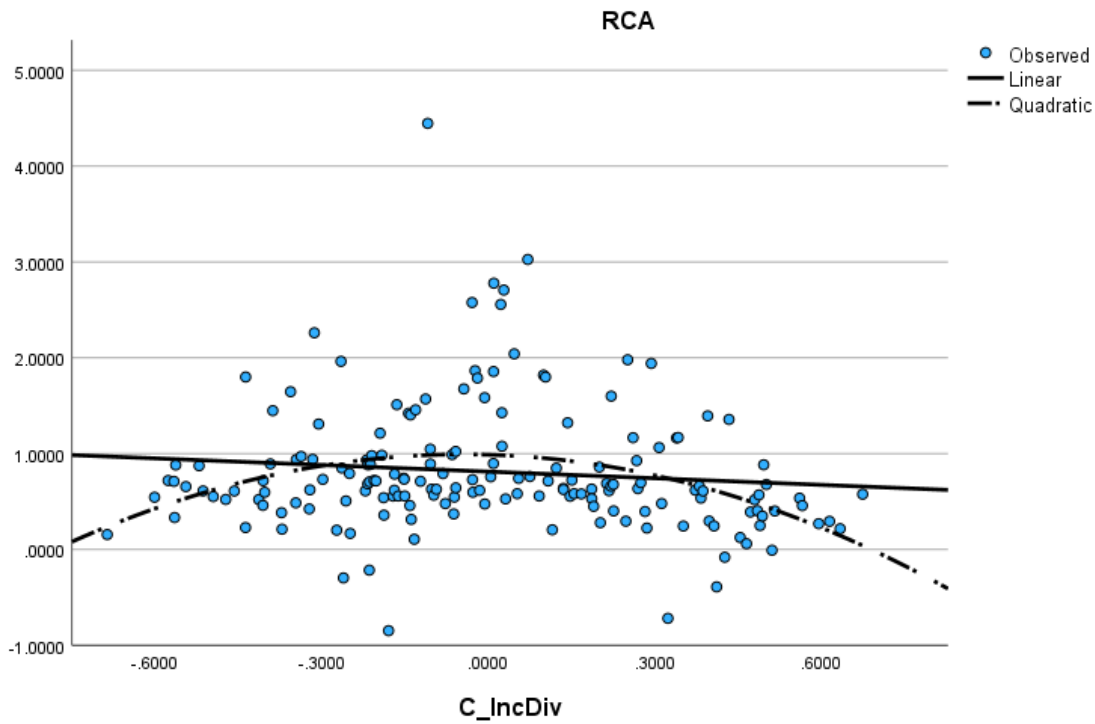


Figure 11. Curvilinear analysis results for the relationship between Economic Distance Diversity of Customer Countries and RCA

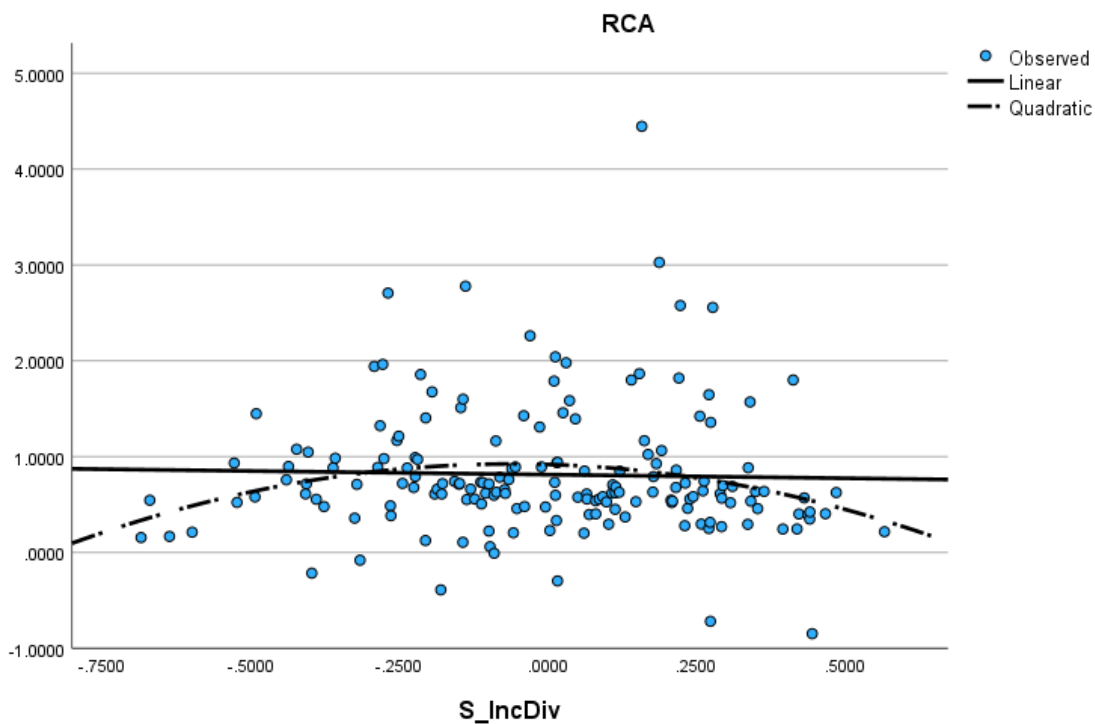


Figure 12. Curvilinear analysis results for the relationship between Economic Distance Diversity of Supplier Countries and RCA

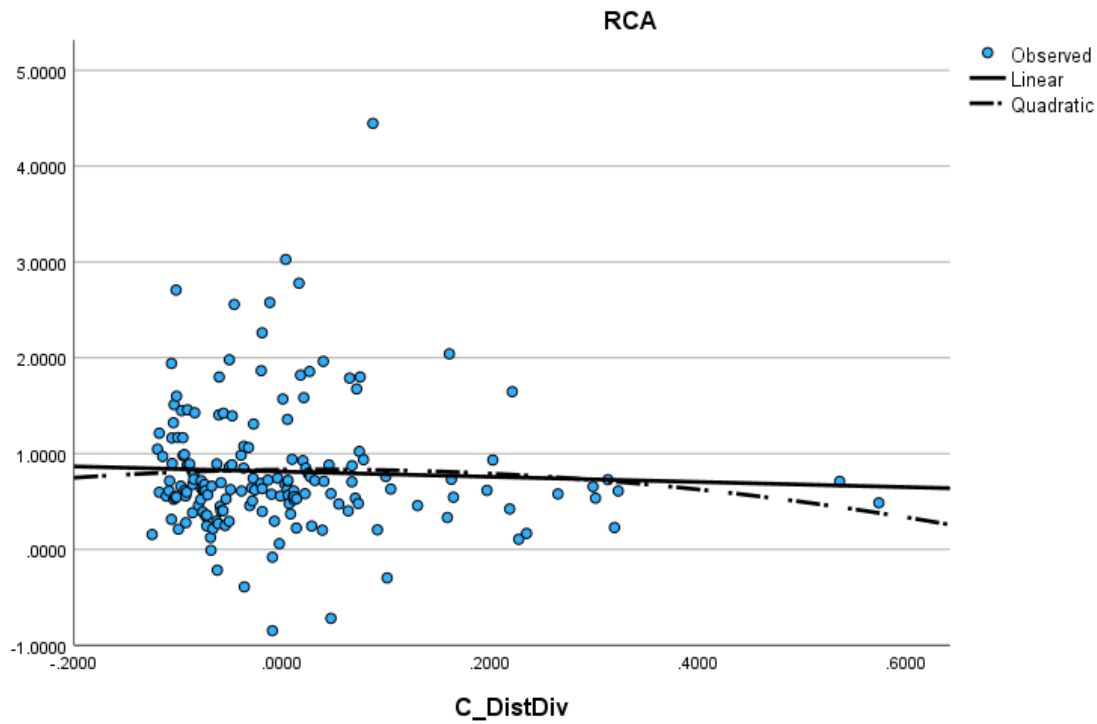


Figure 13. Curvilinear analysis results for the relationship between Geographic Distance Diversity of Customer Countries and RCA

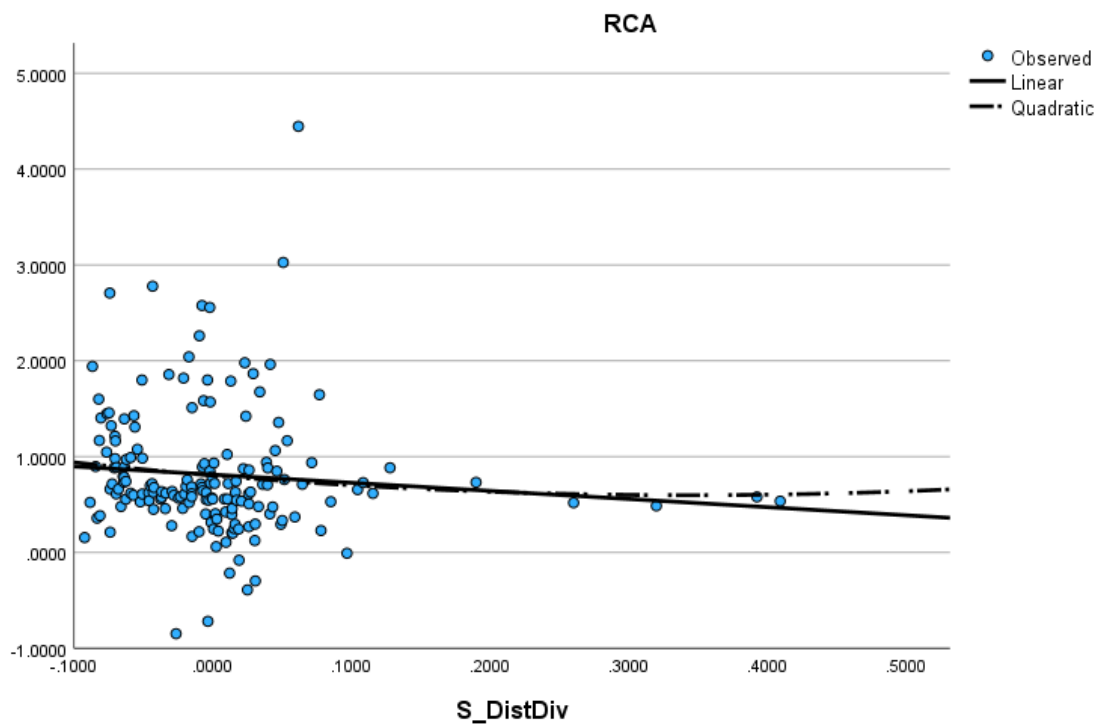


Figure 14. Curvilinear analysis results for the relationship between Geographic Distance Diversity of Supplier Countries and RCA

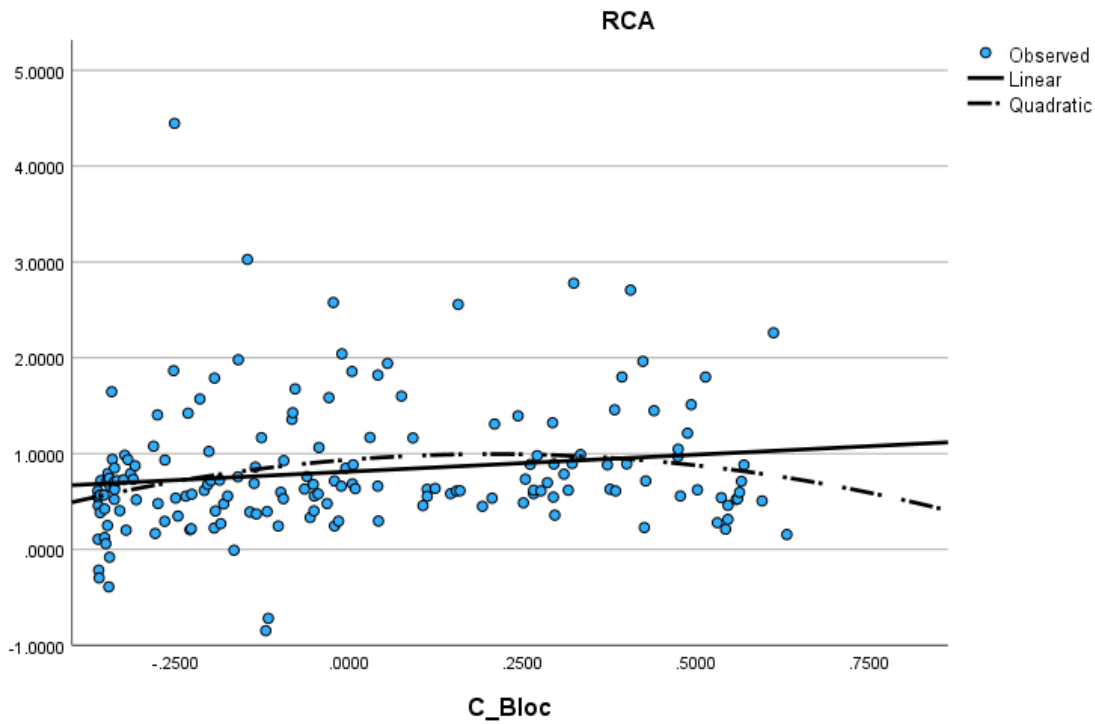


Figure 15. Curvilinear analysis results for the relationship between Administrative Membership of Customer Countries to Regional Trade Blocs Countries and RCA

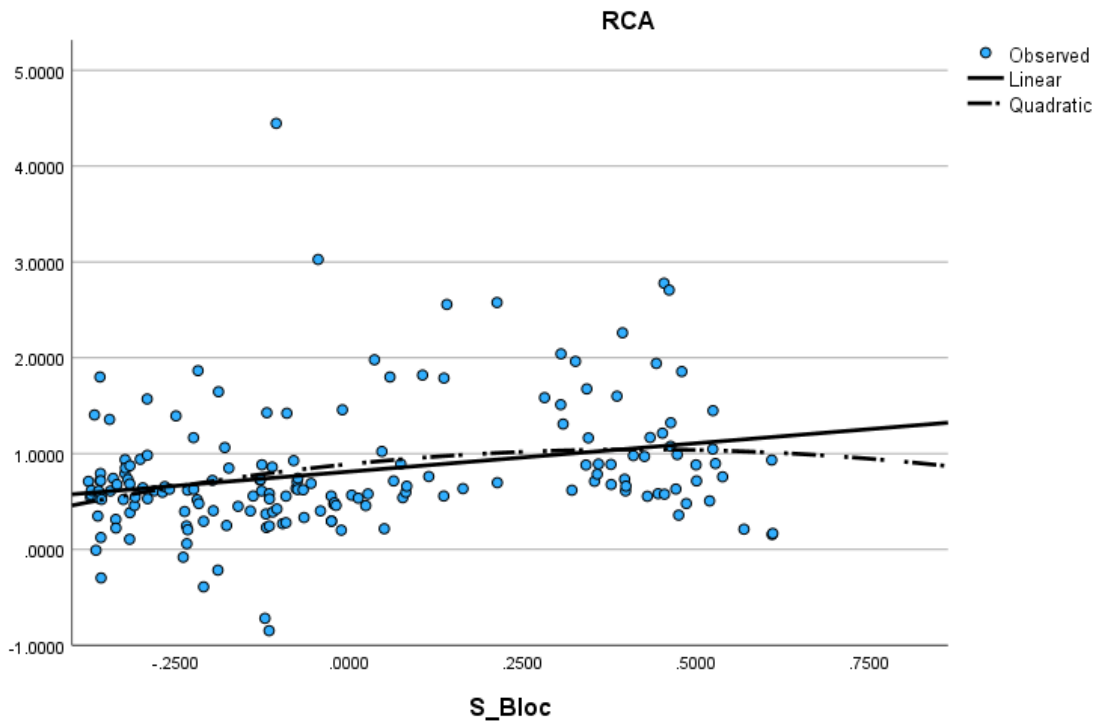


Figure 16. Curvilinear analysis results for the relationship between Administrative Membership of Supplier Countries to Regional Trade Blocs Countries and RCA

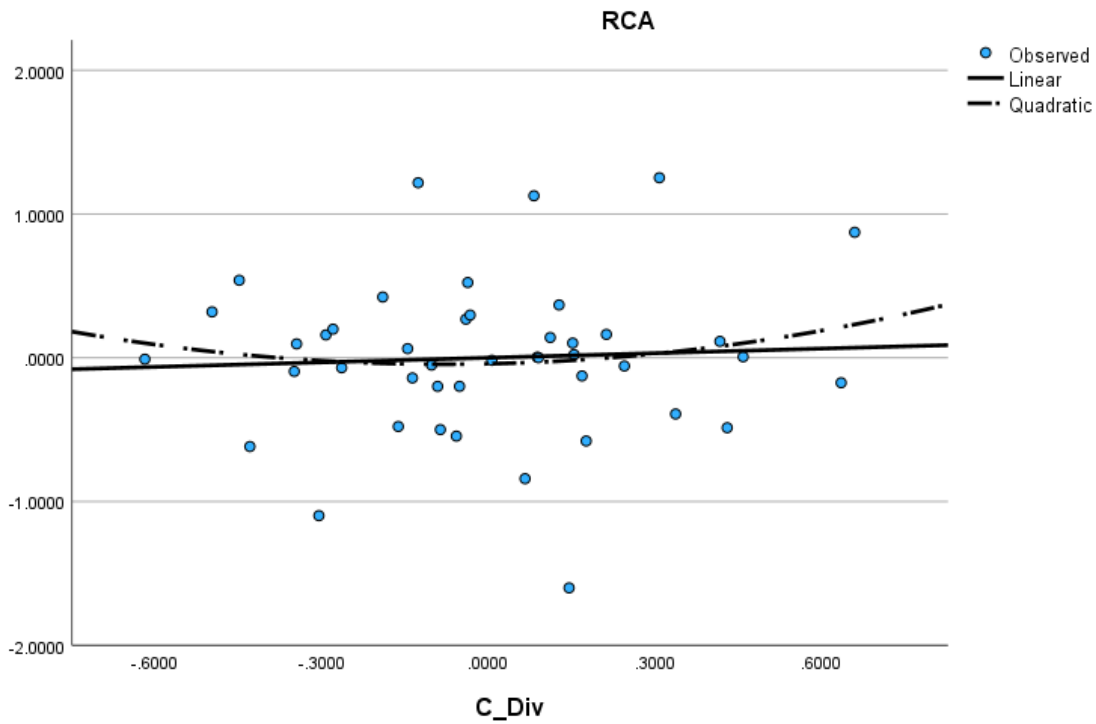


Figure 17. Curvilinear analysis results for the relationship between Distance Diversity of Customer Countries with Colonial Ties and RCA

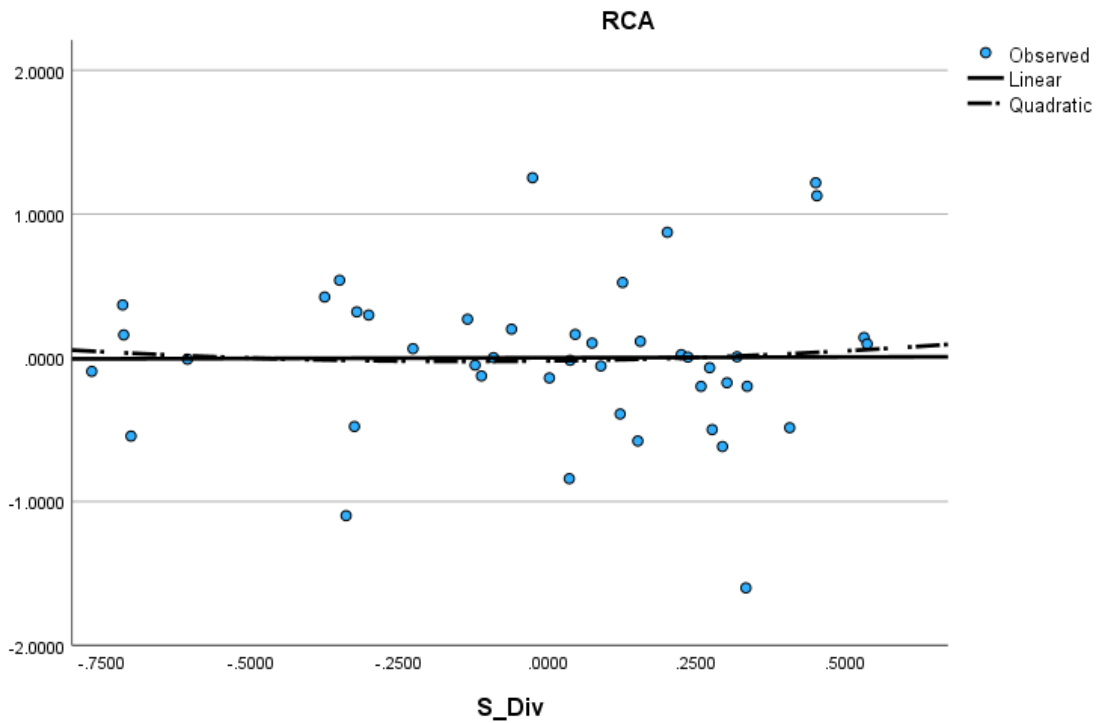


Figure 18. Curvilinear analysis results for the relationship between Distance Diversity of Supplier Countries with Colonial Ties and RCA

5.8 CONCLUSION

This chapter started off with the description of the dataset used in this study. This was followed by narrating how the data was prepared for analysis. First, the data was analysed for missing values followed by mean centering the predictor variables. Descriptive analysis was then carried out and finally linear multiple regression was done for the purpose of testing the hypothesis. The chapter then closed with the narration of the test results for the hypothesis. The results obtained are summarised in table 18 below.

Table 18: Summary of Analysis Results

Expected relationships expressed in hypotheses	Outcome
Hypothesis 1: In transnational fields, the cultural distance diversity of customer countries is positively correlated to RCA	Supported
Hypothesis 2: In transnational fields, the cultural distance diversity of supplier countries is positively correlated to RCA	Not supported
Hypothesis 3: In transnational fields, the geographic distance diversity of customer countries is negatively related to RCA	Not supported
Hypothesis 4: In transnational fields, the economic distance diversity of customer countries' income level groups is negatively correlated to RCA	Supported
Hypothesis 5: In transnational fields, the economic distance diversity of supplier countries' income level groups is negatively correlated to RCA	Not supported
Hypothesis 6: In transnational fields, the administrative membership of customer countries to regional trade blocs is positively correlated to RCA	Not supported
Hypothesis 7: In transnational fields, the administrative membership of supplier countries to regional trade blocs is positively correlated to RCA	Supported
Hypothesis 8: In transnational fields, the administrative membership of customer countries to regional trade blocs moderates the relationship between cultural distance diversity of customer countries and RCA	Marginally supported
Hypothesis 9: In transnational fields, the administrative membership of customer countries to regional trade blocs moderates the relationship between economic distance diversity of customer countries and RCA	Supported
Hypothesis 10: In transnational fields, the distance diversity of customer countries with colonial ties is positively correlated to RCA	Not Supported
Hypothesis 11: In transnational fields, the distance diversity of supplier countries with colonial ties is positively correlated to RCA	Not Supported

6 DISCUSSION

6.1 INTRODUCTION

Distance is arguably one of the most important constructs in international business (Ambos & Håkanson, 2014; Avloniti & Filippaios, 2014; Zaheer et al., 2012), which is why some scholars have described international management as being synonymous with the management of distance (Zaheer et al., 2012). Its criticality to international business has resulting in a lot of scrutiny in the suitability of the measures currently in use for most distance constructs that include psychic, cultural, and institutional distance, just to name a few.

Using the neo-institutional theory as the theoretical lens, and specifically by interrogating the work on organisational fields, this study contributes to this ongoing debate by challenging the dyadic conceptualisation of distance in international business. Previous distance studies in international business conceptualised distance in a dyadic form, i.e., between country A and country B when firms were internationalising (Azar & Drogendijk, 2014; Dong et al., 2017; Evans & Mavondo, 2002; Ghemawat, 2001; Hofstede, 1983; Johanson & Vahlne, 1977; Kostova, 1999; Magnusson et al., 2014; O'Grady & Lane, 1996; Sousa & Bradley, 2005; Yang et al., 2012). However, this study makes a contribution by arguing that the dyadic conceptualisation of distance in transnational organisational fields is inadequate to explain the behaviour of field actors in response to distance. In transnational organisational fields, I argued that an actor has to balance the demands of all its field partners in order to gain legitimacy with the most consequential field partners to that particular actor. In other words, in a transnational organisational field, distance is not dyadic due to the simultaneous participation of multiple partners of different nationalities. Therefore, to optimise their outcomes, actors need to conceptualise distance in a field perspective.

To test and explain this conceptualisation of distance in a field perspective, I developed a novel construct, called the Transnational distance field. Anchored on the Ghemawat's (2001) CAGE framework, I proposed four dimensions for the Transnational distance field which include Cultural distance diversity, Administrative distance diversity, Geographic distance diversity, and Economic distance diversity of the countries making up the transnational organisational field. These dimensions were tested with both suppliers and customers as key economic actors.

6.2 INSIGHTS FROM THE PSYCHIC DISTANCE PARADOX

My research suggests that distance does not function in a binary way (similar/different) or even as a continuum (more/less similar). The evidence provides support that the multiplicity of different distances from different counterparts, and multiplicity of measures do indeed affect the RCA of a country, and thus provides in principle support for the notion that distance operates as a field.

To interpret this insight, some of the core insights from the literature on the psychic distance paradox are useful. A central explanation for the psychic distance paradox is that performance improves because managers are aware of and make use of the perceived distance (Azar & Drogendijk, 2014; Magnusson et al., 2014; Zaheer et al., 2012) to alter the firm's actions. For example, a study by Azar and Drogendijk (2014) showed a positive relationship between psychic distance and innovation, which resulted in enhanced firm performance. The explanation of their findings was that the uncertainty resulting from the perceived high level of differences in psychically distant markets intensified the firm's efforts for innovation in order for the firm to cope with an unfamiliar environment and overcome the uncertainties. The adopted technological and organisational innovations subsequently lead the firm to enhanced performance. Other studies have also shown support for this argument (Magnusson et al., 2014; Zaheer et al., 2012).

The psychic distance paradox thus suggests that it is not distance *per se* that challenges or enables performance, but how managers relate to and engage with distance. Therefore, contrary to the conventional view of distance as a barrier, it can be agreed that distance can be either good or bad for trade between countries depending on how managers perceive and respond to it.

In a similar way, I suggest that a transnational distance field introduces much greater complexity, but that performance is not enabled or hindered by the complexity itself. Rather, I argue that an awareness of the diversity is key to take advantage of, or mitigate against, the nuanced effects of distance. This has important implications for future research, as it suggests that what matters for performance is not distance *per se*, but the response to distance. A shift in conceptualisation will, for example, mean greater overlap between the distance literature and the learning literature.

6.3 MEASURING THE TRANSNATIONAL DISTANCE FIELD

To measure the conceptualisation of distance as a field, I referred to the concepts embedded in the literature on transnational organisational fields (Djelic & Quack, 2008; Frishman, 2013; Manning et al., 2012; Marano & Kostova, 2016; Wooten & Hoffman, 2016). A central point is the existence of a diverse array of pressures, originating from different actors and across different countries. I therefore decided to measure the transnational distance field by looking at the diversity of pressures faced by the focal entity, in my study, the Food and Beverage sector of any given country.

An analogy for operating in a transnational distance field is of being in water with currents. Some of the currents are useful, going in the direction required, and some are not. Some currents and counter-currents cancel out each other, except in specific cases. One can be aware of the currents, and either take advantage of how they move, or decide to change location because of them. Alternatively, one can simply “go with the flow”.

My task was to measure the ‘currents’ in the pool. I considered two key economic actors, suppliers and customers. Because each actor can exert multiple types of pressures – e.g., a customer with higher economic power can offer greater economic opportunities but also expect greater adherence to standards – I selected the four dimensions from Ghemawat’s (2001) CAGE framework. I thus considered the cultural, administrative, geographic and economic distance dimensions for both suppliers and customers for each country with which a focal country traded.

In each case, I measured the level of diversity that the focal country faced within that distance dimension. For example, cultural distance diversity in the transnational field was measure using the Theil index (Niebuhr, 2010; Twigg et al., 2010) which is regarded as the most suitable measure of diversity as it reflects both the share and variety of a population within a particular group or region (Audretsch et al., 2010).

Using diversity measures to approximate the complexity and nuance of a distance field is a novel contribution of this research. Given the globally connected nature of economic activity (Aslam et al., 2017; Casella et al., 2019), it is likely more appropriate to consider the diverse range of distance elements rather than to isolate just one or two dimensions and for just one or two countries. Future research needs to investigate this further.

6.4 CULTURAL DISTANCE DIVERSITY OF COUNTRIES AND RCA

The effect of cultural distance on organisational outcomes has been widely researched in international business literature, albeit being limited to distance between two countries. The current study makes a contribution by extending previous research beyond the dyadic view of cultural distance. In the dyadic view of cultural distance, the manager's focal point is cultural distance between his country and a single trading partner's country. However, when we look at distance in a field perspective, the interest is no longer the distance to a particular country, but the diversity of the multiple cultural distances presented within the transnational organisational field. In such a setting, I argued that the managers' situation becomes more complex as they have to make choices that balance up the multiple demands and opportunities presented by the culturally diverse trading partners.

To explain how this matters it is useful to reflect on previous research. A study to examine the relationship between cultural distance and bilateral trade within the European union by Cyrus (2015) showed that cultural distance had no effect on trade, while trade reduced cultural distance between trading partner countries. Part of this outcome was contrary to expectations, where cultural distance is normally seen as a barrier to trade. Another study by Tokas and Deb (2020), also examining the relationship between cultural distance and bilateral trade found that reduced levels of cultural distance resulted in increased levels of bilateral trade between India and a partner country.

My study found a significant positive relationship between cultural distance diversity of customer countries and revealed comparative advantage (RCA). This means that the more culturally distant the customer countries are within a transnational organisational field, the more the focal country will increase its revealed comparative advantage. Previous studies have shown that in such cases of complexity, firms put more effort to learn the legitimating requirements of their foreign trading partners (Kostova & Zaheer, 1999) and device creative ways to seek and perhaps influence alternative paths to legitimacy (Quirke, 2013). This outcome also supports the view that says, diversity brings about learning opportunities for firms to integrate and leverage different business practices which lead to enhanced competitive advantages (Meyer et al., 2011). This may also be explained from the arguments of the psychic distance paradox. Contrary to intuitive expectations of distance being a barrier to trade, the study by O'Grady and Lane (1996) revealed that when firms are internationalising to distant countries they put more effort towards learning and preparing for the differences. Therefore, firms were shown to perform better in distant countries compared to closer countries because managers tend to be complacent when entering closer countries due to the

assumed similarities between their country and foreign market to the point of ignoring subtle but important differences (Evans & Mavondo, 2002).

However, the same test on supplier countries was not supported. This means that there is no significant relationship between the cultural distance diversity of supplier countries within a transnational organisational field and revealed comparative advantage. One explanation for this result could be that Food and Beverage Global Value chains, which are the context of this study, are normally buyer driven. Suppliers depend on their customers for economic gains and would therefore prioritise the demands of their customers in order to make their products more competitive. On the other hand, customers, who are the dominant party in the field are less likely to prioritise the demands of their suppliers. In other words, the configuration of suppliers does not affect revealed comparative advantage.

6.5 GEOGRAPHIC DISTANCE DIVERSITY OF COUNTRIES AND RCA

Geographic distance matters because it has a direct effect on for example the cost of transporting products (Ghemawat, 2001). This becomes even more consequential if goods involved are bulky or have a short shelf life, as will arguably be the case in the Food and Beverage sector. In this study I focused on the geographic distance diversity of customer countries because it is their distance from the suppliers that matters more since it is ordinarily the responsibility of the supplier to get the goods to their destination in good order. However, my hypothesis which said 'in transnational organisational fields, geographic distance diversity of customer countries is negatively related to RCA', was unsupported.

Understanding why that is the case is an important area of future research. Two areas for future research come to mind. The first relates to transportation. My data predate the COVID-19 pandemic with the associated disruptions to the supply chain; the transportation infrastructure may simply have been developed to such an extent that the costs and complexities of transportation of goods were simply not so much of an issue. In a post COVID-19 world, that is no longer quite the case (Anis et al., 2022; Kumar et al., 2022; Kwon, 2020). The literature on distance emphasises cultural (Hofstede, 1983), institutional (Dong et al., 2017; Kostova, 1999; Yang et al., 2012), and psychic (Azar & Drogendijk, 2014; Evans & Mavondo, 2002; Johanson & Vahlne, 1977; Magnusson et al., 2014; O'Grady & Lane, 1996; Sousa & Bradley, 2005) types of distance. Geographical distance itself is less studied, and as the disruptions brought about by recent supply chain delays show, could be an important area for future work.

It could also be argued that when faced with customers with diverse geographical distances, the gains of online engagement have made in-person contact less important. The transformative effect of information and communications technology on international business is already known (Rangan & Sengul, 2009) but examining how it affects movement through geographical space is an important area for future research.

6.6 ECONOMIC DISTANCE DIVERSITY OF COUNTRIES AND RCA

When a transnational organisational field is made up of countries with different economic attributes, economic distance is created between these countries. This resulting economic distance between the countries is said to influence the choice of business partners and the levels of trade between the countries making up the transnational organisational field (Miloloža, 2015).

As earlier stated, this study is not interested in the dyadic economic distance, but it is interested in the economic distance diversity of several countries which are trading partners of the focal country. These countries could be customers while our focal country is the supplier or these countries could be suppliers while our focal country is the customer. Therefore, in order to test the proposed relationship between economic distance diversity of countries and revealed comparative advantage (RCA), two hypotheses were created. The first hypotheses pertaining to customer countries was supported while the second one pertaining to supplier countries was not supported. These are discussed in detail in the following paragraphs.

The analysis showed that economic distance diversity of customer countries income level groups is negatively correlated to RCA. This means that when a transnational organisational field has high levels of distance diversity in the economic attributes of its customer countries, there would be reduced levels of revealed comparative advantage on the focal country. This outcome is consistent with the view which says that institutional demands within an organisational field are most consequential when the organisational field has one dominant customer or multiple customers with converging demands (Marano & Kostova, 2016; Ocasio & Radoynovska, 2016). In the case where the economic distance divergence of customer countries is high, there will be no convergence in the demands of the customer countries, because countries at different economic levels behave differently in their buying patterns (You et al., 2018). Therefore, if there are high levels of economic distance diversity of the customer countries, it means supplier countries have a choice on whom they prefer to sell to, they don't have to comply with any specific demands they regard as more difficult to meet.

On the other hand, the results of the analysis showed that the hypothesis which says that 'in transnational organisational fields, economic distance diversity of supplier countries income level groups is negatively correlated to RCA' was not supported. The reason could be that most food and beverage value chains are buyer driven, meaning it is the demands of buyers that matter more than those of the sellers.

How then does this affect managers? Compliance is generally expensive; therefore, field actors are likely to balance the need for legitimacy and their ability to trade at minimum compliance costs. Managers are likely to ignore customers whose demands are very high (unless they represent a sizable proportion of sales) if they can make the same sales from less demanding customers.

6.7 ADMINISTRATIVE DISTANCE DIVERSITY OF COUNTRIES AND RCA

Four hypotheses (6, 7, 8, 9, 10 and 11) were developed to evaluate the relationship between administrative distance diversity of countries and revealed comparative advantage. Hypothesis 6 predicted that the higher the portion of exports that are being sold to customer countries which are members of the same regional trade blocs as the supplier country, the higher the supplier country's RCA. However, the results of the analysis did not support this hypothesis. However, distance has been shown to give both good or bad outcomes. Therefore, this outcome can be explained by arguing that when countries belonging to the same trade blocs are trading amongst themselves, the perceived similarities in policies and business practices (Korneliusson & Blasius, 2008; Phillips et al., 2009) cause them to expect little barriers, leading to less effort being put to increase their competitiveness. This explanation agrees with O'Grady and Lane's (1996) psychic distance paradox, where countries performed badly when they were trading with similar countries as compared to when they were trading with less similar countries.

A similar test, hypotheses 7, was also conducted, this time with the focus on suppliers belonging to the same regional trade blocs as the customer country they are exporting to. It was expected that the higher the imports that the focal customer country got from these supplier countries that belonged to the same trade blocs as itself, the higher the customer country's RCA. In this case, the predicted positive relationship between administrative membership of supplier countries to regional trade blocs and RCA was supported. It therefore means that customer countries increase their RCA when they are importing their goods from suppliers belonging to the same trade blocs as themselves.

This outcome is somewhat interesting because the previous hypotheses gave an impression that customer countries are not affected by the distance diversities of their multiple supplier countries.

This case however shows that when there is homogeneity in the policies and business practices of the supplier countries, the focal customer country's behaviour gets affected. This outcome can be explained in two ways. First, membership to trade blocs requires compliance to a given set of policies and business practices valued by the trade bloc. Therefore, if any country needs to attain legitimacy within that trade bloc, it must comply with those particular policies and business practices.

Second, it has been shown that when the demands of actors within a transnational organisational field converge, they tend to compel the focal actor to acquiesce to the institutional demands exerted on it (Marano & Kostova, 2016; Ocasio & Radoynovska, 2016). Trade blocs bring homogeneity (Korneliusen & Blasius, 2008; Phillips et al., 2009) and hence convergence of institutional demands. In other words, this finding underline that there is still value in homogeneity, or to put it differently, costs to distance.

I also hypothesised that membership to regional trade blocs will play a moderating role to distance diversity, in particular cultural distance diversity and economic distance diversity of customer countries. Hypothesis 8 which tested the moderating effect of administrative membership of customer countries to regional trade blocs on the relationship between cultural distance diversity of customer countries and RCA was partially supported, while hypothesis 9, which tested the moderating effect of administrative membership of customer countries to regional trade blocs on the relationship between economic distance diversity of customer countries and RCA was fully supported. The results for hypothesis 9 are discussed in the following paragraphs.

As shown in figure 8, as the moderating effect of administrative membership of customer countries to regional trade blocs increases, the correlation between economic distance diversity of customer countries income level groups and RCA changes from negative to positive. This means that as the portion of exports going into the same regional trade blocs as the focal country increase, the revealed comparative advantage of the focal country will also increase with the increase in economic distance diversity of customer countries income level groups. Therefore, this outcome could mean that customer countries can belong to the same trade blocs and yet still remain diverse in terms of economic distance, meaning that membership to regional trade blocs does not always equate to homogeneity from the economic attributes of countries' point of view.

In this particular case it can be explained that the resultant economic diversity of customer countries brings about diversity in levels of development between these customer countries. This diversity in levels of development is expected to create learning opportunities which the focal country can explore (Marano & Kostova, 2016) thereby helping it to adopt novel business practices (Kodeih &

Greenwood, 2014). As the focal country integrates and leverages these diverse business practices, it is expected to enhance its competitiveness (Meyer et al., 2011; Tinta et al., 2018). Therefore, the moderating role of administrative membership of customer countries to regional trade blocs creates a positive relationship between economic distance diversity of customer countries and revealed comparative advantage.

Hypotheses 10 and 11 evaluated the relationship between distance diversity of countries with colonial ties and revealed comparative advantage. Past colonial linkages have been shown to minimise administrative distance between countries due to similarities in language (Håkanson & Ambos, 2010) as well as the harmonisation of political, legal, and administrative systems (Dow & Karunaratna, 2006; Tokas & Deb, 2020) that were introduced to former colonies by their erstwhile colonial master. It has also been argued that colonial relations contribute more than 900% to the growth in trade (Miloloza, 2015).

Both hypothesis 10 and 11 were unsupported, meaning that the distance diversity of customer and supplier countries with colonial ties is not correlated with RCA. This outcome is interesting and can be explained from the makeup of the British commonwealth countries. The expectation was that colonial ties bring homogeneity, however a closer look at the composition of the British commonwealth reveals more distance field complexities that were not accounted for. For example, the British commonwealth is comprised of developing economies such as Zambia, Ghana and Malawi as well as developed economies such as Canada and the UK, thereby creating economic distance between within the commonwealth. It is also evident that the commonwealth countries are spread across multiple continents, this consequently results in cultural distance field complexities within the commonwealth.

It is therefore clear that these multiple distances simultaneously interact with any focal actor within the field, justifying my argument that distance must be conceptualised in terms of a field. This is consistent with the field theory which states that actors exist within a field or social space, where their actions and strategies are constrained by the objectives defining the field (Kluttz & Fligstein, 2016).

6.8 CURVILINEAR ANALYSIS OF DISTANCE DIVERSITIES AND RCA

After carrying out linear regression analysis on hypothesis 1, 2, 3, 4, 5, 6, 7, 10, and 11, it was also important to test for the existence of any curvilinear relationships between these distance diversities and RCA. Therefore, I ran a curve estimation analysis and the results shown on figures 9 to 18 are explained in the following passages.

Table 19 below shows the comparison of the model summary for the linear regression and the curvilinear regression. As shown, both models are statistically significant, however, R Square was reduced from 24.5% to 17%.

Table 19: Model summary for linear and curvilinear regression results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig.
Linear	0.494	0.245	0.167	0.607	3.156	0.000
Curvilinear	0.413	0.170	0.085	0.636	2.000	0.016

Also of interest are the changes in the levels of statistical significance of the predictor variables as summarised in table 20 below.

Table 20: Changes in levels of statistical significance of the predictor variables

Regression	Hypothesis 1		Hypothesis 2		Hypothesis 3		Hypothesis 4		Hypothesis 5		Hypothesis 6		Hypothesis 7	
	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.	Beta	Sig.
Linear	0.319	0.011	0.170	0.149	0.001	0.996	-0.326	0.004	0.063	0.566	0.120	0.357	0.437	0.001
Curvilinear	0.072	0.623	-0.047	0.789	-0.041	0.631	0.040	0.643	-0.346	0.015	0.005	0.968	0.171	0.132

As shown, hypothesis 1, 4, and 7 which were statistically significant with the linear regression analysis all became statistically insignificant with the curvilinear regression analysis. On the contrary, hypothesis 5, which was statistically insignificant with the linear regression became statistically significant with the curvilinear regression analysis.

The analysis shows that cultural distance diversity of both customer and supplier countries have an inverted U-Curved relationship with RCA. This outcome is not totally unexpected as one could argue that cultural distance diversity within a transnational organisational field is beneficial up to some point after which the complexity brought about by high levels of diversity outweighs the benefits. The same applies to the relationship between economic distance diversity of both customer and supplier

countries and RCA, whereby the results also show an inverted U-Curved relationship. The previous explanation can be used; that economic distance diversity benefits RCA within the transnational organisational field only up to a certain point, beyond which RCA suffers.

The results were quite interesting for geographic distance diversity. As shown on figures 13 and 14, geographic distance diversity of customer countries showed a moderate inverted U-Curved relationship with and RCA while geographic distance diversity of supplier countries had a moderate U-Curved relationship with RCA. One would use the same explanation as above for the geographic distance diversity of customer countries, however, what could be the explanation for the U-Curved relationship between geographic distance diversity of supplier countries and RCA?

The U-Curved relationship means that a focal customer achieves a high RCA when dealing with suppliers whose geographic distances are homogeneous, i.e., no geographic distance diversity. However, as the geographic distance diversity increases, there is loss in performance up to some point beyond which it starts to improve. Perhaps this could mean that the increase in geographic distance diversity is a result of the suppliers being spread across the world. This consequently introduces other distance diversities such as cultural and economic. As earlier argued, more diversity can create opportunities for the focal actor to explore alternative paths to legitimacy that can lead to improving their performance (Kostova & Zaheer, 1999; Meyer et al., 2011; Quirke, 2013). Similar to geographic distance diversity of supplier countries, both the distance diversity of customer and supplier countries with colonial ties also had a U-Curved relationship with RCA.

6.9 CONTRIBUTIONS MADE BY THIS STUDY

6.9.1 Academic Contribution

Businesses exist within an organisational field where they are expected to balance multiple demands in order to attain legitimacy. It has been shown that economic and social actions of organisations have increasingly become transnational (Djelic & Quack, 2008) and that the conceptualisation of the organisational field has extended beyond industrial and geographic boundaries, towards a transnational perspective (Manning et al., 2012; Wooten & Hoffman, 2016). This means that organisations within the same organisational field can be distant from each other to the extent of being in different countries. The resultant diversities of countries in these transnational organisational fields (Morgan, 2006) introduce distance complexities which are likely to complicate the functioning of the organisational field and how actors respond to institutional demands.

The current study brings together neo-institutional theory, specifically its engagement with the literature on organisational fields, and the study of distance in transnational organisational fields. Distance has been proven to be a very important construct in international business studies (Ambos & Håkanson, 2014), and some scholars have gone as far as to equate the study of distance to the study of international management (Zaheer et al., 2012). However, despite all the notable contributions that have been made to the study of distance over the years, one common limitation that has been propagated by the various scholars is the conceptualisation of distance in a dyadic form, i.e., between country A and country B when firms were internationalising (Azar & Drogendijk, 2014; Dong et al., 2017; Evans & Mavondo, 2002; Ghemawat, 2001; Hofstede, 1983; Johanson & Vahlne, 1977; Kostova, 1999; Magnusson et al., 2014; O'Grady & Lane, 1996; Sousa & Bradley, 2005; Yang et al., 2012). This limited dyadic conceptualisation of distance poses challenges when country A is dealing with multiple countries at the same time. Some previous studies also pointed out that differences may exist in the analysis of distance depending on whether the focus is on the dyadic differences between pairs of countries or on the configurations of countries (Ambos & Håkanson, 2014).

To address this gap, this study makes a contribution by arguing that the dyadic conceptualisation of distance in transnational fields is inadequate to explain the behaviour of field actors in response to distance. In transnational organisational fields, I argued that an actor has to balance the demands of all its field partners in order to gain legitimacy with the most consequential field partners to that particular actor. In other words, in a transnational field, distance is not dyadic due to the simultaneous

participation of multiple partners of different nationalities. Therefore, in order to optimise their outcomes, actors need to conceptualise distance in a field perspective.

Therefore, in order to address the above gap, I developed a novel construct, called the Transnational distance field. To give a more comprehensive view of distance in a field perspective, I based this new construct on the Ghemawat's (2001) four dimensions of distance, namely, cultural, administrative, geographic and economic. I proposed four dimensions for the Transnational distance field. These are cultural distance diversity, administrative distance diversity, geographic distance diversity, and economic distance diversity of the countries making up the transnational organisational field.

My work is at the country level of analysis, but having demonstrated the value of a diversity measure to conceptualise distance, I believe that future research can apply a similar strategy to measure distance at the level of the firm.

6.9.2 Practical Contribution

Many businesses exist in transnational organisational fields, where they must interact with actors located in different countries (Kostova et al., 2020). This study argues that the manager does not deal with one actor at a time, but they simultaneously interact with diverse business partners and regulators. In that process, the manager is faced with a challenge to find the best balance of which demands they must conform to, and which demands they must ignore following some kind of a cost-benefit analysis. Although the level of analysis was the country and not the firm, the evidence nonetheless suggests that competitive outcomes result from the functioning of diverse participants on diverse elements.

Customers matter more in a buyer-dominated supply chain, and suppliers matter more in a supplier-dominated supply chain. In the case of food and beverage, it is buyer dominated, and the implications for firms are clear. For example, in coffee global value chains, a few powerful roasters control the value chain and they are the major financial beneficiaries in the value chain compared to their numerous but less powerful suppliers (Manning et al., 2012). On the other hand, for supplier dominated supply chains, diversity is likely to function differently (and figuring out how is an important area of future research). Managers therefore, must figure out who are dominant in their industries, and then consider how the diversity is likely to affect them. But it is likely that not all types of diversity in distance affect them equally, so this changes how managers think about distance.

Therefore, depending on the nature of their product, location of their clients and suppliers as well as the configurations of their trade blocs, managers need to invest time in trying to understand how distance diversities within their transnational field impact their organisational outcomes and learn how to manoeuvre within these complex environments (Kostova et al., 2020).

6.10 LIMITATIONS OF THE STUDY

This study has a number of limitations which are discussed in the following passages. The first limitation relates to the type of organisational field actors that were analysed. The study only focused on the customers and suppliers as the main actors in the transnational field. The role of regulators, who play a very influential role in food and beverage global value chains was not directly analysed. Their role was inferred from the economic levels of development of the countries because high income countries tend to have stronger regulations compared to low income countries (Manning et al., 2012). Future studies may need to look at the unique roles of regulators as well as those of business and professional associations in order to account for diverse institutional demands within the transnational field.

The second limitation to this study was that I used the entire food and beverage sector as the unit of analysis. This has two limitations. First, it meant that the study was conducted at the country level, even though the motivated literature anchored on firm-level explanations. This study thus represents a type of “proof of concept” for the notion that distance is profitably conceptualised as a field, and further research needs to be done at the firm level.

Third, the food and beverage sector combine a wide range of products with different characteristics and subject to different regulations. It can be easily argued that consumers and regulators do not behave the same way across all food and beverage products. The main dataset that I used in this study is the EORA Multi-Region Input-Output tables (Lenzen et al., 2012, 2013), and the presentation of data at sector level seems to be consistent across different Input-Output tables. A typical study that focused on a single sector was done by Manning et al. (2012). It looked at how the embeddedness of actors within certain national contexts influenced the co-evolution of sustainability standards in coffee global value chains. Perhaps future studies may extend my current study, by being more granular and focusing on particular sectors so that the results may be more useful to businesses within those sectors.

Another limitation was in the operationalisation of the cultural distance diversity dimension. There are concerns with the various culture dimensions (Avloniti & Filippaios, 2014; Hofstede, 1983; Kogut

& Singh, 1988). Because my concern was with understanding the diversity of cultures – the field – rather than a specific cultural dimension, I did not use any of the typically-used cultural distance measures. Instead, I used the diversity of the countries as a representation of collective cultural expression. Thus, my measurement suggests that a country that actively engages with a hundred other countries experiences greater cultural diversity than one that engages with only ten. But by making that choice, it meant that I did not take into account issues like similarities in language etc. In other words, my analysis assumes that all cultures are equally similar and equally different. This limitation was partially dealt with through the evaluation of the moderating role of regional trade blocs.

The study looks at diversity as an advantage, however this is not likely to be always the case. Therefore, future studies may also need to look at what point diversity stops to be an advantage and becomes a liability. Also, future studies may need to look at the bidirectional causal relationship between diversity and RCA. This means investigations will need to be made to determine how RCA affects diversity as it can be argued that a country with high RCA is likely to internationalise into more diverse countries as a result of its capabilities.

The Theil index that was used as the measure for diversity does not account for the size of the target market. Though this was not considered to be an issue in this study, it would be interesting for future studies to consider using an index that also incorporates the size of the target market.

6.11 DISCUSSION CLOSING

Referencing to existing literature, this chapter discussed the results on the analysis which were presented in chapter 5. This was followed by the discussion of the contributions, both academic and practical, which were made by this study. Finally, the limitations of this study and recommendations for future studies were discussed. The following chapter is the overall conclusion of this study.

7 CONCLUSION

This study brought together the transnational debate in neo-institutional theory studies and distance, one of the most studied constructs in international business. The fusing of these studies led to the focus of this research, which is the need to extend the conceptualising distance beyond a dyadic view to a field perspective.

Using the food and beverage global value chains as the context for this study, I discussed the changes that have been observed in the organisational field. Extant literature explains that the organisational field is no longer confined to geographical boundaries or industries, but that it now spans national boundaries. This extended organisational field, which is no longer limited to national boundaries, is called the transnational field. As explained in chapter 2, once the organisational field becomes transnational, a need arises to account for the distance complexities introduced by the diverse nationalities involved. It was further explained that in a transnational field, distance is not dyadic due to the simultaneous participation of multiple partners of different nationalities. Therefore, in order to optimise their outcomes, actors need to conceptualise distance in a field perspective.

To test and explain this conceptualisation of distance in a field perspective, I developed a novel construct, called the transnational distance field. Anchored on the Ghemawat's CAGE framework, I proposed four dimensions for the Transnational distance field which include, cultural distance diversity, administrative distance diversity, geographic distance diversity, and economic distance diversity. These dimensions were tested with both suppliers and customers as the main field actors by looking at their influence on revealed comparative advantage. A census was conducted on 189 countries available on the Eora input output tables dataset for the time period covering 2011 to 2015. The unit of analysis was the country level food and beverage sector, and multiple regression was used to validate the measurement model and its hypothesis.

The outcome of the study confirmed that it is an oversimplification to focus on the dyad distance of a single dimension between two entities in a globally connected setting. Instead, distance does function as a field – the results showed that different dimensions operated differently, even for a single type of entity. For example, the cultural distance diversity of customer countries is positively correlated to RCA while the economic distance diversity of customer countries' income level groups is negatively correlated to RCA. Both the above relationships were also shown to be moderated by the administrative membership of customer countries to regional trade blocs. Similarly, not all entities were similarly affected by all the different dimensions. The only supported supplier related hypothesis

was that evaluating the positive relationship between administrative membership of supplier countries to regional trade blocs and RCA.

This study is a first step in conceptualising distance in a way that better captures its nuanced functioning in a globally connected world. It is hoped that future research will further develop and refine the insights from this thesis.

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9 APPENDIX A

9.1 DESCRIPTIVE STATISTICS (2011 – 2014)

2011 Descriptive Statistics

Predictor Variables	N	Min	Max	Mean	Std. Dev
Diversity of customer countries (C_Div)	173	-2.150	1.978	0.000	0.883
Diversity of supplier countries (S_Div)	173	-2.382	1.723	0.000	0.683
Diversity of customer income level groups (C_IncDiv)	173	-0.706	0.656	0.000	0.323
Diversity of supplier income level groups (S_IncDiv)	173	-0.712	0.524	0.000	0.272
% of exports to regional trade blocs (C_Bloc)	173	-0.360	0.634	0.000	0.302
% of imports from regional trade blocs (S_Bloc)	173	-0.375	0.612	0.000	0.302
C_Div Regional trade blocs moderation (C_Div_Bloc)	173	-1.211	0.681	-0.106	0.295
S_Div Regional trade blocs moderation (S_Div_Bloc)	173	-1.456	0.802	-0.071	0.264
C_IncDiv Regional trade blocs moderation (C_IncDiv_Bloc)	173	-0.447	0.223	-0.023	0.104
S_IncDiv Regional trade blocs moderation (S_IncDiv_Bloc)	173	-0.436	0.237	-0.034	0.092
Diversity of customer geographic distance (C_DistDiv)	173	-0.125	0.557	0.000	0.115
Diversity of supplier geographic distance (S_DistDiv)	173	-0.093	0.416	0.000	0.073
Control Variables					
Population (Pop)	173	-3.934	130.476	0.000	14.352
Trade openness (T_Open)	173	-0.890	3.327	0.000	0.572
High Tech Expenditure (HT_Exp)	173	-0.101	0.376	0.000	0.092
GDP Per Capita (GDP_PCap)	173	-1.907	15.575	0.000	2.804
Outcome Variable					
Realised Comparative Advantage	173	-0.467	5.090	0.943	0.695

2012 Descriptive Statistics

Predictor Variables	N	Min	Max	Mean	Std. Dev
Diversity of customer countries (C_Div)	173	-2.145	1.974	0.000	0.882
Diversity of supplier countries (S_Div)	173	-2.384	1.721	0.000	0.683
Diversity of customer income level groups (C_IncDiv)	173	-0.690	0.683	0.000	0.322
Diversity of supplier income level groups (S_IncDiv)	173	-0.697	0.511	0.000	0.268
% of exports to regional trade blocs (C_Bloc)	173	-0.361	0.632	0.000	0.302
% of imports from regional trade blocs (S_Bloc)	173	-0.375	0.612	0.000	0.302
C_Div Regional trade blocs moderation (C_Div_Bloc)	173	-1.203	0.684	-0.101	0.295
S_Div Regional trade blocs moderation (S_Div_Bloc)	173	-1.459	0.801	-0.072	0.265
C_IncDiv Regional trade blocs moderation (C_IncDiv_Bloc)	173	-0.436	0.218	-0.016	0.100
S_IncDiv Regional trade blocs moderation (S_IncDiv_Bloc)	173	-0.427	0.251	-0.031	0.089
Diversity of customer geographic distance (C_DistDiv)	173	-0.125	0.557	0.000	0.115
Diversity of supplier geographic distance (S_DistDiv)	173	-0.093	0.417	0.000	0.073
Control Variables					
Population (Pop)	173	-3.987	131.080	0.000	14.477
Trade openness (T_Open)	173	-0.674	3.408	0.000	0.580
High Tech Expenditure (HT_Exp)	173	-0.103	0.381	0.000	0.094
GDP Per Capita (GDP_PCap)	173	-1.869	14.600	0.000	2.703
Outcome Variable					
Realised Comparative Advantage	173	-0.472	5.099	0.939	0.700

2013 Descriptive Statistics

Predictor Variables	N	Min	Max	Mean	Std. Dev
Diversity of customer countries (C_Div)	173	-2.135	1.976	0.000	0.884
Diversity of supplier countries (S_Div)	173	-2.382	1.733	0.000	0.684
Diversity of customer income level groups (C_IncDiv)	173	-0.688	0.686	0.000	0.318
Diversity of supplier income level groups (S_IncDiv)	173	-0.693	0.501	0.000	0.266
% of exports to regional trade blocs (C_Bloc)	173	-0.362	0.631	0.000	0.302
% of imports from regional trade blocs (S_Bloc)	173	-0.374	0.613	0.000	0.303
C_Div Regional trade blocs moderation (C_Div_Bloc)	173	-1.188	0.682	-0.105	0.296
S_Div Regional trade blocs moderation (S_Div_Bloc)	173	-1.459	0.797	-0.071	0.264
C_IncDiv Regional trade blocs moderation (C_IncDiv_Bloc)	173	-0.434	0.217	-0.017	0.100
S_IncDiv Regional trade blocs moderation (S_IncDiv_Bloc)	173	-0.425	0.250	-0.030	0.088
Diversity of customer geographic distance (C_DistDiv)	173	-0.125	0.560	0.000	0.115
Diversity of supplier geographic distance (S_DistDiv)	173	-0.093	0.414	0.000	0.074
Control Variables					
Population (Pop)	173	-4.065	131.670	0.000	14.617
Trade openness (T_Open)	173	-0.653	3.515	0.000	0.605
High Tech Expenditure (HT_Exp)	173	-0.102	0.475	0.000	0.097
GDP Per Capita (GDP_PCap)	173	-1.935	15.812	0.000	2.840
Outcome Variable					
Realised Comparative Advantage	173	-0.474	5.051	0.932	0.700

2014 Descriptive Statistics

Predictor Variables	N	Min	Max	Mean	Std. Dev
Diversity of customer countries (C_Div)	173	-2.132	1.952	0.000	0.883
Diversity of supplier countries (S_Div)	173	-2.388	1.723	0.000	0.684
Diversity of customer income level groups (C_IncDiv)	173	-0.670	0.693	0.000	0.314
Diversity of supplier income level groups (S_IncDiv)	173	-0.663	0.591	0.000	0.273
% of exports to regional trade blocs (C_Bloc)	173	-0.362	0.631	0.000	0.301
% of imports from regional trade blocs (S_Bloc)	173	-0.372	0.614	0.000	0.302
C_Div Regional trade blocs moderation (C_Div_Bloc)	173	-1.183	0.686	-0.105	0.294
S_Div Regional trade blocs moderation (S_Div_Bloc)	173	-1.466	0.798	-0.072	0.265
C_IncDiv Regional trade blocs moderation (C_IncDiv_Bloc)	173	-0.423	0.217	-0.016	0.097
S_IncDiv Regional trade blocs moderation (S_IncDiv_Bloc)	173	-0.407	0.238	-0.034	0.090
Diversity of customer geographic distance (C_DistDiv)	173	-0.125	0.559	0.000	0.114
Diversity of supplier geographic distance (S_DistDiv)	173	-0.092	0.406	0.000	0.072
Control Variables					
Population (Pop)	173	-4.084	132.340	0.000	14.724
Trade openness (T_Open)	173	-0.650	3.363	0.000	0.594
High Tech Expenditure (HT_Exp)	173	-0.103	0.500	0.000	0.099
GDP Per Capita (GDP_PCap)	173	-1.967	16.937	0.000	2.914
Outcome Variable					
Realised Comparative Advantage	173	-0.591	4.636	0.855	0.681

9.2 CORRELATIONAL STATISTICS (2011 – 2014)

A summary of correlational statistics for years 2011 to 2014 are shown in the following pages.

2011 Correlational Statistics

	RCA	C_Div	S_Div	C_IncDiv	S_IncDiv	C_Bloc	S_Bloc	C_DistDiv	S_DistDiv	Pop	T_Open	HT_Exp	GDP_PCap	C_Div_Bloc	S_Div_Bloc	C_IncDiv_Bloc	S_IncDiv_Bloc
RCA	1.000																
C_Div	-0.012	1.000															
S_Div	0.037	0.322	1.000														
C_IncDiv	-0.140	0.667	0.267	1.000													
S_IncDiv	0.007	0.201	0.567	0.440	1.000												
C_Bloc	0.136	-0.401	0.006	-0.232	-0.162	1.000											
S_Bloc	0.258	-0.014	-0.346	-0.082	-0.415	0.519	1.000										
C_DistDiv	-0.020	-0.216	-0.341	-0.244	-0.048	-0.341	-0.208	1.000									
S_DistDiv	-0.097	0.040	-0.095	0.122	0.187	-0.254	-0.320	0.620	1.000								
Pop	0.091	0.123	0.112	-0.007	0.184	-0.115	-0.039	-0.060	0.011	1.000							
T_Open	-0.050	-0.078	-0.062	-0.028	-0.167	0.140	0.178	-0.151	-0.128	-0.148	1.000						
HT_Exp	0.060	0.197	0.026	0.078	-0.143	0.000	0.223	-0.079	-0.038	0.117	0.361	1.000					
GDP_PCap	-0.150	0.204	0.183	-0.026	-0.182	0.107	0.128	-0.188	-0.114	-0.082	0.164	0.240	1.000				
C_Div_Bloc	0.024	0.044	-0.072	-0.130	-0.197	-0.414	-0.021	0.260	-0.012	-0.017	0.034	0.073	-0.065	1.000			
S_Div_Bloc	-0.001	0.025	0.216	-0.017	0.043	-0.095	-0.289	-0.011	0.060	0.031	-0.024	0.067	-0.093	0.276	1.000		
C_IncDiv_Bloc	0.095	-0.136	-0.069	-0.146	-0.040	-0.460	-0.278	0.330	0.068	0.046	-0.091	-0.062	-0.239	0.709	0.262	1.000	
S_IncDiv_Bloc	-0.043	-0.038	0.049	0.061	0.224	-0.354	-0.544	0.206	0.194	0.030	-0.231	-0.093	-0.209	0.155	0.615	0.393	1.000

2012 Correlational Statistics

	RCA	C_Div	S_Div	C_IncDiv	S_IncDiv	C_Bloc	S_Bloc	C_DistDiv	S_DistDiv	Pop	T_Open	HT_Exp	GDP_PCap	C_Div_Bloc	S_Div_Bloc	C_IncDiv_Bloc	S_IncDiv_Bloc
RCA	1.000																
C_Div	-0.013	1.000															
S_Div	0.040	0.322	1.000														
C_IncDiv	-0.162	0.597	0.233	1.000													
S_IncDiv	0.021	0.215	0.552	0.491	1.000												
C_Bloc	0.143	-0.379	0.014	-0.165	-0.135	1.000											
S_Bloc	0.259	-0.015	-0.353	-0.128	-0.389	0.517	1.000										
C_DistDiv	-0.021	-0.216	-0.341	-0.197	-0.071	-0.344	-0.208	1.000									
S_DistDiv	-0.094	0.040	-0.096	0.176	0.171	-0.247	-0.319	0.621	1.000								
Pop	0.091	0.123	0.113	-0.018	0.183	-0.117	-0.041	-0.060	0.011	1.000							
T_Open	-0.053	-0.085	-0.077	-0.046	-0.176	0.149	0.205	-0.170	-0.144	-0.152	1.000						
HT_Exp	0.084	0.088	0.072	-0.009	-0.125	0.074	0.187	-0.107	-0.083	0.113	0.336	1.000					
GDP_PCap	-0.153	0.194	0.177	-0.064	-0.184	0.118	0.115	-0.183	-0.113	-0.080	0.155	0.263	1.000				
C_Div_Bloc	0.016	0.067	-0.048	-0.196	-0.179	-0.417	-0.027	0.252	0.003	-0.022	0.015	-0.007	-0.033	1.000			
S_Div_Bloc	0.002	0.025	0.205	-0.078	0.012	-0.095	-0.282	-0.011	0.060	0.031	-0.032	-0.013	-0.085	0.272	1.000		
C_IncDiv_Bloc	0.107	-0.210	-0.081	-0.186	-0.016	-0.382	-0.293	0.330	0.094	0.038	-0.123	-0.147	-0.245	0.610	0.238	1.000	
S_IncDiv_Bloc	-0.027	-0.052	0.014	0.065	0.174	-0.309	-0.511	0.210	0.186	0.024	-0.246	-0.176	-0.197	0.143	0.615	0.420	1.000

2013 Correlational Statistics

	RCA	C_Div	S_Div	C_IncDiv	S_IncDiv	C_Bloc	S_Bloc	C_DistDiv	S_DistDiv	Pop	T_Open	HT_Exp	GDP_PCap	C_Div_Bloc	S_Div_Bloc	C_IncDiv_Bloc	S_IncDiv_Bloc
RCA	1.000																
C_Div	-0.010	1.000															
S_Div	0.043	0.321	1.000														
C_IncDiv	-0.156	0.595	0.225	1.000													
S_IncDiv	0.023	0.209	0.550	0.487	1.000												
C_Bloc	0.143	-0.394	0.009	-0.177	-0.135	1.000											
S_Bloc	0.251	-0.026	-0.344	-0.129	-0.378	0.521	1.000										
C_DistDiv	-0.025	-0.217	-0.338	-0.194	-0.069	-0.336	-0.205	1.000									
S_DistDiv	-0.094	0.038	-0.100	0.177	0.169	-0.248	-0.322	0.626	1.000								
Pop	0.089	0.125	0.116	-0.014	0.187	-0.119	-0.046	-0.060	0.012	1.000							
T_Open	-0.106	-0.044	-0.102	0.012	-0.189	0.147	0.179	-0.162	-0.098	-0.158	1.000						
HT_Exp	0.032	0.136	0.003	0.075	-0.136	0.025	0.193	-0.132	-0.056	0.124	0.255	1.000					
GDP_PCap	-0.149	0.196	0.184	-0.067	-0.179	0.095	0.114	-0.183	-0.115	-0.081	0.155	0.186	1.000				
C_Div_Bloc	0.020	0.056	-0.069	-0.199	-0.195	-0.419	-0.021	0.257	-0.001	-0.019	-0.006	0.042	-0.058	1.000			
S_Div_Bloc	-0.011	0.024	0.218	-0.075	0.027	-0.094	-0.283	-0.015	0.055	0.028	-0.035	0.083	-0.086	0.281	1.000		
C_IncDiv_Bloc	0.107	-0.213	-0.095	-0.183	-0.024	-0.386	-0.293	0.335	0.094	0.039	-0.147	-0.131	-0.265	0.614	0.246	1.000	
S_IncDiv_Bloc	-0.042	-0.050	0.031	0.070	0.186	-0.310	-0.519	0.208	0.184	0.020	-0.230	-0.094	-0.199	0.146	0.609	0.422	1.000

2014 Correlational Statistics

	RCA	C_Div	S_Div	C_IncDiv	S_IncDiv	C_Bloc	S_Bloc	C_DistDiv	S_DistDiv	Pop	T_Open	HT_Exp	GDP_PCap	C_Div_Bloc	S_Div_Bloc	C_IncDiv_Bloc	S_IncDiv_Bloc
RCA	1.000																
C_Div	0.007	1.000															
S_Div	0.040	0.325	1.000														
C_IncDiv	-0.164	0.573	0.219	1.000													
S_IncDiv	-0.031	0.197	0.482	0.505	1.000												
C_Bloc	0.144	-0.396	0.015	-0.174	-0.157	1.000											
S_Bloc	0.267	-0.023	-0.351	-0.144	-0.413	0.520	1.000										
C_DistDiv	-0.034	-0.217	-0.337	-0.184	-0.030	-0.343	-0.208	1.000									
S_DistDiv	-0.093	0.040	-0.094	0.188	0.222	-0.250	-0.320	0.622	1.000								
Pop	0.108	0.127	0.113	-0.016	0.181	-0.116	-0.039	-0.060	0.012	1.000							
T_Open	-0.079	-0.043	-0.104	-0.023	-0.213	0.160	0.205	-0.166	-0.118	-0.162	1.000						
HT_Exp	0.057	0.185	0.023	0.067	-0.131	-0.019	0.168	-0.102	-0.024	0.119	0.215	1.000					
GDP_PCap	-0.122	0.196	0.182	-0.072	-0.176	0.094	0.113	-0.182	-0.114	-0.081	0.172	0.204	1.000				
C_Div_Bloc	0.018	0.051	-0.065	-0.213	-0.212	-0.420	-0.026	0.264	-0.003	-0.021	-0.005	0.057	-0.053	1.000			
S_Div_Bloc	0.003	0.022	0.216	-0.085	-0.018	-0.093	-0.285	-0.017	0.052	0.032	-0.047	0.099	-0.094	0.278	1.000		
C_IncDiv_Bloc	0.100	-0.230	-0.089	-0.175	-0.007	-0.381	-0.310	0.349	0.108	0.039	-0.185	-0.128	-0.276	0.579	0.235	1.000	
S_IncDiv_Bloc	-0.046	-0.056	-0.021	0.084	0.214	-0.324	-0.524	0.239	0.215	0.026	-0.271	-0.093	-0.204	0.115	0.510	0.439	1.000

9.3 COEFFICIENTS (2011 – 2014)

2011 Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	0.958	0.057		16.897	0.000		
Cultural Distance Diversity of Customer Countries (C_Div)	0.211	0.103	0.268	2.040	0.043	0.280	3.567
Cultural Distance Diversity of Supplier Countries (S_Div)	0.218	0.123	0.214	1.770	0.079	0.331	3.024
Economic Distance Diversity of Customer Countries (C_IncDiv)	-0.816	0.250	-0.380	-3.268	0.001	0.357	2.799
Economic Distance Diversity of Supplier Countries (S_IncDiv)	0.305	0.290	0.119	1.050	0.295	0.376	2.662
Administrative Membership of Customer Countries to regional trade blocs (C_Bloc)	0.090	0.308	0.039	0.292	0.771	0.269	3.712
Administrative Membership of Supplier Countries to regional trade blocs (S_Bloc)	1.165	0.292	0.506	3.991	0.000	0.300	3.331
Geographic Distance Diversity of Customer Countries (C_DistDiv)	0.060	0.706	0.010	0.086	0.932	0.355	2.815
Geographic Distance Diversity of Supplier Countries (S_DistDiv)	0.304	0.979	0.032	0.310	0.757	0.453	2.208
Population (Pop)	-0.001	0.004	-0.014	-0.183	0.855	0.827	1.209
Trade openness (T_Open)	-0.020	0.099	-0.017	-0.207	0.836	0.731	1.369
High Tech Expenditure (HT_Exp)	0.370	0.621	0.049	0.597	0.552	0.710	1.409
GDP Per Capita (GDP_Pcap)	-0.055	0.020	-0.222	-2.699	0.008	0.716	1.396
C_Div Regional trade blocs moderation	-0.540	0.283	-0.229	-1.911	0.058	0.337	2.972
S_Div Regional trade blocs moderation	-0.093	0.279	-0.035	-0.335	0.738	0.429	2.330
C_IncDiv Regional trade blocs moderation	2.165	0.806	0.323	2.686	0.008	0.334	2.992
S_IncDiv Regional trade blocs moderation	0.894	0.894	0.119	0.999	0.319	0.342	2.921

2012 Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	0.947	0.055		17.099	0.000		
Cultural Distance Diversity of Customer Countries (C_Div)	0.225	0.100	0.283	2.241	0.026	0.293	3.409
Cultural Distance Diversity of Supplier Countries (S_Div)	0.198	0.122	0.193	1.618	0.108	0.330	3.032
Economic Distance Diversity of Customer Countries (C_IncDiv)	-0.866	0.246	-0.398	-3.528	0.001	0.368	2.717
Economic Distance Diversity of Supplier Countries (S_IncDiv)	0.388	0.286	0.149	1.357	0.177	0.391	2.561
Administrative Membership of Customer Countries to regional trade blocs (C_Bloc)	0.145	0.295	0.063	0.491	0.624	0.288	3.470
Administrative Membership of Supplier Countries to regional trade blocs (S_Bloc)	1.092	0.288	0.471	3.789	0.000	0.303	3.301
Geographic Distance Diversity of Customer Countries (C_DistDiv)	0.086	0.692	0.014	0.125	0.901	0.364	2.750
Geographic Distance Diversity of Supplier Countries (S_DistDiv)	0.413	0.970	0.043	0.426	0.671	0.452	2.212
Population (Pop)	-0.001	0.004	-0.028	-0.366	0.715	0.828	1.208
Trade openness (T_Open)	-0.046	0.095	-0.038	-0.482	0.631	0.751	1.332
High Tech Expenditure (HT_Exp)	0.867	0.582	0.116	1.490	0.138	0.768	1.301
GDP Per Capita (GDP_Pcap)	-0.060	0.021	-0.232	-2.871	0.005	0.717	1.395
C_Div Regional trade blocs moderation	-0.480	0.260	-0.203	-1.847	0.067	0.389	2.570
S_Div Regional trade blocs moderation	-0.169	0.280	-0.064	-0.603	0.548	0.417	2.398
C_IncDiv Regional trade blocs moderation	2.086	0.754	0.299	2.768	0.006	0.401	2.491
S_IncDiv Regional trade blocs moderation	1.125	0.923	0.143	1.219	0.225	0.340	2.939

2013 Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	0.932	0.056		16.575	0.000		
Cultural Distance Diversity of Customer Countries (C_Div)	0.234	0.101	0.296	2.321	0.022	0.297	3.372
Cultural Distance Diversity of Supplier Countries (S_Div)	0.187	0.122	0.182	1.535	0.127	0.341	2.934
Economic Distance Diversity of Customer Countries (C_IncDiv)	-0.860	0.254	-0.391	-3.385	0.001	0.360	2.777
Economic Distance Diversity of Supplier Countries (S_IncDiv)	0.361	0.292	0.137	1.236	0.218	0.390	2.563
Administrative Membership of Customer Countries to regional trade blocs (C_Bloc)	0.186	0.301	0.081	0.619	0.537	0.284	3.516
Administrative Membership of Supplier Countries to regional trade blocs (S_Bloc)	1.009	0.289	0.436	3.487	0.001	0.307	3.253
Geographic Distance Diversity of Customer Countries (C_DistDiv)	0.033	0.704	0.005	0.048	0.962	0.361	2.772
Geographic Distance Diversity of Supplier Countries (S_DistDiv)	0.440	0.993	0.046	0.443	0.658	0.442	2.263
Population (Pop)	-0.001	0.004	-0.022	-0.294	0.769	0.829	1.206
Trade openness (T_Open)	-0.060	0.090	-0.051	-0.662	0.509	0.797	1.254
High Tech Expenditure (HT_Exp)	0.556	0.559	0.077	0.995	0.321	0.799	1.252
GDP Per Capita (GDP_Pcap)	-0.053	0.020	-0.215	-2.646	0.009	0.727	1.376
C_Div Regional trade blocs moderation	-0.465	0.265	-0.196	-1.753	0.081	0.383	2.609
S_Div Regional trade blocs moderation	-0.201	0.284	-0.076	-0.709	0.479	0.421	2.377
C_IncDiv Regional trade blocs moderation	2.196	0.777	0.312	2.828	0.005	0.394	2.536
S_IncDiv Regional trade blocs moderation	0.846	0.930	0.107	0.909	0.365	0.349	2.862

2014 Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	0.861	0.056		15.462	0.000		
Cultural Distance Diversity of Customer Countries (C_Div)	0.210	0.098	0.272	2.139	0.034	0.297	3.367
Cultural Distance Diversity of Supplier Countries (S_Div)	0.209	0.115	0.210	1.808	0.073	0.357	2.799
Economic Distance Diversity of Customer Countries (C_IncDiv)	-0.784	0.243	-0.362	-3.231	0.002	0.383	2.613
Economic Distance Diversity of Supplier Countries (S_IncDiv)	0.242	0.271	0.097	0.892	0.374	0.409	2.446
Administrative Membership of Customer Countries to regional trade blocs (C_Bloc)	0.136	0.299	0.060	0.453	0.651	0.274	3.656
Administrative Membership of Supplier Countries to regional trade blocs (S_Bloc)	1.059	0.288	0.471	3.674	0.000	0.293	3.410
Geographic Distance Diversity of Customer Countries (C_DistDiv)	0.060	0.685	0.010	0.087	0.930	0.363	2.753
Geographic Distance Diversity of Supplier Countries (S_DistDiv)	0.420	0.981	0.044	0.428	0.669	0.448	2.234
Population (Pop)	0.000	0.004	0.006	0.073	0.942	0.838	1.194
Trade openness (T_Open)	-0.036	0.089	-0.031	-0.405	0.686	0.796	1.256
High Tech Expenditure (HT_Exp)	0.495	0.530	0.072	0.935	0.351	0.813	1.230
GDP Per Capita (GDP_Pcap)	-0.045	0.019	-0.192	-2.367	0.019	0.732	1.366
C_Div Regional trade blocs moderation	-0.459	0.252	-0.199	-1.821	0.071	0.404	2.473
S_Div Regional trade blocs moderation	-0.092	0.253	-0.036	-0.364	0.716	0.495	2.020
C_IncDiv Regional trade blocs moderation	2.164	0.765	0.308	2.829	0.005	0.405	2.471
S_IncDiv Regional trade blocs moderation	0.770	0.831	0.102	0.926	0.356	0.395	2.532