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THE DETERMINANTS OF REGIONAL TRADE AGREEMENTS

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ABSTRACT

Master's Thesis

The Determinants of Regional Trade Agreements

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Number of regional trade agreements has increased tremendously in the last few decades. It is worthy of note that, in today's world nearly all countries participate in at least one regional trade agreement. Faced with these extreme figures on regional trade agreements formation made reasonable to wonder why and how these agreements burgeoned? Even several papers have taken into account the influence of economic development on the probability of signing trade agreements, none of these try to look from a human development perspective which is a more holistic proxy of development. In this respect, this study aims to find out the determinants of regional trade agreements, effect of human development performances of countries on the probability to form regional trade agreements and the impact of economic, geographic and developmental factors on different country groups to capture idiosyncratic characteristics of country pairs. In order to address these issues, this study used panel data of 64 countries over the period 1980-2005 and results manifest that countries with similar human development performances are more willing to form trade agreements with each other. Moreover, impact of explanatory variables on the likelihood of regional trade agreements formation vary across country groups, implying pairs have their own economic, geographic and developmental factors where magnitude and significance of these factors also vary.

Keywords: Regional Trade Agreements, Human Development

ÖZET

Yüksek Lisans Tezi

Bölgesel Ticaret Anlaşmalarının Belirleyicileri

Elif KORKMAZ

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Son birkaç on yıl içinde bölgesel ticaret anlaşmalarının sayısı son derece hızlı bir şekilde artmaktadır. Bugünün dünyasında neredeyse bütün ülkeler en az bir bölgesel ticaret anlaşmasına katılım göstermektedir. Bu çarpıcı rakamlar şu soruyu akıllara getiriyor: Bölgesel ticaret anlaşmaları neden ve nasıl filizlendi? Bu konuya iktisadi gelişmişlik yönünden yaklaşmaya çalışan birçok çalışma bulunmasına rağmen gelişmişlik için daha bütüncül bir gösterge olan insani gelişmişlik yönünden yaklaşılmamıştır. Bu bağlamda, bu çalışma bölgesel ticaret anlaşmalarının belirleyicilerini bulmayı, ülkelerin insani gelişmişlik seviyelerinin bölgesel ticaret anlaşması imzalama olasılığı üzerindeki etkisini bulmayı ve iktisadi, coğrafi ve kalkınmışlık belirleyicilerinin farklı ülke grupları üzerindeki etkilerini analiz etmeyi amaçlamaktadır. Bu sorulara yanıt vermek amacı ile 1980-2005 yılları arasında 64 ülkeyi içeren bir panel veri kullanan bu çalışma açıkça göstermektedir ki ülkeler insani gelişmişlik düzeyi yakın olan ekonomilerle bölgesel ticaret anlaşması imzalamaya daha yatkındırlar. Dahası, açıklayıcı değişkenlerin ticaret anlaşması imzalama olasılığı üzerindeki etkilerinin ülke grupları arasında değişkenlik gösterdiği, yani farklı ülke gruplarının kendi iktisadi, coğrafi ve kalkınmışlık belirleyicileri olduğu sonucuna varılmıştır.

Anahtar Kelimeler: Bölgesel Ticaret Anlaşmaları, İnsani Gelişmişlik

THE DETERMINANTS OF REGIONAL TRADE AGREEMENTS

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CHAPTER THREE
EMPIRICAL RESULTS

ABBREVIATIONS

AFTA	ASEAN Free Trade Area
ANZCERTA	Australia–New Zealand Closer Economic Relations Trade Agreement
AP	Andean Pact
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
CACM	Central American Common Market
CAN	Andean Community
CARICOM	Caribbean Community
CARIFTA	Caribbean Free Trade Association
CEMAC	Central African Economic and Monetary Community
COMECON	Council for Mutual Economic Assistance
COMESA	Common Market for Eastern and Southern Africa
EAC	East African Community
ECCAS	Economic Community for Central African States
ECOWAS	Economic Community of Western African States
ECSC	European Coal and Steal Community
EEC	European Economic Community
EFTA	European Free Trade Association
EU	European Union
EURATOM	European Atomic Energy Community
GATT	General Agreements on Tariff and Trade
GDP	Gross Domestic Product
HDI	Human Development Index
LAFTA	Latin American Free Trade Association
LAIA	Latin American Integration Association
MERCOSUR	Southern Common Market
NAFTA	North American Free Trade Agreement
RTA	Regional Trade Agreements
SACU	Southern African Customs Union

SADC	Southern African Development Community
UNDP	United Nations Development Programme
U.S	United States
WAEMU	West African Economic and Monetary Union
WTO	World Trade Organization
WWII	World War II

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INTRODUCTION

''If one wishes to predict the welfare effects of a customs union it is necessary to predict the relative strengths of the forces causing trade creation and trade diversion'' (Lipsey, 1960: 498).

Achieving economic benefits and being in a strong position in the international arena have always been primary objectives for countries. In line with this purpose, many countries have taken part in several economic integration arrangements over the years. First examples of economic integration date back to the late 18th century but most international economic blocks have come into existence from mid-1950's and their numbers have dramatically increased especially in the last two decades. It is worthy of note that, in today's world nearly all countries participate in at least one regional trade agreement. In the period from 1948 to 1994, 124 regional trade agreements have been notified by General Agreements on Tariff and Trade (GATT) and after creation of World Trade Organization (WTO) in 1995, the successor of GATT, over 400 arrangements covering trade in goods and services are added. As of February 2016, 625 notifications of regional trade agreements had been received by the GATT/WTO and 419 of these were in force according to the RTA Database provided by the WTO. The number of regional trade agreements manifest that regionalism is growing at a very rapid rate. Faced with these extreme figures on regional trade agreements formation made reasonable to wonder why and how these agreements burgeoned; how they affect national welfare together with world welfare and how they influence multilateral liberalization process that each is a longstanding debate among scholars for years. Following these figures and historical background with the growing body of empirical evidences, significant attention should be paid for this extreme event of our era. Moreover, regionalism is still in progress and driving motives for countries to form new trade agreements should be discovered.

Having a look at existed theoretical background of regionalism, Orthodox approach advocated the idea that member countries could increase their welfare by forming customs unions and free trade agreements that enable them to specialize on production of goods and services in which they have comparative advantage. Indeed,

trade literature generally focused on potential welfare gains (losses) of member (non-member) countries from regional trade agreements through trade creation and trade diversion affects which could be addressed to Jacob Viner and his magnum opus "The Customs Union Issue" (1950). However, until Baier and Bergstrand (2004) the determinants that motivate countries to sign regional trade agreements had not been taken into account with a systematic empirical analysis. In the spirit of Lipsey's quote above, Baier and Bergstrand (2004) defined the geographic position, economic size and factor endowment characteristics of countries as key determinants of regional trade agreements by using general equilibrium model of world trade. This pioneering study has opened a seminal road by providing first systematic empirical evidences to determine economic factors that affect probability of having regional trade agreements between country pairs. In the light of Baier and Bergstrand's (2004) benchmark cases, empirical literature has broadened by new studies from different standpoints on the way to determine potential factors behind regional trade agreements.

On the other hand, structure of countries in regional blocks has changed by virtue of changes in world trading system. Economists have started to examine this quantum leap segmentally named as waves of regionalism. As an example, today's regionalism is called as a new wave in the literature which is the continuation of old regionalism. As distinct from traditional geographic factors, trade blocks have started to be created by more distant countries in this wave compared to the old wave. Additionally, trade blocks are not only Eurocentric now but also spread almost all around the world. In the old wave of regionalism, south-south or north-north integration examples were prevalent while in the new wave south-north arrangements have appeared like Asia-Pacific Economic Cooperation (APEC) that contained China, Indonesia, Philippines, Thailand and Malaysia or North American Free Trade Agreement (NAFTA) that created by Mexico, U.S. and Canada (Güran, 1999: 23; World Bank, 2000). It could be said that regional trade agreements generally occur between countries that have similar levels of economic development in previous examples. However country pairs have become more dissimilar in terms of their economic size in the new wave as APEC and NAFTA are good examples. It means that partners are not created by only developed countries but also developing

countries in our times as a result of liberalization and outward-looking trade policies of emerging countries.

In conclusion, rise of regionalism created a tremendous impression among scholars in order to find out the determinants of trade agreements. Besides first empirical analysis of Baier and Bergstrand (2004) on the economic determinants of trade agreements, changing configuration of regionalism has started to create its own determinants with the lapse of time. It is a simple fact that there is a notable increase in the number of developing country participation in trade blocks and this recalls a reasonable question in mind: What is the effect of development levels of countries on regional trade agreements formation? Even several papers have taken into account the influence of economic development on the probability of signing regional trade agreements, none of these try to look from a human development perspective which is a more holistic proxy of development. It is noteworthy to remember that development is a complex measure that indicates much more than income because there are fairly enough countries prove it by providing different human development performances even they have very similar level of gross domestic product (GDP). Moreover, developing countries have started to engage trade agreements with each other and with advanced economies as well even first economic integration examples are all dominated by developed countries before. So, which factors trigger these countries to form regional trade agreements? Are they similar with the advanced countries or different? These challenges recall another question: Do the determinants of regional trade agreements formation vary across countries?

To sum up, human development performance is a holistic measure of development that could have a potential impact on regional trade agreements formation and engaging in trade arrangements is not a linear decision for dyads. For the very reason, this study aims to find out the determinants of regional trade agreements, effects of human development performances of countries on the probability to form regional trade agreements and the impact of economic, geographic and developmental factors on different country groups. Following these ideas, two arguments are tested empirically: (1) What are the effects of human development performances of countries on the probability to form regional trade agreements? (2) Do the determinants of regional trade agreements formation vary

across countries at different human development levels? In order to address these issues, this study used panel data of 64 countries over the period between 1980 and 2005. By using descriptive statistics as well as panel regressions, the link between level of human development and regional trade agreements formation is analyzed. This study provides two main contributions to the literature. First, following arguments of Human Development Report (1990) that implies factors such as economic, social and demographic characteristics of countries in order to address actual level of development, human development performances of countries are considered as a potential determinant of regional trade agreements formation. Secondly, countries in the dataset are classified according to their levels of human development based on United Nations of Development (UNDP) classification in order to address how determinants of regional trade agreement formation vary across groups.

The remainder of this thesis is organized as follows. In Chapter 1, evolution of regionalism especially after World War II (WWII) and regional economic blocks that come into existence in this period are summarized briefly by regions. Related literature on the determinants of regional trade agreements are also presented in this chapter. In Chapter 2, data used in this study and descriptive analysis as well as econometric issues used in empirical study are explained in detail. Following these, Chapter 3 presents and explains results of the panel regressions for both pooled data and country groups. The final chapter concludes dissertation through main findings.

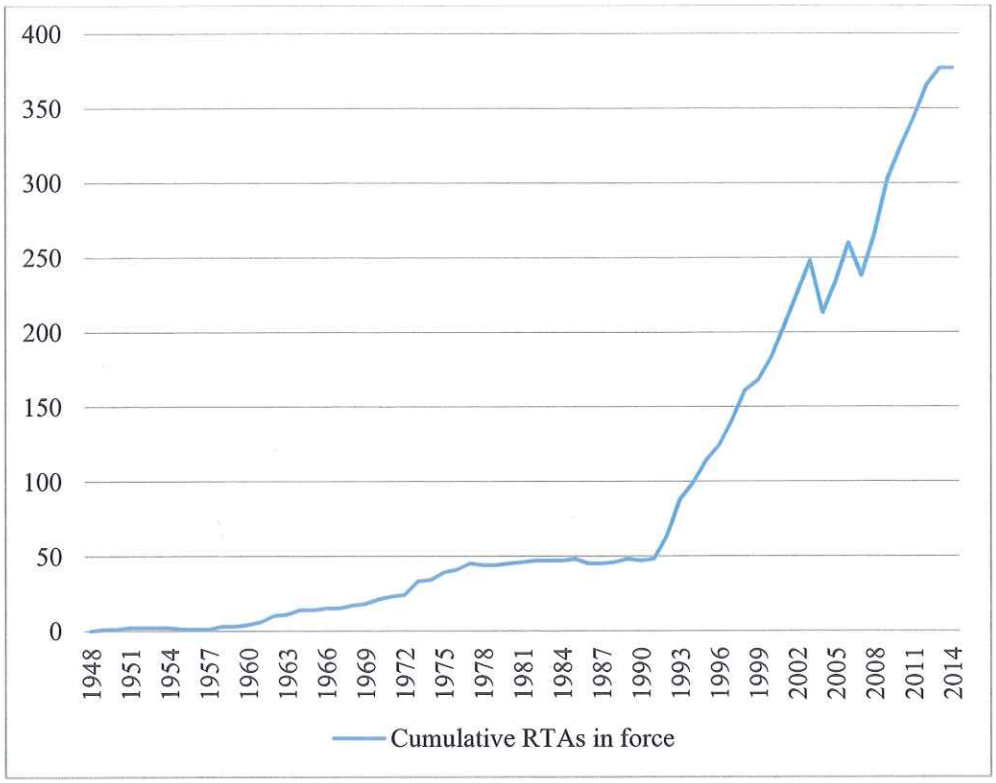
CHAPTER ONE
LITERATURE REVIEW

1.1 GENESIS AND GROWTH OF REGIONALISM

Regionalism is one of the most striking developments of last century that caused changes in the nature of world trading system through removing borders, making countries closer and affecting millions of people's life. In order to have a good grasp on this significant event of our era, it is crucial to give a coherent definition of what is region and regionalism at first. However, complex structure of regionalism with the political and economic dimensions makes some difficulties to define these concepts for those who want to have better understanding. This multidimensional structure leads scholars to give different descriptions in order to define these concepts. Region is generally defined as a group of countries that are geographically proximate or contiguous (Hurreell, 1995:353; Mansfield and Milner, 1997:3). On the other hand, region is accepted as a combination of countries that share economic, political and cultural links amongst many scholars. From an economic point of view, regionalism is defined as integrated market places (Bhagwati, 1993; Mansfield and Milner, 1999). In addition to these, regionalism is also stated as a combination of individual economies in order to generate larger economic communities (Robson, 1980:1).

One of the most remarkable changes in global economy has been the shift from protectionism to freer trade around the world. In this regard, genesis of regionalism may traced back to 18th century but the growth of regionalism dates back to post-WWII era that includes more open economies and integrated markets than they have never been before in order to improve and balance their economic situations. As shown in Figure 1, there were very few number of regional trade agreements (RTAs) before 1960's and foundation phases of these economic blocks depend on colonialism or imperialism effect. As an example, Council for Mutual Economic Assistance (COMECON) depends on Soviet imperialism that comprised the countries of the Eastern which was set up in 1949 by Soviet Socialist Republics, Bulgaria, Czechoslovakia, Poland, Hungary and Romania (Robson, 1980: 1).

Figure 1: Number of RTAs in the World by Date of Entry into Force, 1948-2014



Source: WTO RTA Database

Economic integration in the sense of Robson (1980) could be addressed to the creation of European Economic Community (EEC) under Treaty of Rome in 1956 that was set up by France, West Germany, Italy, Belgium, Netherlands and Luxemburg. The importance of EEC is not only come from being a core example of economic integration but together with European Coal and Steal Community (ECSC) and European Atomic Energy Community (EURATOM), EEC is one of the main pillars of the largest regional bloc in the world known as European Union (EU) which was established in 1992. EU became a role model for other RTAs that are looking for a deep economic integration because of its liberalization process through trade in services and investment as well as through building political integration. In the west side of Europe, it is noteworthy to mention that there is another important economic community namely, European Free Trade Association (EFTA). In 1960, EFTA included United Kingdom and smaller Western Countries such as Switzerland, Austria, Denmark, Norway, Sweden and Portugal. As a result of the EEC enlargement and Community's single market offer, the importance of EFTA and

number of participant countries have decreased over time. However it is still in force with the membership of Iceland, Liechtenstein, Norway and Switzerland. It is important to highlight that members of EU and EFTA are advanced countries which means that they are similar in economic size. In addition to this common trait, these arrangements spread to several European countries that are closer in distance as well. Geographically closer members that are also similar in terms of economic size were widespread characteristics in the old wave of regionalism where EU and EFTA are good examples.

After days of creation, European integration has encompassed almost the whole continent and growing impetus of economic integration process has started to leap from Europe to Latin America, Asia as well as Africa. In a nutshell, Eurocentric based regional trade blocks have spread around the world. In the Australasia part, The Australia–New Zealand Closer Economic Relations Trade Agreement (ANZCERTA) was signed bilaterally and entered into force in 1983[1]. In the North side, in order to liberalize trade and have a mutual advantage in terms of economic growth and prosperity, Canada signed Canada-U.S. Free Trade Agreement with U.S. in 1988 which will be replaced with NAFTA after Mexico supervened in 1994[2]. NAFTA becomes one of the world's largest free zone and aims to sustain economic integration in a wider area. It should be mentioned that NAFTA is a crucial example of the new wave of regionalism because it was constructed by partner countries with different economic sizes. As stated in Bhagwati and Panagariya (1996) and Ray (1998), most of RTAs are created between similar countries. However, NAFTA is one of the leading examples that has taken place among low income (Mexico) and high income countries (U.S. and Canada).

Besides advanced economies, quite a few number of international economic integration examples can be found in developing world as well. Africa stands out among others because of being host of numerous examples. The West African Economic and Monetary Union (WAEMU) and the Central African Economic and Monetary Community (CEMAC) are customs unions and also monetary unions with

[1] http://dfat.gov.au/trade/agreements/anzcerta/Pages/australia-new-zealand-closer-economic-relations-trade-agreement.aspx, (10.06.2015).
[2] http://www.international.gc.ca/trade-agreements-accords-commerciaux/agr-acc/us-eu.aspx?lang=eng , (10.06.2015)

a common currency (Yang and Gupta, 2005: 10). Other major customs unions are the Southern African Customs Union (SACU), and The East African Community (EAC). The Economic Community of Western African States (ECOWAS) is one of the largest African economic blocs[3]. ECOWAS birthed in 1975 under Treaty of Lagos and revisited for more powerful and broader scope in 1993[4]. Economic Community for Central African States (ECCAS), the Common Market for Eastern and Southern Africa (COMESA), and the Southern African Development Community (SADC) are other regional arrangements that have important economic impact within this area.

In developing world, another region worth mentioning is Latin America. Stimulated countries by 1980s crisis made structural reforms and created more open economies to the rest of the world. Central American Common Market (CACM) was set up in 1960 by Guatemala, Honduras, El Salvador, Nicaragua and Costa Rica in an attempt to generate a common market and revived in 1993 under Guatemala Protocol to achieve full integration goal. Second main regional block, Latin American Integration Association (LAIA), was set up under Treaty of Montevideo in 1980 which was replaced with Latin American Free Trade Association (LAFTA) two decades later[5]. LAIA was established to change the structure of LAFTA in order to achieve trade liberalization goal. Third initiative Southern Common Market (MERCOSUR) was generated by Argentina, Brazil, Paraguay and Uruguay to create a common market under the Treaty of Asunción in 1991. MERCOSUR members are constructed by both developed and developing countries. However, differently from LAFTA, MERCOSUR achieved economic liberalization goal (Güran, 1995: 228). Andean Community (CAN) which was known as Andean Pact (AP) until 1996 was signed by Bolivia, Colombia, Ecuador and Peru in 1969 as a new alternative. In 2004, the two large blocks of South America, MERCOSUR and CAN, negotiated with each other to go a step further and create a free trade zone in this region.

Caribbean Free Trade Association (CARIFTA) was set up in 1965 to create a free trade area between member countries. In 1973, Caribbean Leaders agreed to

[3] Member countries of ECOWAS are Benin, Burkina Faso, Cape Verde, Cote d' Ivoire, The Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Sierra Leone, Senegal and Togo.

[4] http://www.ecowas.int/about-ecowas/history/, (12.06.2015).

[5] LAFTA was set up by Argentina, Brazil, Chile, Uruguay, Mexico, Paraguay and Peru. Colombia and Ecuador joined in 1961. Venezuela and Bolivia joined in 1966 and 1967 respectively.

transform CARIFTA into a common market named as Caribbean Community (CARICOM) in order to deepen integration process and increase trade in this region[6]. Following that, trade among members was liberalized and non-tariff barriers were eliminated immediately. Introduction of a common external tariff for non-member countries put customs union into effect.

One of the highest economic growth rates of all over the world has shown by Asia and its importance in the world economy still continues to increase. The land of diversity in terms of economic prosperity, culture and population is home to one of the most successful regional blocs of developing world called Association of Southeast Asian Nations (ASEAN) which was established in 1967 by Indonesia, Malaysia, Philippines, Singapore and Thailand. Today ASEAN has 10 member states with the participation of Darussalam, Viet Nam, Lao PDR, Myanmar and Cambodia[7]. On the road to reach higher level of trade liberalization, ASEAN leaders decided to establish a free trade area as a next step. ASEAN Free Trade Area (AFTA) was set up by ASEAN members in 1992. As a wider economic integration initiative in this region, Asia-Pacific Economic Cooperation (APEC) should be mentioned as well. Twelve Asia-Pacific economies established APEC in 1989 in order to provide sustainable growth and economic prosperity in the Asia-Pacific region for today's 21 Pacific Rim countries of APEC forum[8]. The intention is to achieve free trade and investment in this region in two steps; by 2010 for industrialized countries and by 2020 for developing countries (Cuyvers and Tummers, 2007: 12).

Growth and genesis of regionalism are summarized briefly through several leading examples that enroll in different continents around the world in order to provide an insight about the background and importance of regionalism. In the next step, related literature on economic integration theory and empirical studies aimed to find out potential determinants of RTAs will be examined comprehensively.

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[6] http://www.caricom.org/jsp/community/history.jsp?menu=community, (17.06.2015).

[7] http://www.asean.org/asean/about-asean/history, (17.06.2015).

[8] 12 member states of APEC are Australia, Brunei Darussalam, Canada, Indonesia, Japan, Korea, Malaysia, New Zealand, the Philippines, Singapore, Thailand and the United States. China, Hong Kong, China and Chinese Taipei, Mexico, Papua New Guinea, Chile, Peru, Russia and Viet Nam joined to APEC and taking the full membership to 21.

1.2 EMPIRICAL LITERATURE

Regionalism has become one of the much-debated topics for economists as well as politicists. Particularly, studies that subjected to welfare effects of regionalism occupied the international economic integration literature for a long time. Viner's (1950) corner stone study "The Customs Union Issue" is one of the leading publications about welfare effects of RTAs. One of the main contributions of Viner's pioneering study is providing the trade creation and trade diversion concepts to the theory. Viner pointed out that trade creation effect can occur if RTA members start to import a product from more efficient producers of RTA members because of lower costs rather than domestic producers. Trade diversion, on the other hand, occurs if members start to import more from higher cost member countries rather than lower cost countries in the rest of the world as a result of RTA formation. Following these developments, it is asserted that welfare effect of a customs union depends which effect dominates the other. In other words, RTAs could have beneficial or harmful effects on economic welfare. According to Viner, trade creation effect refers welfare enhancing and trade diversion effect refers welfare reducing impact of trade agreements.

Viner's study has led scholars to analyze welfare increasing (decreasing) effects of RTAs for member (non-member) countries through trade creation and trade diversion effects of trade agreements and it has become one of the much-discussed topics among scholars in order to explain if there is any specific RTA that is preferred by countries. Lipsey (1957: 40-46) and Summers (1991: 295-301) supported the idea that RTAs are more likely to create trade however, even an RTA between dyads is trade diverting there is still a chance to increase welfare of member countries. The logic behind this assertion is even member countries start to import from higher cost producers because of a customs union formation, new prices without tariffs could be less than non-member lower cost producer's prices with tariff. Actually trade is diverted from lower cost producers to higher cost producers but this has a welfare enhancing effect on member countries under these circumstances. Hence, they criticized Viner's study from a different perspective by manifesting trade diversion is not bad in every situation. Krugman (1989), Summers

(1991) and Frankel et al. (1995) pointed out that RTAs are most likely to enhance welfare of member countries if it is created by natural trading partners rather than unnatural partners because of high initial volume of trade and low transportation costs between natural partners. This idea gave rise to an argument that if natural trading partners are also geographically contagious which means they share a common border, RTAs are more likely to create welfare gains for the partner countries.

On the other hand, Panagariya (1995) and Bhagwati and Panagariya (1996) undermine the studies that decided welfare gains (losses) of RTAs through static effects and natural partner hypothesis. They asserted that higher initial volume of trade between countries could be harmful for the individual members as a result of tariff revenue redistribution between members even the effect of trade creation exceeds trade diversion or there is no trade diversion. Bhagwati and Panagariya (1996) criticized natural trading partner hypothesis and explained that RTAs are beneficial for countries even if formed with a distant partner rather than a proximate one.

Ever since Viner (1950), much attention has been paid by scholars to understand whether or not RTAs are beneficial or harmful for members as well as for the rest of the world. While welfare effect of RTAs aroused interest that much, it is plausible to wonder what determines the RTA formation which has been the subject of curiosity among scholars in recent years. As a starting point, it is fruitful to have a good grasp about existed and potential factors in previous studies. Baier and Bergstrand (2004) provided first systematic empirical analysis of economic factors of RTA formation and the determinants that influence the probability of signing an RTA between country pairs. They constructed their model from Krugman (1991) and Frankel et al. (1995, 1996 & 1998) and provided the economic geography, intra-industry and inter-industry characteristics of country pairs as potential determinants of RTA formation. Baier and Bergstrand (2004: 41-50) supports that because transportation costs are lower and trade volume is higher between closer countries, if country pairs are closer in distance then the probability of signing an RTA between partners is high which addressed in previous studies through implying natural trading partners. In addition to this argument, geographic distantness from the rest of the

world has also significant effect on RTA formation. The basic idea behind this factor is that because of higher intercontinental transportation costs and less trade volume among remote countries, continental trading partners are faced with less trade diversion which increases the probability to sign RTAs between them. They pointed out that RTA engagement is also tied to economic size of countries. Both larger and similar economies in terms of their GDPs increase the net welfare gain from RTA formation and also increase the probability of RTA engagement between dyads. Furthermore, besides geographic and economic factors, capital/labor ratios of country pairs matter on RTA formation and greater difference in relative factor endowments increases the likelihood of signing RTAs.

Baier and Bergstrand (2004) encouraged scholars to investigate this topic deeply and gave rise to various researches on the determinants of trade agreements. Besides this preliminary study and traditional determinants, several papers have paid attention on this subject to carry a step further and discover other determinants that affect RTA formation. Increasing importance and number of trade agreements in services sector in the last decade gave rise to the studies that consider services sector and comparative analysis of services and goods sectors on RTA formation. The dataset of Baier and Bergstrand (2004) contained less number of trade agreements on services which causes limited knowledge in the results of their analyses for service sector. However, it is crucial to analyze sectors individually because of possible idiosyncratic motivators. Cole and Guillin's (2013: 17-18) study contributed to the literature through providing comparison between economic, geographic and political determinants of services and goods agreements by using probit model. Their results showed that traditional determinants are still significant for both agreements on goods and services; however, geographic determinants have little impact on services agreements. Political stability showed significant and positive results especially for services agreements. This study also controlled the effects of determinants on country groups that classified by income as developed and developing. Regression results support that political stability, economic size and income level of countries are significant factors for both groups. However, neither Baier and Bergstrand (2004) nor Cole and Guillin (2013) took into consideration regulatory convergence as a determinant for entering trade agreements which is actually one of the potential

indicator behind services trade negotiations. Recent study of Sauve and Shingal (2014) that considers agreements notified under Article V of the GATS and Shingal and Egger (2014) that considers services agreements signed by Asian economies contributed to the literature through providing the effect of regulation in services trade. Their results supported that larger economies that are also similar in relative factor endowments and trade balances with divergent regulatory framework are more willing to negotiate services agreements. In addition to these, countries with lower levels of restriction in their regulatory framework, geographically distant and that already trade with each other are also more tend to negotiate service agreements.

Since regionalism goes back a long way, every period of regionalism should be criticized in its own era to have an objective analysis about its progress. In line with this idea, even the number and time span of waves varied by scholars, several studies occupied literature under the idea that regionalism took shape in waves (Baldwin, 1997; Ethier, 1998; Burfisher et al., 2003). Mansfield and Milner (1999: 595-602) asserted that there have been four waves of regionalism: First wave occurred in late 19th century which was mostly Eurocentric and last two waves have occurred since post-WWII era. Bhagwati (1993: 28-31) announced two waves as first and second regionalism that has occurred since WWII. Following these developments, Gonzales (2012: 9) identified three waves of regionalism: First wave is occurred in the period between 1960 and 1985, second wave is identified in 1985-1995 and the third as well as the last wave is occurred between 1995 and 2006. Even periods of waves vary from study to study, the idea that regionalism has occurred in waves remains the same among scholars. Numerous studies have highlighted that regionalism evolves in time. Under the idea that structure, causes and effects of regionalism could change over time, changing nature of regionalism should be considered when examining its determinants as well. In line with this objective, Gonzales (2012) pointed out that new agreements contain less similar country pairs in terms of economic size which are also more distant than before through comparing three waves of regionalism. This study also announced that trade between new partners is more vertically specialized if you compare those that did not have an agreement. Then, vertical specialization analyzed implicitly through three distinct channels as a new determinant in this study and results showed that vertical

specialization is significant factor that motivate countries to have an agreement. This study is one of the extreme manifestations of regionalism's evolution through providing the changing characteristics of country pairs that have a joint RTA. Changing shape of regionalism encourages us to find further determinants of RTAs besides traditional motivators.

Baldwin (1993: 16-18) asserts that existing economic blocks trigger governments to be a member of one these blocks because these arrangements have possible harmful effects to non-member countries. In order to avoid the harmful effects of economic blocks and catch new opportunities through membership, third countries tend to join regional integration process which is named as domino theory of regionalism. Cost to the non-member countries increases directly proportionate to the increasing number of members in the existing regional blocks as a result of increasing number of markets that non-members have disadvantage. So, this is the extreme manifestation that regionalism is a continuous action. This theory came into existence as a potential determinant and several papers have shown the link between interdepence (domino effect) and RTA formation (Chen and Joshi, 2010; Gonzales, 2012). Besides traditional determinants, Egger and Larch (2008) added interdepence effect to their analyses. In other words, they considered third country effect as a new determinant of RTA formation in order to analyze whether RTA membership has an impact on new RTAs or existing ones. Empirical results show that because non-member countries avoid welfare loss risk through trade diversion effect of RTA formation between member countries, this situation creates an incentive to join an existing RTA or create a new one. It is also found that interdependence and geographic distance are negatively correlated with each other. Baldwin and Jaimovich (2010) explained the effect of interdepence in the spirit of Baldwin's domino effect theory, in other words contagious effect, through using contagious index that was generated by authors as a main explanatory variable with broader sample of RTAs. Dataset of Baldwin (1993) covers customs unions where dataset of Baldwin and Jaimovich (2010) covers both customs unions and free trade agreements which is an important contribution by providing more observations. As expected, results proved that trade agreements are contagious. Baier, Bergstrand and Mariutto (2014) discussed this issue in utter detail and provided deeper understanding about

this factor and its sources by separating interdepence effect in two channels named as own-FTA effect and cross-FTA effect. The own-FTA is the effect of member's already existed trade agreements with other countries where cross-FTA is the effect of other existed trade agreements in the rest of the world. By using general equilibrium model, they provided that both sources of interdependence are significant and the effect of own-FTA is larger than the cross-FTA effect on the probability of signing trade agreements.

Comparing with the political factors, international integration literature has occupied primarily on economic determinants of RTAs although both of them have considerably important impact. However, studies that are primarily focused on political factors or political and economic factors' collaboration in order to explain motivators behind RTAs have also received an attention in the literature. The role of government in RTA formation is crucial because of the reason that governments can play a critical role on RTA negotiations. In this sense, political and economic factors that encourage politically minded governments to form new trade agreements are one of the centers of interest on the determinants of RTA formation. The pioneering study of Grossman and Helpman (1995: 687) supports that if the new trade agreements are considerably welfare increasing for the average voter and if interest groups that are negatively affected from such participation fail to prevent the accord, governments tend to form a new trade agreement. Governments' willingness to have such an agreement also increases if it generates profit gains for the exporters.

The relationship between regionalism and geopolitical stability has been a crucial source of debate in the literature. Because of the possibility of affecting world peace through foreign trade and trade agreements, scholars have made various efforts to provide results for this longstanding debate. From a liberal point of view, higher trade openness has a detractive effect on military conflicts. In this sense, it is argued that RTAs have an impact on the probability of war through increasing opportunity cost of war. In addition to this, RTAs provide better relations between countries by RTA negotiations through drawing partners together where globalization decreases the opportunity cost of war because allows for distant trade partnership (Martin et al. 2010: 30).

Martin et al. (2012: 30-31) provided a good example to understand how political and economic factors could be in the same way and affect the geography of RTAs. Their study showed that country pairs that have a higher frequency of wars are more willing to form RTAs. Likelihood of signing RTAs is not high for those that have a recent conflicts but for long-run histories. This study also pointed out that global trade openness causes higher probability of war because of decreasing dependence on trade with any given country. Mansfield and Pevehouse (2000: 801-803) and Martin et al. (2008: 894) asserted that trade flows have a little impact on conflict if countries do not belong to the same RTA. On the other hand, RTA membership remarkably reduces the probability of conflict. In addition to these, likelihood of conflict between RTA partners decreases as trade flows between them increases which mean that amount of trade flows play an important role on the probability of conflict. Under the idea that different level of RTAs could have different triggering factors, the effect of military issues on depth of RTAs is analyzed in order to figure out the correlation between them. It can be said that countries that more subject to conflicts and have higher trade openness are more prone to generate deeper RTAs such as common markets and customs unions (Vicard, 2012).

Unprecedented increase in the number of RTAs has occurred simultaneously with the increase of multilateral openness that spurred by GATT/WTO. In order to obtain benefit from multilateral trade regime, Mansfield and Reinhardt (2003) demonstrated that RTAs could be a contributor. Their study crystallized that how GATT/WTO membership bolster its members on RTA formation where countries aim to increase their bargaining power in an international arena. In addition to multilateral regime type of GATT/WTO, this study highlighted the role of domestic regime type and results manifested that democracies are more tend to form RTAs than autocracies. Similar results are reported by the study of Mansfield, Milner and Rosendorff (2002) through comparison between democracies and mixed country pairs that are composed by democracy and autocracy. Their results demonstrated that democracy lowers trade barriers more compared to an autocracy when negotiating for mutually acceptable privileges. In other saying, democratic countries are more likely to form RTAs in comparison to autocracies. Wu (2004: 20) confirmed the positive effect of democratic governance on RTA formation. This study provided

results for two different time periods and pointed out that despite changing waves of regionalism, influence of democracy on RTA formation is significant and has a positive impact in each wave.

From a different perspective, Vicard (2011: 188-190) investigated the determinants of successful RTAs. In this study, factors that make RTAs effective which are measured by rise in bilateral trade are estimated. Results manifested that traditional determinants are matter for RTA effectiveness as well. Economically larger and similar countries tend to gain more benefit from an RTA formation compared to economically smaller and less similar dyads. As expected, proximity between countries has also significant influence on having a successful RTA. It means that closer countries tend to benefit more from RTA formation through trade creation effect. Besides traditional determinants, sharing a common language and colonial history were found as positive factors. The effect of sharing a colonial history is less but both determinants increase the effectiveness of RTAs. It is important to mention that the effects of North/North, South/South and North/South agreements were found similar. Alternatively, Holmes (2005) finds out the factors behind effective RTAs in two steps. List of effective RTAs is constructed as a first step of the analysis by using gravity model where RTA dummy is used as an independent variable to explain total value of trade. RTAs that have positive and significant effect on trade flows between members indicated as effective. It should be noted that customs unions were more tend to be effective among other types of agreements. In the next step of the analysis, effective RTAs are used as a dependent variable in order to examine triggering factors behind their formation by using logit model. In other words, this study investigated the determinants of effective RTAs that increase trade flows between member countries. This study estimated the effect of mercantile interest which refers the desire for access to export markets. Mercantile interest was found as a strongly significant determinant that has an important impact on the probability of RTA formation. In addition to these, it is revealed that being in the same continent, regardless of their importance to each other as trading partners, have a significantly positive effect on RTA formation where Europe is a master sample. This evidence addressed to the Baldwin's domino theory under the idea that

leading arrangements that are few in number but important examples trigger other countries in order to access these expanding export markets.

Consequently, unprecedented increase of regionalism since WWII and especially after 1990s has a great impact on international landscape as it is briefly summarized with above-mentioned studies in the literature. One might as well say, millions of people's lives have been affected through implication of regionalism on economic and political situations of countries. Not surprisingly, it is plausible to look for the motives behind these agreements in order to understand what drives countries to participate in these arrangements. Classical economic integration theory that considers welfare effects of RTAs built a solid ground in order to analyze RTA formation and its determinants. Following these developments, Baier and Bergstrand (2004) provided economic determinants of trade agreements and has opened a new path for further studies. Besides traditional economic determinants, several new economic determinants are provided for deeper and comprehensive understanding on this subject. Many recent studies are focused on specific sectors, regions or economic blocs. Different waves of regionalism and its changing nature encouraged scholars to look for the new motives in case the determinants behind RTAs have evolved in time. Furthermore, because it is at least as much important as economic factors, many scholars contributed to literature through providing new determinants from a political perspective. However, because of the multidimensional framework of regionalism, motivations behind RTA formation are still in progress and should be discovered. This dissertation aims to help bridge through providing knowledge in this respect.

CHAPTER TWO
METHODOLOGY AND DATA

2.1 METHODOLOGY

The econometric framework of this paper is based on qualitative choice model of McFadden (1975, 1976) that allows us to analyze the determinants of RTA formation as well as the effects of determinants on the probability of having an RTA between country pairs. In this model, the best alternative which provides higher utility among all other alternatives in the set will be chosen by dyads. In other words, country pairs form an RTA if both sides expect a utility gain from this arrangement. In this study, utility is indicated as a net gain from RTA participation. Within this framework, utility is symbolized as $y_{ijt}*$ that indicates utility gain from RTA formation between country i and country j in year t and modeled as a latent variable which is unobservable. The baseline model is as follows:

$$y_{ijt}* = \beta_0 + x_{ijt}\beta + e_{ijt}$$

where, x_{ijt} is the vector of explanatory variables (i.e., economic, geographic and developmental characteristics of country pairs), β is the vector of parameters and e_{ijt} is the error term that is normally distributed and independent from x_{ijt}. Under the idea that both countries in the pair must benefit from the RTA formation in order to sign it, $y_{ijt}*$ is outlined as follows where ΔU_{it} and ΔU_{Jt} represents the change in utility for country i and country j respectively in year t;

$$y_{ijt}* = \min(\Delta U_{it}, \Delta U_{Jt})$$

For the reason that utility ($y_{ijt}*$) is an unobservable variable, an indicator variable must be attained. In this study, RTA_{ijt} is attained as an indicator variable which takes value 1 if country pairs have an RTA (positive outcome) and takes the value 0 (negative outcome) otherwise.

$$RTA_{ijt} = \begin{cases} 1 \; if \; y_{ijt} * > 0 \\ 0 \; if \; y_{ijt} * \leq 0 \end{cases}$$

Response probability of RTA formation P is given by

$$\begin{cases} P(RTA_{ijt} = 1) = P(y_{ijt} * > 0) = G(\beta_0 + \beta x_{ijt}) \\ P(RTA_{ijt} = 0) = P(y_{ijt} * \leq 0) = G(\beta_0 + \beta x_{ijt}) \end{cases}$$

where G is the standard normal cumulative distribution function.

2.2 DATA AND DESCRIPTIVE ANALYSIS

This section focuses on explaining the characteristics of the dataset used in the empirical analyses and presenting some basic descriptive statistics in order to provide preliminary information about the determinants of RTA formation. For this purpose, this dissertation employs an extensive panel dataset, created as six 5-year period intervals from 1980 until 2005. In this study, 2016 country pairs are constructed by using 64 nations according to human development performances as well as data availability[9]. The list of all variables used in empirical analysis is outlined below in Table 1 with the definitions as well as data sources.

As shown in Table 1, RTA_{ijt} is a dependent variable and indicates whether or not each county pair in the dataset has an agreement at time t. The binary variable RTA_{ijt} takes the value 1 for a dyad (ij) if there is an agreement at time t and 0 otherwise. RTA_{ijt} variable used in this dissertation considers five levels of trade agreements according to the degree of integration: Preferential Trade Agreements, Free Trade Agreements, Customs Unions, Common Markets and Economic Unions. One-way preferential trade agreements are excluded from the dataset due to the failure to comply with the content of research objectives of this study. In order to have a comprehensive data coverage as well as in conformity with existing literature and research objectives, two-way preferential trade agreements are included in the

[9] 64 countries match other 63 countries and created $(64 \times 63)/2 = 2016$ country pairs.

dataset. Additionally, RTA_{ijt} variable is constructed by using NSF-Kellogg Institute Economic Integration Agreements Database.

Table 1: The List of Variables Used in Empirical Analysis

Dependent Variable	**Definition**	**Source**
RTA_{ijt}	$\begin{cases} 1 \; if \; i \; and \; j \; have \; RTA \\ 0 \; otherwise \end{cases}$	NSF-Kellogg Institute EIA Database
Independent Variable	**Definition**	**Source**
$DGDP_{ijt}$	$\lvert logGDP_{it} - logGDP_{jt} \rvert$	Maddison Project Database
$SGDP_{ijt}$	$\lvert logGDP_{it} + logGDP_{jt} \rvert$	Maddison Project Database
$DIST_{ijt}$	$\lvert logDIST_{it} - logDIST_{jt} \rvert$	CEPII Database
$COMLANG_{ijt}$	$\begin{cases} 1 \; if \; i \; and \; j \; share \; common \; official \; language \\ 0 \; otherwise \end{cases}$	CEPII Database
$DHDI_{ijt}$	$\lvert HDI_{it} - HDI_{jt} \rvert$	UNDP
$DCO2_{ijt}$	$\lvert logCO2_{it} - logCO2_{jt} \rvert$	World Bank

In related literature, content of RTA_{ijt} variable could vary from study to study. For example, many studies consider services agreements notified WTO under Article V of the GATS (Sauve and Shingal, 2014; Shingal and Egger, 2014; Cole and Guillin, 2013; Karam and Zaki, 2013). On the other hand, most of the studies consider only free trade agreements and customs unions (Baier and Bergstrand, 2004; Baldwin and Jaimovich, 2010; Baier, Bergstrand and Mariutto, 2011; Cole and Guillin, 2013). However, increasing interest on preferential trade agreements has led scholars to include these trade agreements in their datasets under the idea that preferential trade agreements are likely to evolve and could be accepted as a first stage of free trade agreements (Mansfield and Pavehouse, 2000; Holmes, 2005; Mansfield and Reinhardt, 2003, Wu, 2004; Vicard, 2012). As seen from the above examples, content of RTA_{ijt} varies by studies through including different levels of trade agreements.

For any dyad (ij), the set of explanatory variable vector covers economic, geographic and developmental characteristics of country pairs. Two economic determinants that indicate gross domestic product (GDP) difference between dyads

and GDP sum of country pairs have been widely used in literature because of potential explanatory power on RTA formation. $DGDP_{ijt}$ represents GDP difference between country i and country j at time t and it is calculated by taking the absolute value of the difference between the logs of average real GDPs of dyads. $SGDP_{ijt}$ represents GDP sum between country i and country j at time t and it is calculated by taking the sum of the logs of average real GDPs of dyads. In order to calculate these two economic variables, real GDP data are taken from Maddison Project Database.

Bilateral distance ($DIST_{ijt}$) and common language ($COMLANG_{ijt}$) are the geographic variables in the explanatory variable vector. Bilateral distance is used as a proxy for transportation costs and measures the distance between dyads through calculation of latitudes and longitudes of the most important cities in these countries by great circle formula (Mayer and Zignago, 2006: 4). $DIST_{ijt}$ represents the logs of bilateral distance between country i and country j. $COMLANG_{ijt}$ is a dummy variable that indicates whether the partners share a common language or not. The binary variable $COMLANG_{ijt}$ takes value 1 for a dyad (ij) if they have a common language and 0 otherwise. Bilateral distance between countries and common language data are taken from CEPII Gravity Dataset.

Countries have distinctive environmental regulations to trade with each other and these regulations can act as barriers for trade partners. However, governments enforce these regulations in order to protect their nature and achieve environmental standards which are necessary goals for individual countries and world as a whole. Under the idea that governments consider environmental issues when forming a trade agreement with the partner countries, environmental quality of the dyads could have a possible impact on the formation of trade agreements. Accordingly, per capita CO2 emissions are considered as a proxy for environmental quality of countries. $DCO2_{ijt}$ variable is considered as a developmental indicator and calculated by taking the absolute value of the difference between the logs of CO2 emissions (metric tons per capita) of dyads at time t. Per capita CO2 emissions data are taken from World Bank Database.

Another developmental indicator in the dataset is $DHDI_{ijt}$ which represents the difference in human development performances of country pairs. This variable deserves more detailed explanation because it directly addresses the link between

level of development and RTA formation that is the core issue of this dissertation. Under the idea that people and their capabilities are as important as economic growth for assessing level of development, human development index (HDI) used as a proxy for development that published by UNDP. Measurement of HDI depends on three basic dimensions: a long and healthy life, access to knowledge and a decent standard of living. In order to address a long and healthy life, life expectancy at birth data is used. Furthermore, access to knowledge assessed by mean years of schooling for adults aged 25 years and expected years of schooling for children of school entering age. Lastly, per capita gross national income is used to measure standard of living dimension which is the third and last tool of HDI. In order to obtain HDI of countries, geometric mean of normalized indices for each of the three dimensions are calculated and measured on a scale ranging from 0 to 1. Aspirational goal is designated as 1 and higher numbers that are close to 1 represents higher human development (Human Development Report, 2014). Within this context, $DHDI_{ijt}$ indicator is created through taking the absolute value of the difference between dyads' level of human development at time t. HDI data are taken from Human Development Report 2009 which is published by UNDP[10].

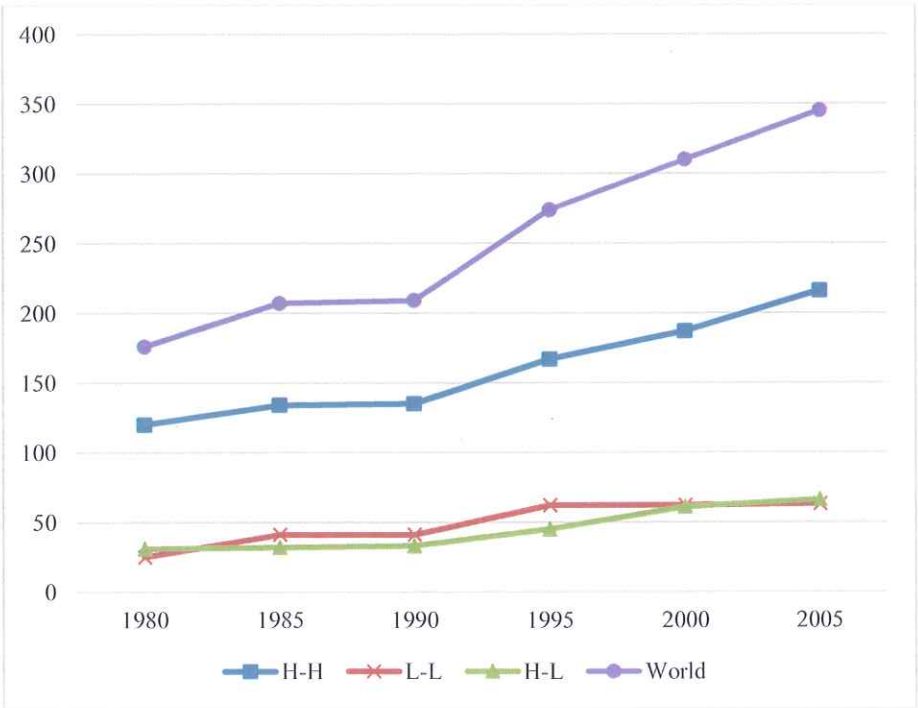
Before presenting methodological issues and results of panel estimations, it is essential to be aware of the basic features of raw data at first. In parallel with this purpose, descriptive statistics of some key variables will be introduced in order to have preliminary information about the link between RTA formation and its potential determinants. Before presenting descriptive statistics, classification of country pairs according to their HDI level should be explained. Normally, countries are separated into four groups based on their HDI: very high human development, high human development, medium human development and low human development countries by UNDP. This dissertation reduces the number of groups from four to two for simplicity when comparing the results of empirical analysis and interpreting graphs.[11] In line with this idea, very high and high human development countries are named as high where medium and low human development countries are named as low in the rest of the dissertation. Based on this classification, country group created

[10] Country's HDI value could vary from year to year. In this regard, because of the data availability, Human Development Report 2009 is considered for calculations.
[11] The list of countries and their classifications are presented in Appendix 1.

by high HDI dyads is named as H-H where country group created by low HDI dyads is named as L-L. If country group is created by dyads that one country belongs to high HDI category and one country belongs to low HDI category, it is named as H-L. Lastly, pooled data which includes all country pairs in the dataset is named as world in the rest of the dissertation and graphs as well.

Figure 2 shows the total number of RTAs according to country groups that are described above. As shown in figure below, total number of RTAs increases significantly in the world for the period 1980-2005. However, number of RTAs between L-L and number of RTAs between H-L dyads approximate each other at lower levels where number of RTAs between H-H dramatically outnumbers the other two groups. In the light of numeric data, number of RTAs between H-H is more than three times the number of RTAs between L-L and H-L which is quite important information because of giving insight into the tendencies of country groups. As a consequence, the figure presents that RTA formation is dominated by joint agreements of high human development countries.

Figure 2: Number of RTAs across Country Groups, 1980-2005[12]



[12] All figures in this chapter are the author's own calculations.

After presenting the number of RTAs for all country groups (H-H, L-L, H-L and world), key determinants of RTA formation are examined in the following figures. First of all, each country group is classified in itself according to whether the dyads have an RTA at time t or not which provides us an opportunity to compare the characteristics of RTA partners versus non-RTA partners.

In this regard, Figure 3 maps the difference between the logs of average real GDPs of RTA partners versus non-RTA partners for all country groups. It should be highlighted that average GDP difference between RTA partners of the world is nearly 1.4 times less than non-RTA partners in the period between 1980 and 2005. Additionally, GDP differences of RTA partners are 2.6, 2.2 and 1.8 times less than non-RTA partners for L-L, H-L and H-H dyads respectively. These numbers demonstrates that even the magnitude of similarity differs from one country group to another; RTA partners are similar in GDPs compared to the non-RTA dyads. To sum up, Figure 3 manifests that RTA partners tend to be similar in economic size for all country groups in the dataset.

Figure 3: Characteristics of RTA Dyads by GDP Difference, 1980-2005

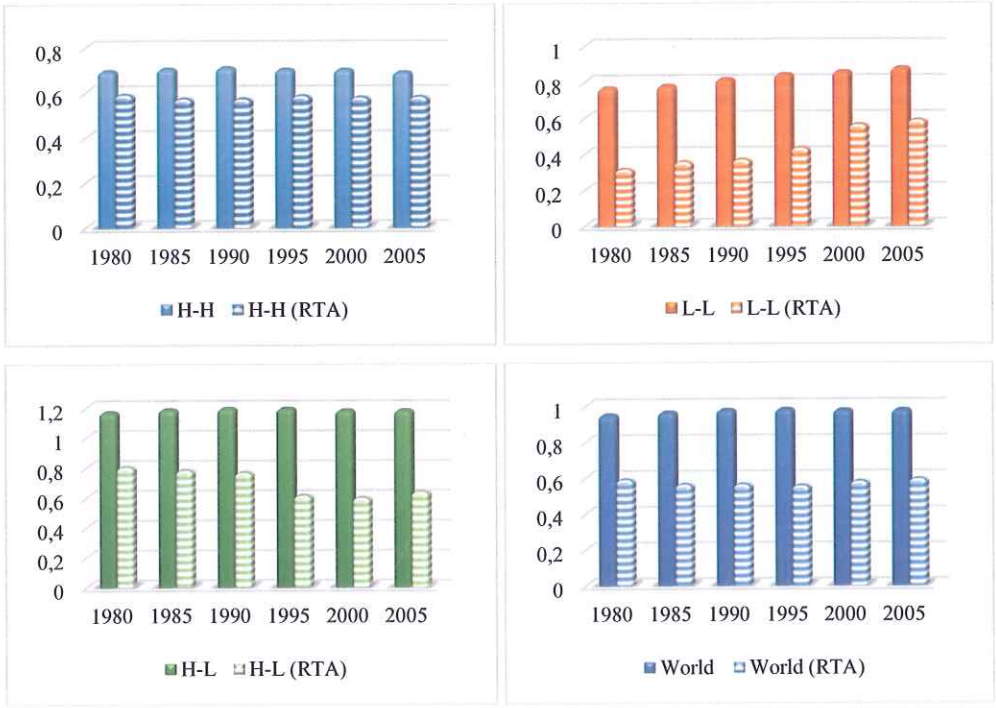
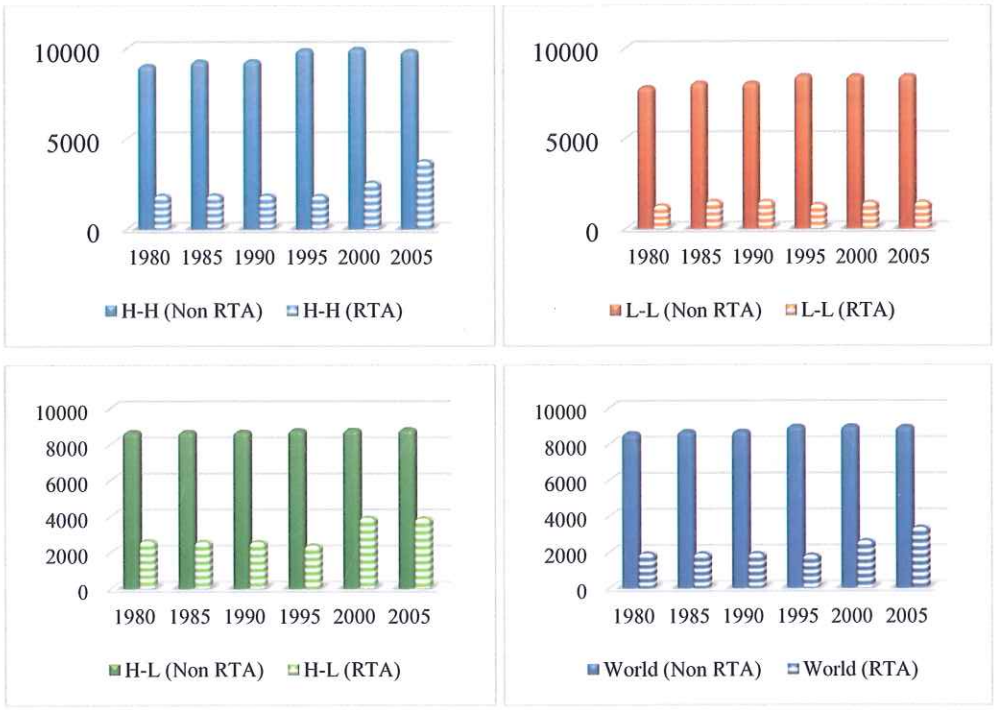


Figure 4 below shows the characteristics of RTA partners and non-RTA dyads according to distance for all country groups in the period 1980-2005. This figure demonstrates that distance is negatively related to RTA formation in all periods and for all country groups. It is revealed from the figure that average distance between dyads that have a joint RTA is considerably less than those who have not within this time period. For instance, period average distance between non-RTA dyads of H-H is 9557.4 km where it is only 2307.8 km for RTA partners which mean that partners are 4.1 times closer in distance than non-RTA dyads with each other in this time period. Additionally, period average distances between non-RTA partners are 8215.9 km and 8732.6 km where they are only 1429.9 km and 2997.1 km for RTA dyads of L-L and H-L respectively within this time period. In other words, partners of L-L and H-L are 5.7 and 2.9 times closer in distance respectively with each other than non-partners. Meanwhile, world average is 8803.7 km for non-RTA dyads where it is only 2263.3 km for RTA partners. As seen in Figure 4, the distance between non-RTA dyads is quite a big compare to the distance between RTA partners in all periods and for all country groups. These evidences imply that distance is an important factor that has a strong impact on RTA formation.

Figure 4: Characteristics of RTA Dyads by Distance, 1980-2005



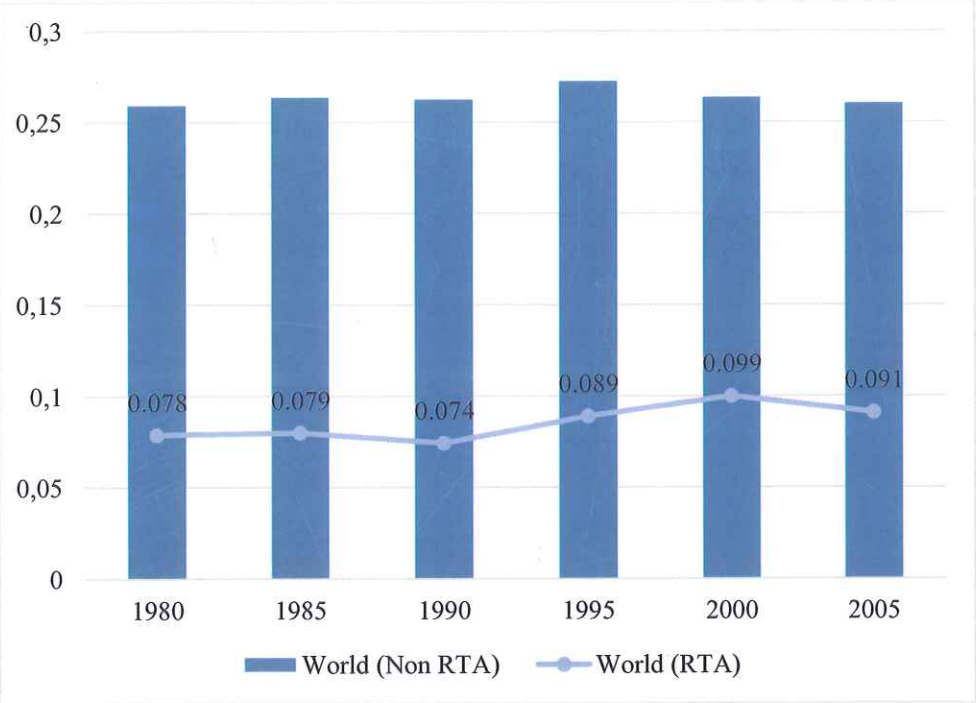
Another point to take into consideration in Figure 4 is the time varying pattern of distance between RTA partners over the period between 1980 and 2005. It reveals from the figure that even the distance between RTA partners is considerably less than the distance between non-RTA dyads for all country groups; it gradually increases within this time period. For example, average distance between RTA partners of H-H increases from 1875.2 km in 1980 to 3771.2 km in 2005. In other words, in the meantime the distance between RTA partners of H-H is almost doubled. Worldwide period average distance for partners is 1924.2 km in 1980 and it increases to 3370.4 km in 2005 also shows that distance between RTA partners increases every passing year. It is evidence that countries started to form RTAs with more distant economies than before which manifests the changing nature of regionalism as it is talked in detail in the previous chapter. Even the transportation costs are one of the major components of trade costs, advances in technology decreases transportation costs considerably. Decreasing costs may trigger countries to form new trade agreements with more distant countries. In addition to this, most of the countries have already signed trade agreements with closer partners and are still looking for new arrangements to get more gains from free trade. Having already signed trade agreements with proximate partners could be the reason of forming trade agreements with distant partners.

Figure 5 below represents the characteristics of RTA partners versus non-RTA partners according to HDI difference in the period between 1980 and 2005. This figure is a prima facie evidence of positive effect of HDI similarity on RTA formation. Period average HDI difference score of the world is 0.2 for non-RTA dyads where it is only 0.08 for RTA partners within this time period. Results support that RTA partners tend to be similar in human development performances. Another interesting point to note is time varying pattern of HDI similarity between dyads. Numerical data clearly shows that even RTA partners are more similar in level of human development compared to the non-RTA dyads, they become more dissimilar in recent years compared to the 1980s.

In brief, descriptive statistics reveal that economic similarity and geographic proximity have a strong relationship with RTA formation. GDP difference and distance between RTA partners are fairly smaller than non-RTA partners for all

country groups as well as for world data. Moreover, it has found that similarity in human development performances has a strong and positive relationship with RTA formation. Human development performances of RTA-partners are more similar compared to non-RTA partners for a given period of time.

Figure 5: Characteristics of RTA Dyads by HDI, 1980-2005



As a consequence, descriptive statistics provide information about the relationship between some of the key variables and RTA formation. However, these results should be supported by regression analysis for deeper understanding that also takes other determinants into account. For this reason, next chapter aims to present empirical study and regression results.

CHAPTER THREE
EMPIRICAL ANALYSIS

3.1 ESTIMATION RESULTS FOR POOLED DATA

This section presents and discusses the empirical results obtained from econometric analysis in order to explain the determinants of RTA formation and effect of country's human development performance on the probability of signing RTAs. Within this purpose, estimation results of all specifications obtained from probit model are presented. When using probit model, marginal effects should be obtained in order to have estimated effects of the explanatory variables on the probability of a positive outcome. In line with this objective, marginal effects of the determinants on the probability of signing RTAs are presented as well.

First of all, Table 2 presents the regression results of pooled data that includes all countries in the dataset. First five specifications display the different combinations of economic, geographic and developmental determinants of RTA formation where Specification 6 presents probit results of a baseline model for pooled data.

Table 2 below shows that signs of all coefficients are consistent with expectations. Additionally, all determinants are statistically significant. On the side of economic determinants, regression results of panel probit estimation displays that $DGDP_{ijt}$ which indicates difference in real GDPs between dyads at time t is statistically significant at the 1 percent significance level. Results reveal that $DGDP_{ijt}$ has a negative impact on RTA formation. As noted earlier in the study of Baier and Bergstrand (2004), economically similar countries are more willing to sign trade agreements and $DGDP_{ijt}$ matches with expectations in the study of RTA formation concordantly. Economically similar countries are also similar in market size which provides larger and mutual benefit for both partners from this trading arrangement. In this regard, economic similarity increases the probability of RTA engagement and country pairs with similar market size are more likely to form RTAs.

Table 2: Panel Probit Estimation Results of RTA Formation

Variables	(1)		(2)		(3)		(4)		(5)		(6)	
DGDP	-1.31	***	-0.87	***	-0.92	***	-1.92	***	-1.52	***	-1.34	***
	(0.16)		(0.27)		(0.31)		(0.31)		(0.33)		(0.32)	
SGDP	2.49	***	3.00	***	3.34	***	2.67	***	2.84	***	2.51	***
	(0.07)		(0.15)		(0.15)		(0.25)		(0.22)		(0.24)	
DIST			-14.88	***	-15.34	***	-14.1	***	-16.26	***	-13.74	***
			(0.53)		(0.60)		(0.84)		(0.68)		(0.90)	
COMLANG					2.23	***	1.30	**			1.31	**
					(0.47)		(0.55)				(0.56)	
DHDI							-7.86	***	-4.35	***	-4.00	**
							(1.24)		(1.67)		(1.62)	
DCO2									-2.19	***	-2.00	***
									(0.45)		(0.43)	
Observations	12096		12096		12096		10093		9923		9923	
Pseudo R2	0.596		0.414		0.414		0.419		0.421		0.420	
Log-Likelihood (L0)	-4138.602		-2197.82		-2183.463		-1736.373		-1704.099		-1703.614	
Log-Likelihood (L1)	-1671.311		-1287.869		-1278.675		-1008.698		-986.301		-987.813	

Note: Numbers in parenthesis are standard errors. Statistically significant z-statistics at 10%, 5% and 1% level stated as *, ** and *** respectively.

Other variable $SGDP_{ijt}$ that represents sum of the real GDPs of country pairs at time t is also statistically significant at the 1 percent significance level. Parallel to the previous studies in literature, $SGDP_{ijt}$ has a positive impact on the formation of RTAs. Results in Table 2 reveal that larger market size increases the probability of RTA formation between dyads under the idea that RTA formation between two large countries increases the volume of trade and partners gain more benefit from this trading arrangement. Apparently, traditional economic determinants $DGDP_{ijt}$ and $SGDP_{ijt}$ are also significant determinants of RTA formation that includes broader in scope of trade agreements. To sum up, countries are more willing to form RTAs with economically similar and larger partners.

Geographic distance is one of the key determinants for country pairs in the theory of economic integration as well as in empirical studies on this subject. Moreover, it is fruitful to remember that geographic distance and proximity are used to define region and regionalism concepts in related literature. Table 2 displays that $DIST_{ijt}$ is statistically significant at the 1 percent significance level and has a negative impact on the formation of RTAs between dyads. In other words,

geographic distance decreases the likelihood of RTA formation where proximity increases. Basically, trade with closer partners reduces the potential trade diversion because RTAs are signed by natural trading partners. Moreover, transportation costs still remain one of the most important expenses that effect government's decisions on the way to form RTAs although technology is ever growing incessantly. Even countries have started to trade with more distant economies in the new wave of regionalism, being natural trading partners still fosters trade relationships between countries. In conclusion, geographic distance between dyads has a negative impact on the probability of signing trade agreements and countries are more willing to form RTAs with proximate partners.

As it is shown in Table 2, $COMLANG_{ijt}$ is statistically significant at the 5 percent significance level and has a positive impact on RTA formation. In related literature, common official language and trade agreements formation are positively correlated with each other because sharing a common language reduces trade and transaction costs between partner countries. In this study, $COMLANG_{ijt}$ variable used as a proxy for cultural proximity and the sign of this variable matches with the expectations. Eventually, cultural proximity increases the likelihood of signing RTAs between dyads.

Table 2 demonstrates that difference in human development performances between dyads is statistically significant at the 5 percent significance level and has a negative impact on RTA formation. Similar to economic size, regression results reveal that country pairs prefer to be similar in human development performances as well. In order to understand why countries with similar human development performances are more willing to form trade agreements, it is fruitful to remember the dimensions of HDI again that we used to measure $DHDI_{ijt}$. Basically, the main pillars of human development are a long and healthy life, being knowledgeable and have a decent standard of living. HDI is a comprehensive measure -not only financial but also social and demographic- that tells us about a country's overall achievement. This suggests an idea that besides level of economic welfare, there are several characteristics like political will, sustainable relationship with international community, national policy choices and priorities that play a key role for development and could be entitled as country's vision for public prosperity (UNDP

Human Development Report, 2010). When examining the regression results, underlying reasons of country's willingness to sign RTAs with similar partners in human development performance could be addressed to these characteristics. In other words, dyads are more willing to form RTAs with partners that share the same vision for public prosperity.

In this dissertation, $DCO2_{ijt}$ is considered as one of the regressors in the econometric model and represents the difference in per capita CO2 emissions between dyads. Table 2 shows that $DCO2_{ijt}$ is statistically significant at the 1 percent significance level. Moreover, difference in per capita CO2 emissions plays a negative role on the formation of RTAs which means that countries prefer to be similar in environmental quality with their partners when trading with each other to attain environmental standards.

When using longitudinal data, marginal effects of the explanatory variables should be obtained in order to have estimated effects on the probability of a positive outcome. In order to interpret the estimated effects, Table 3 presents the marginal effects at the mean of explanatory variables for all specifications. When interpreting the results, 6^{th} column of the Table 3 will be considered as a baseline model of pooled data. The coefficients explain by how much a unit increase (decrease) in the regressors increase (decrease) the probability of RTA formation.

As presented in the last column of Table 3 below, marginal effects are significant and are in the appropriate directions for all variables. Firstly, $DGDP_{ijt}$ has a negative marginal impact on the probability of signing RTAs between country pairs. Based on these regression results, a unit increase in GDP difference will decrease the likelihood of an RTA formation by 2.3 percent, holding all other regressors constant. On the other hand, sum of the real GDPs has a strong and positive impact on the probability of signing RTAs between country pairs. A unit increase in GDP sum will increase the probability of forming RTAs by 4.3 percent, all others constant.

So from existed theory and empirical studies, geographic distance has fairly strong influence on RTA formation. Parallel to the expectations, Table 3 shows that $DIST_{ijt}$ has a significant and negative effect on the probability of signing RTAs between dyads. Moreover, a unit increase in geographic distance between dyads will

decrease the probability of signing trade agreements by approximately 24 percent, holding all other regressors constant. It is important to highlight the magnitude of the marginal impact of distance which is greater than every other variable's marginal effect. Geographic distance plays a crucial role on the decision to sign RTAs and results reveal that proximate countries are more likely to form RTAs.

Table 3: Marginal Effects on the Probability of RTA Formation

Variables	(1)	(2)	(3)	(4)	(5)	(6)
DGDP	-0.006 ***	-0.014 ***	-0.016 ***	-0.033 ***	-0.022 ***	-0.023 ***
	(0.001)	(0.004)	(0.005)	(0.005)	(0.004)	(0.005)
SGDP	0.012 ***	0.050 ***	0.057 ***	0.046 ***	0.041 ***	0.043 ***
	(0.002)	(0.001)	(0.002)	(0.003)	(0.002)	(0.003)
DIST		-0.250 ***	-0.265 ***	-0.244 ***	-0.234 ***	-0.238 ***
		(0.007)	(0.004)	(0.004)	(0.004)	(0.005)
COMLANG			0.038 ***	0.022 **		0.022 **
			(0.008)	(0.010)		(0.010)
DHDI				-0.136 ***	-0.062 ***	-0.069 **
				(0.021)	(0.024)	(0.027)
DCO2					-0.031 ***	-0.034 ***
					(0.006)	(0.007)
Observations	12096	12096	12096	10093	9923	9923
Pseudo R2	0.596	0.414	0.414	0.419	0.421	0.420

Note: Numbers in parenthesis are standard errors. Statistically significant z-statistics at 10%, 5% and 1% level stated as *, ** and *** respectively.

Table 3 shows that, sharing a common official language is also another important determinant of RTA formation. $COMLANG_{ijt}$ has a significant and positive marginal impact on the probability to form trade agreements. Countries that share a common official language are 2.2 times more willing to form RTAs compared to those who do not.

When examining $DHDI_{ijt}$, regression results display that difference in human development performances has a strong and negative marginal effect on the probability of RTA formation. Table 3 reveals that a unit increase in the difference in human development performances between dyads will decrease the probability of RTA formation by about 7 percent, holding all other regressors constant. It is important to highlight that marginal impact of $DHDI_{ijt}$ is higher than economic

determinants like $DGDP_{ijt}$ and $SGDP_{ijt}$ and it has the highest marginal impact on RTA formation after geographic distance.

The last explanatory variable $DCO2_{ijt}$ has also a significant and negative marginal effect on the probability of RTA formation. As Table 3 depicts, a unit increase in the difference in per capita CO2 emissions will decrease the probability of a positive outcome by 3.4 percent, holding all others constant.

3.2 COMPARATIVE ANALYSIS OF COUNTRY GROUPS

The purpose of this section is presenting regression results for each country group classified by human development performances of dyads (H-H, H-L and L-L). Economic, geographic and developmental determinants are estimated for these three country groups separately. Regression results will provide an insight to analyze how significance and the magnitude of the marginal impacts of variables vary across groups. It should be taken into account that because H-H, H-L and L-L indicate country groups classified by human development performances of pairs, $DHDI_{ijt}$ is not included in regression models. Differently from the pooled data regression, group regressions aim to present the determinants of RTA formation between dyads classified by human development performance.

Table 4 shows regression results for each country group. Regressions are estimated by using probit model and the first column depicts the results of the model in which country pairs are created by high human development dyads (H-H). First column of Table 4 reveals that all explanatory variables have the expected signs and are statistically significant at the 1 percent significance level except $DGDP_{ijt}$. Coefficient of difference in real GDPs turns out to be insignificant in this model.

On the other side of the economic determinants, regression results show that $SGDP_{ijt}$ is statistically significant in comparison with $DGDP_{ijt}$. Moreover, sum of the real GDPs of dyads has a positive impact on the probability of signing RTAs. In other words, the larger the economic size the larger the gain from trade agreements for H-H dyads which means that economically larger high human development countries are more willing to form RTAs.

Table 4: Panel Probit Estimation Results of RTA Formation across Country Groups

Variables	H-H	H-L	L-L
DGDP	0.48	-1.46 **	0.02
	(0.46)	(0.66)	(0.55)
SGDP	3.62 ***	5.24 ***	1.40 ***
	(0.25)	(0.31)	(0.31)
DIST	-12.86 ***	-17.79 ***	-11.36 ***
	(0.81)	(1.45)	(1.67)
COMLANG	3.08 ***	6.66 ***	-2.10 **
	(0.64)	(0.76)	(0.82)
DCO2	-1.61 ***	-4.62 ***	-0.73 *
	(0.60)	(0.79)	(0.41)
Observations	3267	6030	2610
Pseudo R2	0.354	0.553	0.300
Log-Likelihood (L0)	-964.893	-570.544	-439.123
Log-Likelihood (L1)	-622.587	-254.611	-307.290

Note: Figures below coefficients in brackets are standard errors. Statistically significant z-statistics at 10%, 5% and 1% level stated as *, ** and *** respectively.

Table 4 shows that $DIST_{ijt}$ is statistically significant at the 1 percent significance level and the sign for the associated coefficient is negative for H-H group. Regression results reveal that geographic distance has an explanatory power on RTA formation for high human development countries and pairs are more willing to form RTAs with proximate partners. Difference in per capita CO2 emissions is also significant and has negative impact on the formation of trade agreements. Sharing a common language is significant and has a positive effect on RTA formation for H-H dyads as it is expected from literature because of decreasing impact on trade and transaction costs.

Second column of Table 4 presents the regression results of a model in which country pairs are created by one high human development and one low human development countries (H-L). As it can be seen from the table, $DGDP_{\mathrm{I}Jt}$ is statistically significant at the 5 percent level and all other variables are significant at 1 percent level. Difference in real GDPs between dyads has a negative relationship with the formation of RTAs. Additionally, $DGDP_{iJt}$ variable highlights a very important subject which is one of the chief points of this dissertation: Even human development performances of countries dissimilar in H-L group, country pairs tend

to become trading partner with economically similar countries. More explicitly, H-L dyads represent one high human development and one low human development country pairs which means that they are different in human development performance however, regression results show that H-L dyads are more willing to sign RTAs if difference in real GDPs decreases. As noted above, even they are dissimilar in human development performance, being similar in economic size increases the probability of RTA formation. On the other hand, $SGDP_{ijt}$ and RTA formation are positively correlated with each other which means that larger economies increases the probability of signing trade agreements. Consequently, economically similar and larger H-L dyads are more willing to form RTAs.

As seen in the second column of Table 4, $DIST_{ijt}$ is statistically significant and negatively correlated with RTA formation. Geographic distance decreases the likelihood of signing RTAs between H-L dyads as in the case with H-H dyads. Negative impact of geographic distance is an expected behavior because transportation costs are exists regardless of country's level of development. Sharing a common official language has a positive effect on the probability of signing trade agreements between H-L dyads. When considered the potential impact of common language on trade negotiations to conclude them successfully as well as its decreasing effect on trade and transactions costs, the sign of this variable is in the appropriate direction. Difference in per capita CO2 emissions has a negative impact on the formation of RTAs for H-L partners which implies that even human development performances of H-L dyads are dissimilar, country pairs prefer to be similar in environmental quality as such in H-H group. To sum up, geographic and cultural proximity as well as similarity in environmental quality increase the probability of RTA formation between H-L dyads.

The last column of Table 4 depicts the regression results of a model in which country pairs are created by low human development countries (L-L). Regression results reveal that all variables are statistically significant except $DGDP_{ijt}$. Difference in real GDPs between dyads turns insignificant as it was in H-H group. When examining the economic characteristics $SGDP_{ijt}$ is statistically significant at the 1 percent significance level and there is a positive relationship between sum of

the real GDPs and RTA formation between L-L dyads. To sum up, economically larger L-L dyads are more willing to sign RTAs.

As it is in other country groups, $DIST_{ijt}$ variable is statistically significant at the 1 percent significance level for low human development countries as well. Table 4 shows that geographic distance and RTA formation are negatively correlated with each other and geographic proximity increases the likelihood of RTA formation between L-L dyads. It is also important to highlight that one should consider the negative impact of sharing a common official language on RTA formation differently from the other country groups which is unexpected. Cultural proximity has a negative impact on trade agreements formation on this group only. On the other hand, similarity in per capita CO2 emissions and RTA formation between L-L dyads are positively correlated with each other. In brief, geographic proximity and similarity in environmental quality increases the probability of RTA formation between L-L dyads.

In order to interpret the estimated effects of the explanatory variables on the probability of RTA formation, marginal effects of the explanatory variables are presented in Table 5 below for all country groups. First column of Table 5 displays the marginal effects of the explanatory variables on RTA formation signed by high human development countries. When examining regression results, $DGDP_{ijt}$ is significant and has a negative impact on the probability of an RTA for H-L dyads where it is statistically insignificant for H-H and L-L dyads. A unit increase in difference in real GDPs between H-L dyads will decrease the probability of signing trade agreements between them by 0.7 percent, holding all other regressors constant.

On the other side, larger market size has a great impact on RTA formation for all country groups. A unit increase in sum of the real GDPs will increase the likelihood of signing RTAs by approximately 16 percent, 2.5 percent and 2.7 percent for H-H, H-L and L-L dyads respectively. Results point out that having a large market size has a great impact on H-H dyads and increases the likelihood of signing trade agreements at a high rate compare to the other groups.

Not surprisingly, geographic distance is the most powerful factor when compared to the other determinants of RTA formation in all groups. Results in Table 5 show the importance of geographic distance up through the magnitude of its

marginal effect on the probability of having RTAs. A unit increase in distance leads approximately 56 percent decrease in the probability of a positive outcome for H-H dyads where it is 8.5 percent and 22 percent for H-L and L-L dyads respectively, holding all others constant. More generally, geographic proximity dominates RTA formation decisions in all country groups and country pairs are more likely to form trade agreements with geographically closer partners.

Table 5: Marginal Effects on the Probability of RTA Formation across Country Groups

Variables	H-H	H-L	L-L
DGDP	0.021	-0.007 *	0.0005
	(0.020)	(0.003)	(0.011)
SGDP	0.158 ***	0.025 ***	0.027 ***
	(0.015)	(0.005)	(0.003)
DIST	-0.561 ***	-0.085 ***	-0.223 ***
	(0.020)	(0.022)	(0.016)
COMLANG	0.134 ***	0.031 ***	-0.041 ***
	(0.030)	(0.007)	(0.014)
DCO2	-0.070 ***	-0.022 ***	-0.014 *
	(0.026)	(0.005)	(0.008)
Observations	3267	6030	2610
Pseudo R2	0.354	0.553	0.300

Note: Figures below coefficients in brackets are standard errors. Statistically significant z-statistics at 10%, 5% and 1% level stated as *, ** and *** respectively.

When examining the marginal impact of sharing a common official language on the likelihood of forming RTAs, regression results in Table 5 reveal that $COMLANG_{ijt}$ is also important and powerful factor that effect government's decisions on the way to sign new trading arrangements. Sharing a common language increases the probability of signing RTAs between H-H and H-L dyads by approximately 13 percent and 3 percent respectively. Magnitude of its marginal effect for H-L dyads is high compared to the economic determinants like economic size and similarity. However, sharing a common language plays a negative impact on L-L dyads and decreases the likelihood of RTA formation by 4.1 percent.

Table 5 depicts that marginal effect of $CO2_{ijt}$ is significant and negative in all country group regressions. A unit increase in per capita CO2 emissions leads to

approximately a 7 percent decrease in the probability of RTA formation between H-H partners where it is 2.2 percent and 1.4 percent for H-L and L-L dyads respectively, holding all others constant. Based on these regression results, difference in CO2 emissions is an effective determinant for all country groups and dyads prefer to be similar in environmental quality.

Overall, regression results manifest that there is a remarkable impact of geographic proximity on RTA formation for all country groups. Geographic distance is the most effective factor that influences country's decisions on the way to form new RTAs. As it is known from previous empirical studies and from the theory of economic integration, economic characteristics of dyads have potential impact on RTA formation. Economically larger countries are more willing to conclude RTAs in all groups however economic similarity turns insignificant for H-H and L-L dyads. Moreover, sharing a common official language has a positive impact on H-H and H-L dyads where it has an unexpected negative impact on the probability to form RTAs between L-L dyads. Apart from these results, all other factors have an explanatory power and are in the appropriate directions in all regressions.

In light of these findings, it can be stated that impact of explanatory variables on the likelihood of RTA formation between country pairs vary across groups, implying country pairs have their own economic, geographic and developmental factors where magnitude and significance of these factors also vary. So, when examining driving motives behind RTA formation, idiosyncratic characteristics of country pairs should be considered to reach potential differences in key explanatories.

CONCLUSION

The main purpose of this dissertation is to extend the literature about the determinants of regional trade agreements formation through introducing new determinants and looking from a developmental perspective. Under the idea that development is a complex and comprehensive measure -not only financial but also social, demographic as well as environmental- that tells us about a country's overall achievement, RTA formation is analyzed from a developmental point of view. To address these issues, this study was conducted on three tracks: Descriptive statistics of raw data are presented; panel data analyses of pooled data is presented for 64 countries in the period between 1980 and 2005 by using probit regression model and finally comparative analyses of country group regressions are displayed to capture how magnitude and significance of the determinants vary across country groups.

Findings of this study reveal that economic determinants matter for RTA formation and have a high explanatory power on the probability of signing trade agreements. When examining the determinants of pooled data that includes all countries in the dataset, both descriptive and panel data estimations reveal that economically similar and larger countries are more willing to sign RTAs. Moreover, geographic proximity spurs RTA formation between dyads with a very large marginal impact. Even distant countries have started to negotiate and sign bilateral trade agreements with each other ever-increasingly in the new wave of regionalism, geographically closer countries are still more likely to form new RTAs.

Besides traditional determinants, findings reveal that developmental indicators are also significant and have an explanatory power on RTA formation. Moreover, country pairs with similar human development performances are more likely to form RTAs. Similarity in human development performance shows strong marginal impact compared to the other variables such as economic determinants, which is stunning. As it is mentioned before, human development is a more holistic measure of development which indicates more than economic welfare and it is revealed in regression results with significant and high explanatory power on RTA formation.

In this study, another developmental indicator, per capita CO2 emission, is also found as a statistically significant variable and has a strong impact on RTA formation. Countries with similar environmental quality are more likely to form RTAs with each other.

Main contributions of this study are classifying country pairs according to human development performance as H-H, H-L, L-L and presenting regression results for each country group with the comparative analysis of group results. Group regressions touch on an important matter through displaying how the significance and magnitude of the marginal impacts of economic, geographic and developmental factors on RTA formation vary across country groups. Findings manifest that geographic proximity dominates all RTAs and matters for all country groups even the magnitude of its impact differ. In a nutshell, geographic proximity increases the likelihood of signing RTAs in all country groups regardless of development level. However, comparing results of group regressions shows that magnitude and significance of the determinants differ across country groups. As an example, difference in real GDPs between dyads which has a proven impact on trade agreement formations turns insignificant for H-H and L-L dyads. Sharing a common language is one of the core factors that trigger RTA formation between H-H and H-L dyads; however, this variable performs an unexpected negative impact for L-L dyads. On the other hand, economically larger countries regardless of their human development performance are more willing to conclude RTAs in every group regressions. CO2 emissions also show similar impact on RTA formation for H-H, H-L as well as L-L dyads.

In sum, economic, geographic and developmental factors matter for the probability of forming RTAs on pooled data regression. Developmental indicators namely; human development performance and CO2 emissions, have high explanatory power on RTA formation. However evidences show that RTA formation is not a linear activity for countries because the magnitude and significance of the determinants vary across countries at different human development levels.

In the light of above findings, three things can be clarified: First, traditional determinants also matter for RTA formation which includes broadened level of trade agreements than Baier and Bergstrand (2004). Second, human development

performance has a high explanatory power on RTA formation. Third, RTA formation is not a linear decision and its determinants could vary across country groups because of differences in levels of financial, social and environmental development between dyads. This study highlights the multidimensional framework of regionalism which is still in progress and shows that there is still need for more research in order to explore motivations behind RTA formation in more detail.

In light of these findings, it can be stated that governments should consider the role of idiosyncratic factors when forming trade agreements and endeavor to sign trade arrangements that are compatible with their developmental structure. In order to gain benefit from these arrangements, governments should consider the particular needs of their economies and take country specific differences into account. Although there are many dimensions that affect trade agreements formation, experiences of countries and academic studies could give some hints about strategies that conducive to gain more benefit from these trade agreements.

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APPENDICE

APPENDIX 1: List of Countries by HDI

Appendix Table 1: List of Countries by HDI

High Human Development Countries	Low Human Development Countries
Algeria	Benin
Argentina	Burkina Faso
Australia	Burundi
Austria	Central African Republic
Belgium	Guinea-Bissau
Brazil	Liberia
Bulgaria	Malawi
Canada	Mali
Chile	Mozambique
Colombia	Niger
Costa Rica	Rwanda
Denmark	Tanzania
Ecuador	Togo
France	Bolivia
Germany	Egypt
Greece	El Salvador
Ireland	Guatemala
Italy	Honduras
Japan	Indonesia
Korea, Rep	Iran Islamic Rep.
Mexico	Kenya
Netherlands	Nepal
Norway	Nicaragua
Panama	Pakistan
Peru	Paraguay
Romania	Philippines
Singapore	South Africa
Sweden	Sudan
Switzerland	Thailand
Turkey	Uganda
United Kingdom	
United States	
Uruguay	
Venezuela, RB	